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“An investigation of the efficacy of face-to-face versus synchronous chat in the generation and development of written drafts in the EAP class”

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Abstract

The thesis is a study of the early stages of the writing cycle in an English for Academic Purposes (EAP) class at the University of Singapore. The study focuses on a group brainstorming activity prior to the stage of writing the first draft and on the impact of this activity on the students' first individual drafts. In addition, the study compares two different modes of discussion: face-to-face and online synchronous chat. The comparison is concerned with the interactional patterns of the discussion in the two modes, and with the transfer of content from the discussion to the first written drafts. The use of group brainstorming at the pre-writing stage is a familiar activity in the writing class but researchers have not yet paid much attention to the way in which the ideas generated in the brainstorming activity are transferred to individual written drafts. It is this gap that this dissertation seeks to fill. A question of particular interest is the extent to which knowledge construction in the composition class is accomplished by the individual or by the group.

Data were collected from four classes of first-year undergraduate students of Science taught by the researcher. The control group, with 31 members, carried out their brainstorming activity in face-to-face mode, while the experimental group, with 27 members, carried out their brainstorming using a synchronous chat facility. The primary data were the chat scripts, face-to-face transcripts and first writing drafts. Analysis of the discussion data was carried out using a genre-based content analysis model deriving from speech act theory (Sinclair and Coulthard, 1975), rhetorical structure theory (Mann & Thompson 1986, 1988), and more recent work on collaborative writing by Plowman (1993), think-aloud protocols (Smagorinsky, 1991) and collaborative computer-based communication by Garrison and Anderson (2003), among others. The model is used to count the frequency of different ideas according to their rhetorical characteristics in the two conditions (face-to-face and synchronous chat), and to determine whether the ideas were generated by individuals or through group discussion. The analysis then looks at the extent to which the ideas were subsequently reproduced in individual drafts. The frequency analyses are complemented by detailed qualitative analysis of the discussion transcripts and the essays of four students, two from each discussion mode.

The results of the analysis suggest that collaborative brainstorming is productive in helping students with the generation and development of ideas for their writing. The findings also suggest that there is a strong link between ownership and use of ideas initiated in the discussion. This tendency is stronger in the chat group than in the face-to-face group. Analysis of the discussion transcripts suggests that this difference is a result of more ideas being initiated in the chat group. In addition to these group differences, the analysis shows that discussion in both modes is characterised by a tendency to seek consensus, with very little argument and negotiation of content. The implications of these findings for the use of group discussion in the writing class are discussed.

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CHAPTER ONE INTRODUCTION

Writing is a challenging skill to learn for students. It is an even more challenging skill to teach student writers. There are so many variables that can affect how well a writer shapes and expresses his or her thoughts, for example pre-writing stimulus, prior knowledge of topic, interest in the topic, language proficiency, peer influence and motivation to write.

This dissertation looks at only one aspect of the writing process. Broadly, it asks how ideas are formulated in the minds of student writers and transformed into text.

Specifically, it looks at the impact of pre-writing activities such as brainstorming and stimulus text have on writing. It investigates the effects of collaborative discussion on individual writing. It attempts to see if there are any similarities and differences between the use of conventional face-to-face discussion mode and the online mode which is used so prevalently in students' social lives that it may have an impact on their writing.

These are questions that motivate this research. These are also questions that have implications for the pedagogy of writing, in particular second language writing for and in an academic context.

What this chapter intends to do is to provide an overview of the context in which the data were collected, namely background information on how writing is approached at the National University of Singapore. It also aims to present key areas of English Language Teaching (ELT) that are concerned with the research. These include a discussion on English for Academic Purposes, how online discussion comes to play,

and the role of collaborative discussion as a pre-writing exercise and its impact on individual writing. All these will be further pursued in the literature review chapter of the dissertation.

1.1 Background information

The National University of Singapore (NUS) is a university that uses English as its medium of instruction. Similar to other English medium universities, the admission policy for English language presupposes that students who enter the university should have a certain level of proficiency to pursue their studies at the tertiary level. In the Singapore context, the admission criteria for English language include provisions for students with and without the local (i.e. Singapore) GCE 'A' level qualification. For students with the GCE 'A' level qualification who are admitted, they must have a pass in the General Paper. For those without the GCE 'A' level qualification, the English language requirement is as specified in Table 1.1, namely the IELTS and TOEFL, two most recognised international English language tests, EL1119 which is an English language test administered by the University of Cambridge Local Examinations Syndicate (UCLES), and the Malaysian University Entrance Test (MUET).

Table 1.1 English Language requirement for students without GCE 'A' level qualification (Office of Admissions, 2009)

| Test | Minimum acceptable score |
|-------------|--|
| EL1119 | C6 |
| IELTS | 6.0 |
| MUET | 221 |
| TOEFL | 550 for paper-based / 213 for computer-based / 79-80 for internet-based |

In addition to this basic English language requirement for admission purposes, in order to ensure that students have the necessary language proficiency to cope with the rigour and demands of academic work at NUS, there is an additional set of English language criteria (Registrar's Office, 2009) required of undergraduate students admitted to NUS. The criteria spell out clearly students who are exempted from taking a post-admission English language placement test, the Qualifying English Test (QET). Those who do not satisfy any of the language requirements take the QET that is administered twice a year. Based on the results of the Qualifying English Test, students are either exempted from taking any (non-credited) English language courses or they are placed in one of the following two courses – Basic English (BE) and English for Academic Purposes (EAP) where the former is a prerequisite of the latter. These are not pre-matriculated courses; instead, students take them concurrently with their other core modules. Unofficial statistics of the Qualifying English Test compiled by the Centre for English Language Communication indicate that usually 40% of all students who sit for the Qualifying English Test are exempted from reading any English language course, 45% to 50% are required to read English for Academic Purposes and 10% to 15% have to read Basic English followed by English for Academic Purposes.

The main objective of the Qualifying English Test is to establish the level of help and support in English language students will need to study in the university. The QET is a two-hour exam consisting of two sections: text-editing (30%) and essay writing (70%). In the text-editing section, students are asked to identify and correct errors in a text. The errors include grammar, use of vocabulary, sentence structure and transitional words. In the essay writing section, students are given a short text to read.

Prior to the text, there are three pre-reading questions that aim to help students think about the topic or theme discussed in the text. The text chosen for the text-editing section is of the same topic or theme, again to provide students with some background information or perspective on the same topic. Students do not need to answer the pre-reading questions but could use them to shape the content of their essay. There is only one prompt given and the students' essays are in response to this particular essay prompt. The length that students are required to write is approximately 500 words.

The essay is marked using a standardised marking scheme based on band descriptors. There are three components in the marking scheme: language, content and organisation, all with equal weighting. Every essay is scored against these three areas, from Band 0 to Band 6, Band 0 being the least proficient or least competent and Band 6 being the most proficient or most competent. A global writing band (from 0 to 6) is then established. The raw score of the text-editing section is cross-referenced against the global writing band to arrive at a final band for the QET.

Based on the band that students obtain, they are placed into different English language courses, as depicted in Figure 1.1. Students who obtain Bands 5 and 6 are considered to have fulfilled the English language requirement hence exempted from taking any English language courses. Students with Bands 3 and 4 are placed in an English for Academic Purposes course, the module in which this study was situated. In addition to core academic modules in students' respective majors, they are required to take an English for Academic Purposes module and receive a pass. However, there is no modular credit awarded to it. Students assigned with Bands 1 and 2 are those who require even more help in the English language. Therefore, before they do an English

for Academic Purposes course, they have to read a Basic English course. In other words, the Basic English course is a prerequisite to the English for Academic Purposes course. Again, students need to get a pass in Basic English to proceed to English for Academic Purposes. Although there are very few students who fall into the Band 0 category, there are those in special disciplines such as the Conservatory of Music who are so weak and so low in their proficiency level that they require Special English classes before they can attempt Basic English and English for Academic Purposes.

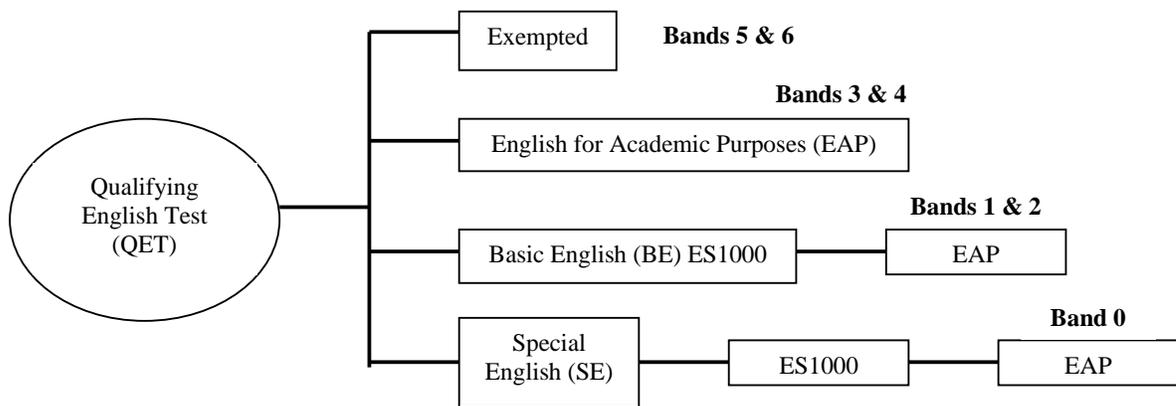


Figure 1.1 QET band scores and corresponding English language courses

In the past two decades, the international student profile at NUS has changed even though the percentage remains between 20% and 25% of the total NUS student population. Increasingly, NUS has admitted students from a larger international community. Besides students from ASEAN (Association of South East Asian Nations) countries, there is an increase of students from South Asia such as India, Sri Lanka and Pakistan and especially students from China which apart from Malaysia form the major bulk of the international student community. Most of these students are required to take the Qualifying English Test and more than 60% of them have to

read Basic English and/or English for Academic Purposes (based again on informal statistics of the Centre). While international students form the majority in the Basic English course, the majority of the students in the English for Academic Purposes course are still local Singaporeans who come from either the junior colleges or the polytechnics. This mix of local and international students has indeed created an interesting dynamics in the Basic English and English for Academic Purposes classrooms. It also means that the Centre for English Language Communication should constantly re-examine its Basic English and specifically English for Academic Purposes courses since the main bulk of the students are in the English for Academic Purposes courses.

Another change in the profile of the international students is their increased level of English language proficiency. A good example is the case of sponsored students from the People's Republic of China (PRC). For more than a decade since 1992, NUS through government bilateral relations has admitted close to 350 PRC students annually. In the initial years, these students came with limited general English language proficiency but with an increasing exposure to the English language especially in China where there is significant effort and initiatives placed on the teaching and learning of English, students admitted to NUS in the last few years have been equipped with a higher level of general English language proficiency. There have been anecdotal accounts, noting the increased level of students' speaking and listening ability specifically, which have been subsequently substantiated by the results of oral and aural exams administered when the students first arrived at NUS. With this new development, the Basic English and English Academic Purposes

courses which used to cover the four language skills of listening, speaking, reading and writing have changed their focus to deal mainly with reading and writing skills.

A population with an increased level of general English language proficiency has also presented an opportunity for the English for Academic Purposes course to put more emphasis on language and rhetorical features related to academic studies and less on general language proficiency. This is in fact in line with the university's effort in increasing the English language threshold of its undergraduate students so that students can be effective communicators both in the academic context and in the workplace when they graduate and join the work force. As a result, the Basic English and English for Academic Purposes courses have been streamlined accordingly. Specifically, the Basic English course aims at building students' written communicative competence with a focus on competency at sentence and paragraph levels. The English for Academic Purposes course builds on the skills learned in Basic English and focuses on helping students put paragraphs together into a coherent piece of writing, and to present and substantiate their arguments using appropriate facts and evidence.

These new initiatives and developments in the university policy concerning the English language requirement of its undergraduate students and the changing profile of the students have had an impact on how the English language courses are shaped and how the English for Academic Purposes course is taught. Both these aspects are the key focus of this research.

1.2 The English for Academic Purposes (EAP) course

As noted by Hyland and Hamp-Lyons (2002), the growth of the field of English for Academic Purposes could be attributed to the wide and extensive use of English in the acquisition of academic information. Because of this development, English for Academic Purposes has increasingly been recognised and acknowledged as different from the teaching and learning of general English and learning English for specific purposes. It has, in fact, been categorised as a sub-section of English for Specific Purposes (ESP) (Hyland, 2006). At NUS, the English for Academic Purposes course was introduced in the 1990s as a response to the need for the students to develop an understanding and practical application of academic skills at the tertiary level. The course recognises that there is a set of core skills which are different from general language skills that students should have in order to function effectively in an academic setting that requires them to not only understand, interpret and communicate their ideas and thoughts clearly and coherently, but also to substantiate their arguments with properly documented evidence. At the tertiary level, students are also expected to carry out research or studies and to document the process(es) and findings in a systematic fashion based on conventions practised in various academic disciplines. These are skills deemed required of students to cope with the rigour and demands of university work.

The English for Academic Purposes course at NUS is offered at seven main faculties and schools namely Arts and Social Sciences, Engineering, Science, Computing, Business, Design and Environment, and Music. Although the course offered at different faculties runs independently of one another with respective course codes, teams of tutors and materials, they share a similar philosophy and approach. During

the period in which the study of this dissertation was carried out, the English for Academic Purposes course had evolved and had been streamlined to focus mainly on academic reading and writing skills. A major component of speaking skills which was present in an earlier version of the English for Academic Purposes course had been removed from the curriculum to allow for a more comprehensive coverage of reading and writing skills. Specifically, the objectives of the English for Academic Purposes course are to (a) prepare students with the skills and strategies necessary to read critically, to interpret key messages of academic texts and to differentiate between main and subordinate or supporting ideas, (b) help students present and substantiate their claims or arguments convincingly, and organise their ideas in a clear and coherent manner, (c) introduce students to the register appropriate to an academic setting, and (d) provide students with grammar practice that addresses their weaknesses. Besides sharing these common core skill areas, each English for Academic Purposes course offered at different faculties and schools makes an attempt to incorporate discipline-related reading passages and writing prompts. In short, while the English for Academic Purposes course offered at various faculties or schools shares similar broad objectives, it differs at the implementation level specifically in relation to the use of materials.

This English for Academic Purposes approach adopted is referred to by Hyland (2006) as English for General Academic Purposes (EGAP). This approach presupposes that there are generic academic practices common across all disciplines that are applicable to undergraduates at the tertiary level. For example at NUS, there are common areas of focus and similar course structure that the respective English for Academic Purposes courses share such as a list of grammar items to be covered, the

format of exams, the length and type of reading passages, the weighting of continuous assessment components and the genres of writing assignments. For instance, the assessment structure is the same throughout all the English for Academic Purposes courses, namely 40% final exam and 60% continuous assessment. The final exam consists of a text-editing section (20%) and a writing section (80%). Essays are graded based on three aspects or areas, namely content (20%), organisation (40%) and language (40%), similar to the grading scheme of the Qualifying English Test. The continuous assessment section consists mainly of three 500 to 650-word essays which include problem-solution, cause-effect, comparison-contrast or argumentative essays, smaller pieces of writing like journals and reflections, grammar exercises, oral activities, participation and attendance.

In addition, there is a component on referencing and citation which requires students to select sources, summarise, paraphrase and synthesise what they read. Two English for Academic Purposes courses, with course codes EG1471 for Engineering and ES1301 for Science, were used for the study of this dissertation. Data for the pilot study were taken from EG1471; data collected for the main study were from ES1301. Details of both courses are further elaborated in the respective chapters on the pilot study and main study.

1.3 Use of e-learning tools and online communication tools

The use of e-learning tools has been introduced in many academic institutions especially in distance education programmes. In fact, there are a number of online communication tools available on the Internet that students are familiar with such as the MSN chat, google chat, Skype, facebook, blog and Second Life. Although these

tools have been used mainly for social networking and personal interactions, more and more academic institutions are beginning to maximise their communicative and interactive potential for educational purposes. The use of these e-learning tools has since spread to other academic disciplines especially in language learning where they are being explored as an additional way of motivating students to learn and to acquire the language more effectively and efficiently. As noted by Chapelle in her the introduction of her book, *Computer Applications in Second Language Acquisition*, “everyday language use is so tied with technology that learning language through technology has become a fact of life with important implications for all applied linguists” (2001, p. 1).

The movement in the use of e-learning tools in NUS started in the 1990s but it was not until in the late 1990s and early 2000s that greater prominence has been placed on such tools with the inception or creation of the Integrated Virtual Learning Environment (IVLE). The IVLE is a content management system with standard course-related features such as description of course, staff information, class list, announcements, workbins for the submission of assignments and deposit of lecture notes, projects, multimedia, Breeze presentations, webcast lectures, lesson plans and online assessments. In addition, it has interaction and communication tools such as asynchronous discussion forum, synchronous chat, live tele-conferencing facility CENTRA, and recently blogs, wikis and Second Life.

The importance of the e-learning tools became more significant during the Severe Acute Respiratory Syndrome (SARS) period in 2003 when face-to-face classes were interrupted at NUS. In preparation for any crisis and as part of its crisis management,

NUS has put in place and is constantly improving its e-learning infrastructure. Faculty members are encouraged to make use of the e-learning tools either in supplementing or complementing their lessons. They are also encouraged to experiment with these tools and put online up to 20% of the course content. For courses like the English for Academic Purposes course that value face-to-face (F2F) interaction, although the potential for placing content online seems slim, there are still a number of IVLE features that can be explored for teaching/learning and communication. These features include synchronous and asynchronous activities that closely resemble the face-to-face classroom environment such as chat and discussion forum. These tools are especially relevant for group discussions which are an integral part of the writing component in the process writing approach used in the English for Academic Purposes course at NUS.

It was therefore with this initiative and spirit of incorporating an e-component in the English for Academic Purposes course in mind that the study was situated and contextualised, namely an alternative way of allowing for the group brainstorming session, which has been traditionally done face-to-face, to continue should the situation not be conducive for a face-to-face meeting. In addition, it would be interesting to find out if there are any significant differences between the effectiveness of the face-to-face and online chat discussion and how students interact in chat which is originally designed as a social communication tool.

1.4 Collaborative discussion leading to individual writing

The English for Academic Purposes course adopts an approach derived from the process writing which has been implemented as a pedagogical approach in the

teaching of second language writing since the 1980s (Matsuda, 2003). In this process, it is assumed that writing starts with the formation of unorganised or unstructured bits of content or information (namely ideas). These ideas go through a process where they are translated and organised and structured into linear text. For message(s) to be successfully conveyed to the reader, ideas within a text need to be related and pieced together in a coherent and meaningful way. Each writer goes through a few stages of the writing process prior to the final draft – pre-writing stage (such as brainstorming, outlining and free writing), drafting stage (actual act of writing) and post-drafting stage (namely reviewing and editing). The approach presupposes that by going through the process, student writers will become more fluent and competent and can therefore express their thoughts in a purposeful, clear and coherent manner to readers within a specific context (Hayes & Flower, 1987; White & Arndt, 1991). A more elaborated discussion on the approach will be presented in Chapter Two of this dissertation.

However, there are areas within the process writing approach in which current research and literature have yet to inform the field. ELT researchers and practitioners do not yet have an in-depth understanding of what processes a student writer goes through in organising the bits and pieces of (fluid) ideas into linear text, how the student writer sees and relates ideas to arguments (namely main ideas and supporting details) within the text, how the student writer plans after the pre-writing stage, how the student writer sieves through the initial ideas during the pre-writing stage specifically ideas that are formed in a group or collaboratively and decides which to use and which to discard. In fact, a search of current literature shows that studies in the planning or pre-writing stage are scattered and somewhat sporadic, with most

concentrated in the recent decade (Cumming, 1989; Dujsik, 2008; Ellis & Yuan, 2004; Lah, 2007; Li, Z., 2008; Manchón & Roca de Larios, 2007; Sasaki, 2000; Shin, 2008; Victori, 1999). As noted by Manchón and Roca de Larios (2007), there are issues in “the cognitive domain of writing research that are awaiting an answer” (p. 581).

It is also equally important to understand how writing assignments are shaped in present day classrooms and how the process writing approach is incorporated into the curriculum and is applied in the classroom. In fact, the concept of asking students to brainstorm ideas in a group in the pre-writing stage is a common teaching/learning activity. This activity usually leads to individual writing assignments where the writing outcomes of different students vary, from students who maximise the use of ideas discussed during the collaborative brainstorm session to those who may have used the session as a springboard for the generation of individual ideas. This follows Vygotsky’s (1978) and Bruffee’s (1993) theory of constructivism, the concept of scaffolding and how knowledge is formed in a community and not as an individual. According to Vygotsky and Bruffee, knowledge is formed in a community shared by members who are cognizant of the context in which the communication takes place. Knowledge is best acquired when the learner is challenged at a level slightly above his or her ability and is scaffolded by members within the same community. These notions will be further elaborated in Chapter Two.

The stage of collaborative discussion prior to individual composing in the process writing approach appears in the pre-writing stage. It provides an opportunity for students to experiment with or test their ideas in a safe environment with members

who share the same experience. Specifically, issues that need better understanding include what individual students get out of the collaborative brainstorming session, to what extent do students follow or deviate from the ideas generated in the brainstorming session, which are the ideas that students follow or introduce, which are ideas that are most likely to appear in each student's draft, and what expectations are there between students who follow closely to ideas generated and those who do not.

Additionally, when brainstorming takes place online in a computer supported collaborative learning environment, the learning outcome may yield different effects as compared to the face-to-face environment. The extent to which the outcomes are similar or different between the face-to-face and chat modes is another area of interest.

1.5 Research Aims

This study has been formulated to investigate and provide a better understanding and appreciation of the processes and transfer of meaning between a collaborative brainstorming session and individual written drafts. Results of the study will better inform the English for Academic Purposes course planners and teachers on what students do with the ideas that they discuss. Additionally, the study also hopes to provide some insights into how students interact in two modes of communication, face-to-face and online synchronous chat, by establishing significant similarities and differences in the processes and outcomes of the written drafts. Specifically in the context of NUS, results of the study will have significant implications for the mode in which pre-writing brainstorming sessions are conducted.

1.6 Organisation of Dissertation

This dissertation is organised in six chapters. Chapter One provides background information on the context in which the study was situated and an overview of the focus of investigation. This is followed by a discussion of current literature in Chapter Two on second language writing, group discussion in the process writing approach and the use of technology as a discussion tool. Besides providing a general perspective on these areas, Chapter Two also aims to present and establish a case for a gap in the literature specifically in informing the ELT field on the transfer of meaning from collaborative discussion to individual solitary written draft.

There are two methodology chapters in the dissertation. Chapter Three reports on a pilot study, the establishment of a coding scheme and the use of a framework for the analysis and interpretation of the findings. This leads to a discussion and revision of the framework for the main study in Chapter Four.

Chapter Five reports on and discusses the findings of the main study by tracing ideas using reverse engineering from students' written draft to the brainstorming session and pre-writing articles. The chapter also attempts to answer key research questions on how and which ideas are transferred from collaborative discussion to individual writing. It further compares the use of two discussion modes, face-to-face and chat, in facilitating the discussion.

Besides summarising the research, Chapter Six also provides a discussion on the implications the findings of the main study has for the teaching of academic writing in a tertiary academic context, specifically in English for Academic Purposes.

CHAPTER TWO LITERATURE REVIEW

2.1 Introduction

There are two key areas of gap that the literature review chapter aims to present and argue for: first, a need for more research done on the sub-processes of the writing approach, specifically the impact of pre-writing collaborative discussion on individual writing; and second, an investigation and comparison of the efficacy of face-to-face (F2F) and synchronous chat (SC) discussion in the generation and development of an academic piece of writing.

The chapter starts with a discussion and overview on the evolution of the writing approach that is used in the present study. In presenting and citing studies and research that have been done in the process writing approach which mainly focuses on general composing processes in second language writing, it attempts to show that there is a lack of research specifically in the tertiary environment, in one of the sub-processes of the approach namely the stage from brainstorming to drafting. It continues with a discussion on collaborative learning and how meaning is built within a community of participants and then illustrates the gap in the literature on the influence planning has on drafting. The subsequent section presents a review of a number of studies in computer-mediated-communication (CMC) that show the impact of the use of CMC tools on different areas of writing. The discussion of these studies argues that CMC has a mostly positive impact on writing but there is still a lack of evidence to indicate how such intervention is comparable to the conventional writing absent of any CMC tools. The final section of the chapter describes online practices of participants in social and academic contexts through a discussion of the key

characteristics and features of synchronous chat. This has relevance to the communication or interaction pattern of a discussion among a group of participants.

2.2 Second language writing and writing instruction in an academic setting

2.2.1 Introduction

Among the four language skills of listening, speaking, reading and writing, writing has long been recognised as one of the most challenging skills to acquire. This is more the case in a second or foreign language context where students not only have to learn the orthography of a different language, but they also have to be familiar with the writing conventions of the particular culture. Connor in an interview with *The Language Teacher* acknowledges that writing in English for Foreign Language (EFL) is not an easy task (Mieko, 1997). Scholars in contrastive rhetoric (Connor, 1996; Hinds, 1990) have investigated and analysed the differences in the writing styles of different languages and cultures. In particular, Hinds (1990) observes a distinct difference in the introduction of the key message in an expository essay between the English language and a few Oriental languages. The key message occurs at the beginning of the writing in the English writing style but usually at the end in the Japanese, Korean and Chinese writing style. The differences in writing styles and conventions make instruction and guidance important for second or foreign language student writers to learn to express themselves in the appropriate cultural convention of the targeted language. To many second language student writers at the tertiary level who are required to engage in academic writing in English, the challenge is not only to express their ideas in the target language, but also to express these ideas in a setting that is not familiar to them. Fluency of thought, though important, is no longer

sufficient; writing in an academic context requires observance and learning of a new rhetoric for these students.

Besides differences in rhetorical structure, writing is a cognitive process involving a lot of creativity and critical thinking. As writers write, they are engaged in thought processes, in shaping their ideas and in conveying their message. Such a process requires good organisational skills and creativity in engaging and convincing readers of the writer's intended message(s). Writing is also a social activity where writers have specific message or messages to convey to a targeted community. As such, writers need to shape their message(s) in anticipation of the intended response they hope to elicit from their readers and write in the style that is expected by the audience (Mieko, 1997). This is again where writing instruction and instructional intervention come into play to help accelerate student writers' learning of writing skills and the appropriate writing style.

2.2.2 Studies on the process writing approach to writing instruction

Since the 1980s, second language writing instruction has been influenced by the process approach to writing. This approach arose as a response to the criticism of the product approach which started in the 1960s (Matsuda, 2003). Critics of the product approach question whether any learning took place if students' writing is given a grade but they are not given the opportunity to learn from their mistakes. They also regard the product approach as a pedagogy that centres on what the teacher does and not what the students do.

The process approach which replaced the product approach in the composition field presupposes that writing requires “conscious intellectual effort, which usually has to be sustained over a considerable period of time” (White & Arndt, 1991, p. 3). It emphasises the learning process of the writing experience and suggests that writers employ “three major processes to achieve their writing goals: (a) planning, (b) sentence generation, and (c) revising” (Hayes & Flower, 1987, p.21). This means that prior to drafting, writers plan what they want to write, which is then followed by the generation of text and multiple revisions before the final draft is produced. The relations among the stages of the process writing approach are interlinked, as represented in Figure 2.1 which is based on the White and Arndt’s (1991) model. Central to the process writing model is the revisiting concept at every stage of the process where writers, as they progress in their writing, may revisit the earlier stages of the model even though they have gone through them. Therefore, writing is seen as a recursive process in which writers constantly generate new thoughts or improve on existing content.

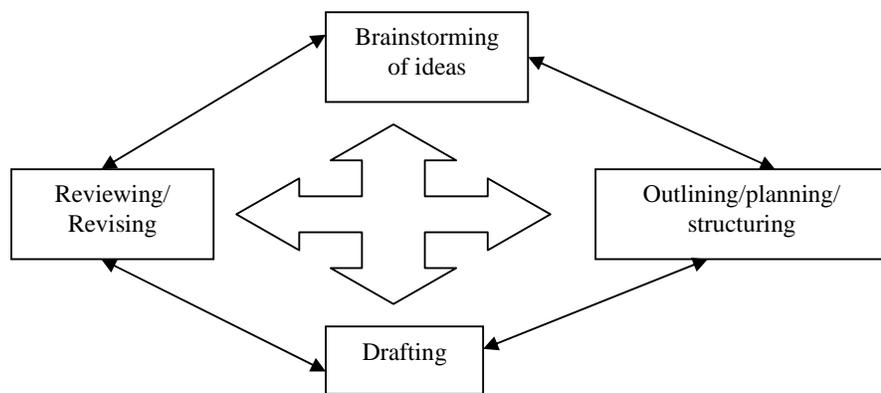


Figure 2.1 Diagram of process writing approach (White & Arndt, 1991, p.3)

Since the early 1970s, there has been an abundance of writing textbooks (Kelly & Lawton, 1998; Langan, 2001; Smalley, Ruetten & Kozyrev, 2001; Sokolik, 2000) and

studies conducted on the process approach to writing instruction. Implementation of the approach has permeated first language (L1), second language (L2) and foreign language (FL) writing at all levels of education, namely primary, secondary, pre-tertiary and tertiary with a higher number of reported studies at the tertiary level (Silva & Brice, 2004). Most documentation of studies in journals appeared in late 1980s and 1990s with some expounding on the effectiveness of the approach. The areas of investigation vary and they range from general improvement of fluency in writing, type of feedback to attitude towards writing. There was also research done to look at the implementation of the approach. Additionally, at a later stage, the focus of these studies moved from general composing processes to sub-processes such as revising (Li & Lin, 2007; Truscott, 2007), peer reviewing (Guardado & Shi, 2007; Suzuki, 2008; Truscott & Hsu, 2008), teacher-student conferencing and feedback provision (Bitchener, 2008; Bitchener & Knock, 2008; Ellis, 2009; Ellis, Sheen, Murakami & Takashima, 2008; Lee, 2008a; Lee, 2008b; Lundstrom & Baker, 2009; Lee, 2007; Rahimi, 2009). There has also been an increasing number of studies on variables that affect the composing processes such as task difficulty, medium of composing, linguistic knowledge and metacognitive awareness (Arrecco & Ransdell, 2002; Boshier, 1998). In fact, Silva and Brice (2004) acknowledge that “work on subprocesses has increased and become more sophisticated” (p. 71).

The following section will report on a number of studies that aimed at investigating the effectiveness of the process writing approach and its impact on students’ writing at different educational levels. The objective of presenting studies at different levels of education is to provide an overview of the extent to which the process writing approach has permeated writing in the first language and subsequently spread to

second and foreign language writing. More focus is given to second language writing research at the tertiary level where the present study is situated.

At the macro level in terms of the effectiveness of the process writing approach, studies (Ho, 2006; Mohd Noor, 1996; Pennington, Brock & Yue, 1996; Pennington & Cheung, 1995; Tsang & Wong, 1992; Wright, 2006) situated in the Asian context suggest that the approach has been effective in helping students with their writing skills in general. In addition, the findings of these studies highlight some advantages such as improvement in fluency and enhancement of critical thinking skills as well as constraints of the approach, namely the failure of the approach in addressing accuracy and the perception of the teachers and students on the use of the approach.

At the school level, Ho (2006) made use of pre- and post-tests, interviews, questionnaires and observations of primary students' strategy use to look at the effectiveness of the approach in six Hong Kong primary schools. The study which involved 200 subjects found an improvement in students' writing skills and confidence in writing specifically for students with a higher level of proficiency and students at upper primary level.

In terms of the implementation of the process approach in the secondary schools, research has found it to be an effective pedagogy for teaching students to write. Similar to studies done at the primary level, the scope and focus varied from more global and general to specific areas of the approach. Mohd Noor (1996) conducted an experimental study on two classes of Malaysian secondary school students to look at the effectiveness of the process writing approach – an experimental group which used

the process approach and a control group which used the product approach. He found that students in the experimental group (process approach) scored better in their writing assignment compared to students in the control group (product approach). The results of the study imply that students benefit from the brainstorming, drafting, reviewing, drafting and re-drafting process.

In another study, eight local (Hong Kong) teachers introduced the process writing approach to eight classes of 300 secondary school students of secondary one to secondary six. These students were engaged in three rounds of writing using the process writing approach over a period of six months. In this study, Pennington, Brock and Yue (1996) wanted to find out the reactions of these students to the innovation. The students completed a questionnaire at the conclusion of each round by giving feedback on aspects of the lesson they appreciated and did not appreciate, their views about learning English and what they would like to do in subsequent lessons. There were a few interesting findings in this research which were reported in two papers – Pennington, Brock and Yue’s paper in which the focus was on the teachers’ perception and Brock’s (1996) paper which looked at the students’ responses. They found that students with better academic results had a more favourable experience with the process writing approach than students who had lower academic results. Second, teachers who had a more positive attitude towards the innovation at the beginning of the study had students who judged the experience as positive, while teachers who had negative or conflicting views about the approach had students who evaluated the experience negatively. They concluded that there seemed to be a “complex pattern of cause-and-effect relationships existing between teachers’ and students’ attitudes and behaviours in the context of an innovation” (Pennington,

Brock & Yue, 1996). Specifically, in six of the classes, it was found that there was a connection between individual teacher's and the respective students' adaptation level (Brock, 1996).

At the tertiary level in Asia where the study of this dissertation is situated, one of the earliest studies on the implementation and impact of the process approach to writing instruction on students was done by Tsang and Wong (1992) in Hong Kong. They introduced the process writing approach to 6 native Cantonese-speaking students in their first year of tertiary education. The purpose of the research was to evaluate the effectiveness of the process writing approach from the students' perspective. The students' evaluation reveals that they appreciated quick writing and they felt that the approach helped them in overcoming mental blocks and illogical structures.

However, the students felt that it did not help them to improve their grammar. In other words, the process writing approach was effective in making a positive difference in content, organisation, fluency and confidence, but not in improving language and grammar accuracy at sentence level. Their findings re-affirm one of the criticisms leveled against the process writing approach in addressing writing-related issues besides its effectiveness in facilitating fluency.

In another study, Muncie (2000) investigated the effectiveness of the process writing approach in the vocabulary building of a group of Japanese university students. Using the Lexical Frequency Profiles (LFP) (Laufer & Nation, 1996), Muncie compared three pieces of writing produced by the students: the first and final drafts of an essay, and an essay where students wrote under time pressure. The results of the study show that although no significant difference could be drawn from the Lexical Frequency

Profiles of the three pieces of writing, the use of vocabulary in the final draft demonstrated more sophistication. This suggests that the process writing approach assists students in the accurate or appropriate use of expressions, not just fluency.

Wright (2006) did an investigation of a group of university students who used the process writing approach in writing scientific essays. She found that the approach helped the students to think more critically which in turn was good for learning. However, she cautioned that guidance from the lecturers is required to make such an approach successful.

The process writing approach has also been researched in the area of teacher education. In a paper written by Pennington and Cheung (1995) based on a study of eight teachers implementing the approach in eight secondary school ESL classes, the authors reported the results of a survey questionnaire on the teachers' perception of the approach. The results imply that for successful implementation of the approach, teachers should be supported with teaching materials and guidance. In addition, they also investigated the factors that led to the adaptation of how the approach was implemented. These factors included the teacher, student, school and community and each was assessed for its compatibility to the approach. The study found that incompatibility was a result of factors at different levels such as student, teacher and context. At the student level, incompatibility included students' poor proficiency, concern about preparation for public examinations and unwillingness to learn a new approach. With adjustment done to give more control to students in their learning and evaluation and a more motivated attitude towards teaching, the teachers were able to manage such incompatibility. At the teacher level, incompatibility encompassed the

teachers' reluctance in trying a new approach and their concern about how the approach could be implemented in the classroom. These concerns could be addressed through training. In terms of contextual factors, there were concerns about large class size and the availability of teaching materials which could be addressed through support given to teachers and schools.

At the micro level in the investigation of the sub-processes of the approach, the findings of studies focusing on revising, peer reviewing, teacher conferencing and feedback suggest that there has not been any clear consensus on the effectiveness of these sub-processes on students' writing.

In terms of revising and feedback, scholars (Ferris, 1999, 2004; Gue'nette, 2007; Truscott, 1996, 2007) differ in their views on the effect of error correction on accuracy. There are also studies such as Li and Lin (2007) and Muncie (2002) which found that revision based on feedback worked in specific conditions. Li and Lin's study which involved 93 EFL students in a Chinese university investigated the role of revision based on teacher feedback in effecting an improvement in language accuracy. The study found that students' accuracy did improve with revision, in particular, if the revision was done based on teacher feedback. Muncie (2002) recommended that in the cycle of the process writing approach, it is better for teacher feedback to be given for the final drafts of students' writing than for the interim drafts. He found that peer feedback incorporated for interim drafts would help to encourage independent learning and engagement of students in the writing exercise. Muncie's conclusion was based on a trial with a group of 29 university students in Japan who took a course on academic writing. He found that the students were more involved in the learning

process if they commented on the interim drafts of their peer's writing which in turn helped in enhancing their writing skills in the long run. When the students were asked to rate from a scale of one to five, one being not at all useful and five being extremely useful to the statement of how helpful their peer's feedback was, the average rate was 4.03 with a standard deviation of 0.66. There was also evidence which showed that 26 (out of 29) or 90% of the students did revise their draft based on feedback given by their peers. More importantly, 65% of the students indicated that they did not make use of all the suggested changes as they would otherwise have done if the comments were from the teacher. Compared to making changes based on feedback from teachers, this is a comparatively low percentage namely 79% of students mentioned that they would accept their teachers' comments and make changes accordingly. This implies that there is more critical differentiation of what is to be accepted when feedback is given by peers than by teachers. Therefore, peer feedback seems to promote engagement in critical analysis of one's writing. Muncie's findings suggest that peer feedback exercise done for interim writing drafts encourages students to think more critically, both as a reviewer and as a writer. In addition, teacher intervention has a better effect on the final drafts.

In terms of conferencing, McCarthy (1994) followed four senior high school students from different cultural backgrounds in America for five weeks. She focused specifically on the way students interacted in the classroom and with their teacher when they did conferencing on their writing. McCarthy found from this small study that each student interacted differently in terms of how they reacted to classroom activities and tasks and what each gained from the experience also varied. The results led her to suggest that interaction between student-student and student-teacher in the

classroom influences the quality and type of learning that occurs for individual students.

In sum, these studies present a brief overview of studies that looked at the effectiveness of the process writing approach at macro and micro levels. At the micro level, most of the studies focused on drafting and post-drafting stages. The discussion will now move to a less researched area of the process writing approach, namely the pre-writing or planning stage. Studies in this area (Cumming, 1989; Dujsik, 2008; Ellis & Yuan, 2004; Li, 2008; Lah, 2007; Manchón & Roca de Larios, 2007; Sasaki, 2000; Shin, 2008; Victori, 1999) have not been extensive especially in the area of second language writing. Manchón and Roca de Larios (2007) note that “no study monographically devoted to planning in L2 composing has been published in the last 10 years” (p. 8). In addition, the focus varies except for two key areas, that is, the time skilled and less skilled writers spend on planning and the difference in their behaviours during the course of planning.

In terms of time spent on planning, Manchón and Roca de Larios made use of verbal protocol to investigate how Spanish EFL students planned when they were doing their academic writing tasks. They looked at how three variables, namely students’ proficiency level, the language of composition and the stage in which planning occurred, had an influence on the time spent on planning. Their results reveal that the more proficient students did more planning than less proficient students in L2 but vice versa in L1 and planning generally occurred in the initial stage of the composing process. However, individually, it was observed that more advanced students did their planning in the initial stage of writing but less proficient students seemed to go

straight into drafting and started planning when they were drafting. Similar to Manchón and Roca de Larios' findings on time spent on planning, Sasaki's (2000) longitudinal study on skilled and unskilled Japanese EFL writers reveal that skilled writers took longer in planning.

As for planning behaviours, Ellis and Yuan (2004) looked at three conditions of planning, namely pre-task planning, online planning and no planning, of 42 Chinese students who wrote a narrative essay. The analysis of their essays and results of a questionnaire and interviews with the students found that the students who did pre-task planning were most fluent and had the most variety of sentence structures than those who did online planning and no planning. They also found that the essays of the students who did online planning were more accurate compared to the other two conditions. Cumming (1989) and Victori (1999) noted from their studies that skilled writers did their planning early in the writing process but unskilled writers planned as they drafted. Li (2008) who used a questionnaire to survey Chinese students who were English majors found that the students perceived factors such as metacognitive knowledge about the planning activity, use of strategies and time allocated for planning as having a positive effect on the quality of their writing.

Similar to the studies on planning, the present study looked at what students did when they were engaged in planning (i.e. brainstorming) for writing. Unlike these studies which focused on planning that involves only the self, the present study attempted to investigate planning that is done in a group.

2.2.3 Beyond the process writing approach

The review will now move to a discussion on how the writing approach used in the present study, namely the genre-based process writing approach, originated. There are a few early studies (Nolton, 1988; Walton, 1990) which critiqued the process writing approach but it was not until the 2000s that the approach was looked at more critically and more questions asked about its main focus on fluency and the lack of consideration for purpose, context and targeted audience.

In a special issue of the *Journal of Second Language Writing* devoted to a discussion of process and post-process, Atkinson (2003a, 2003b), Hyland (2003) and Matsuda (2003) discuss and call for a need to move beyond the process writing approach. Atkinson (2003a) in his introduction discusses how Trimbur sees post-process stage, namely in four aspects such as “social; post-cognitivist; literacy as an ideological arena; and composition as a cultural activity” (1994 cited in Atkinson, 2003a). The main criticism against the process writing approach is the prominence it places on fluency and creativity in writing and the emphasis it has on an individual’s struggles in making meaning that it neglects other important aspects of writing. These include the use of language (Hyland, 2003) and consideration of writing as “public, interactive, and situated” (Kent, 1999 as cited in Matsuda, 2003). In addition, the process approach with its focus on the individual discovery process is seen as a non social activity instead of one that is framed within a social discourse community (Atkinson, 2003a). Students thus are not exposed to the “cultural and linguistic resources necessary for them to engage critically with texts” (Hyland, 2003, p. 20).

Because of the strong belief in the individual as the key to the learning process, the process approach also does not allow teachers much opportunity for intervention. Hyland (2003) sees this as a disadvantage to learners whom he believes can benefit from being made aware of language and rhetorical structure of different types of writing. Another criticism leveled against the process approach is that it gives so much flexibility that it is difficult to establish what learning is (Hyland, 2003).

In fact, as early as in the late 1980s, there had been calls for the removal of the process writing approach in schools (Nolan, 1988; Walton, 1990). Instead, there has been a movement specifically in Australia for the genre approach to be used as it is considered to be culturally situated within a community. Proponents of the genre approach maintain that writing should address and share the features of a particular culture or community (Christie, 1992; Halliday, 1978; Martin, 1989).

The genre approach is later picked up and expanded by Hyland (2007) in his article on ‘genre pedagogy’. Writing is situated in a context where there are certain expectations of the reader that the writer should be aware of when he writes. Hyland believes that linguistic and rhetorical structures that are related to a particular community can be introduced to student writers so that not only do they have fluency in writing but they can also construct meaning in a socially appropriate context. Therefore, lessons in the genre approach usually include language and expressions commonly seen or used in a particular context. Topics or themes are also central as students will need to associate with and draw experience from them. This type of “support learning” (Hyland, 2007, p.158) is similar to the concept of scaffolding initiated by Vygotsky (1978) and later expanded by Bruner (1990), a concept that will

be elaborated later in the chapter in Section 2.3 on collaborative learning. After being exposed to the structures and texts of a particular genre, students are then ready to attempt writing for a particular audience.

2.2.4 Genre-based process writing

This post-process movement has given rise to a few writing approaches that attempt to address the gaps of the process approach to writing. Hyland's (2007) genre-based approach, which originated from the Australian genre pedagogy, to the teaching and learning of language, specifically writing, is one of the most established approaches as a response to the post-process movement. The genre-based approach assumes that students may not be familiar with the rhetorical structures and expressions of a particular culture or community and these therefore should be taught in a structured, explicit and systematic way (Hyland, 2004). Although the genre-based approach does offer procedures on how learning can be sequenced, it does not look at the individual's writing process as closely as the process approach does. Thus, as much as students need structure, they too need guidance on writing process especially one that facilitates creativity and fluency.

Another writing approach that arises is the genre-based process writing approach (Badger & White, 2000) which combines the process and genre-based approaches. It acknowledges the importance of developing writing by providing the students with input relevant and related to specific context, purpose and audience. In addition, it highlights to students and encourages them to make use of language features and structures that are prominent in a specific genre. As shown in Figure 2.1 on page 20, in each writing task, the students go through the stages of process writing (Flower &

Hayes, 1981). These stages are brainstorming, outlining or planning, drafting, and reviewing or revising. The genre-based process writing cycle begins with an introduction of a genre and the specific characteristics and features associated with the genre. It also discusses the organisational structure of the genre. The exercises following the overview of the genre aim to provide learners with an understanding of the genre. In short, students are first introduced to the type or genre of text. They then analyse a few examples of the text before being guided through each step of process writing. While the process writing approach helps learners to acquire fluency in writing and the genre approach familiarises students with a specific genre, the genre-based process writing approach takes a step further by guiding students on how to approach the writing of different types of texts.

Figure 2.2 is an illustration of how the genre-based process writing approach works. It shows the stages of writing instruction that was employed in the present study. The first four stages are added to White and Arndt's process writing model (1991, p.3). These four stages illustrate that there is a discussion of the writing genre before the students proceed to drafting their essay.

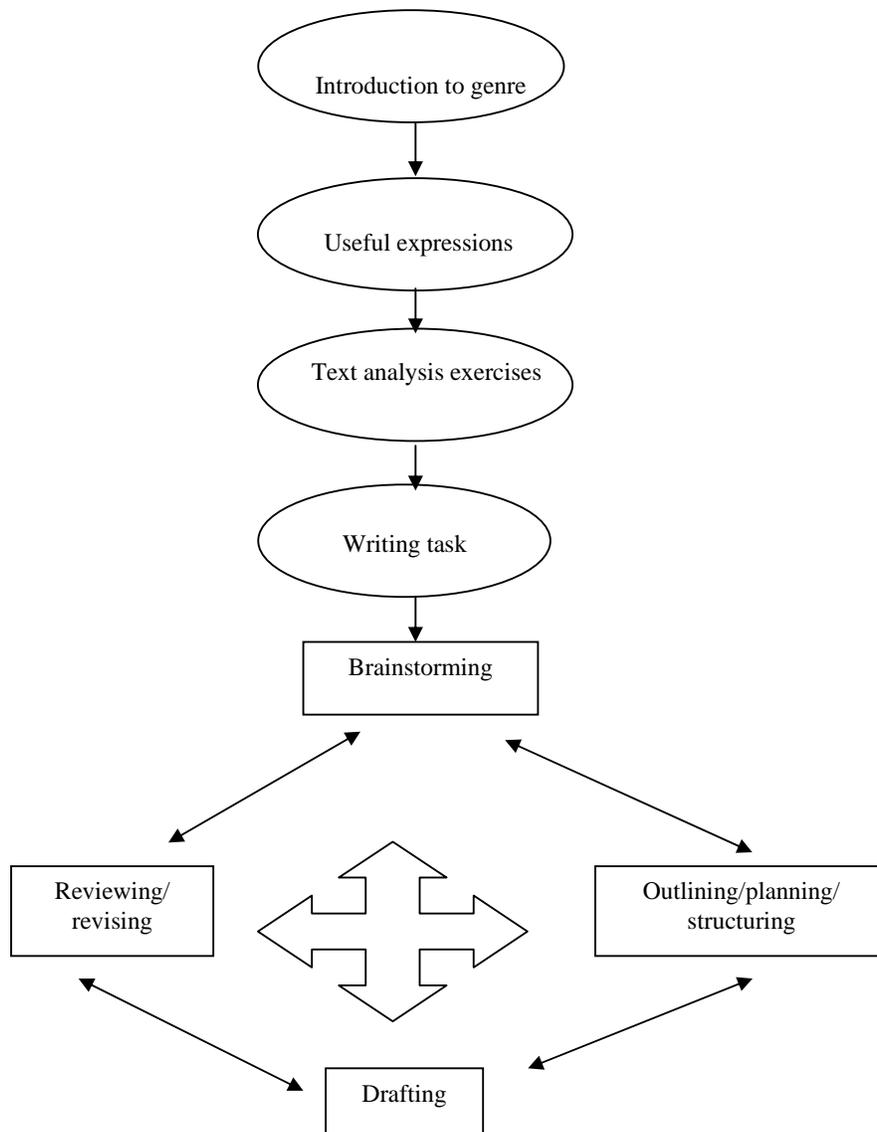


Figure 2.2 Genre-based process writing cycle

2.3 Collaborative and cooperative learning in writing

2.3.1 Introduction

Another area of research that is related to the current study is the use of collaborative learning in the writing process. Group or team work has been used for brainstorming and revising or conferencing. However, there has not been much said about how collaborative work has an impact on individual writing specifically the transfer between group and individual effort from brainstorming to drafting. This section will

discuss the definition of collaborative learning and will give an overview of the relevant research literature to show the scope of research in the field.

Collaborative learning refers to an effort made by two or more learners in working together towards reaching the same goal such as completing an assignment or a task (Benson, 2001). Collaborative learning is differentiated from cooperative learning usually by the process through which learners complete a particular task (Beatty & Nunan, 2004). In order to clarify the concept of collaborative learning, Oxford (1997) distinguishes between collaborative and cooperative learning by noting that while cooperative learning is more structured and more prescriptive with the roles and responsibilities of each member clearly spelt out, collaborative learning is concerned with one's assimilation into the knowledge community and interaction with people who have more knowledge in the community so that they could provide the scaffolding for learning. The difference can be clearly illustrated in the following examples: a group of students working on a research project identify and divide tasks among group members then piece the project together; and a group of students discussing or brainstorming ideas to formulate a consensus on the decision of a given situation. The former is an illustration of cooperative learning, the latter collaborative learning. In other words, working collaboratively involves learners in discussing and negotiating in finishing a task together.

Another key stage in the process writing approach that requires collaborative work among students and between students and teacher in the development and negotiation of meaning is the revising stage. Collaborative learning, when applied in peer-reviewing in the revising stage of the process writing approach for individual writing

assignments, refers to learners looking closely at a piece of writing and identifying and suggesting appropriate revisions or changes. As such, the methodology employed in many writing classes emphasises learners' thinking processes, self-monitoring strategies and the collaborative effort of peer-reviewing and teacher-student conferencing. Increasingly, teachers see the need to allocate time and provide opportunities for their students to talk about their ideas, to gain feedback on their thoughts, and to give comments on others' writing ideas. Besides helping to strengthen students' ideas via these sessions, such opportunities also provide students with the support group of a peer audience (Guardado & Shi, 2007; Suzuki, 2008; Truscott & Hsu, 2008).

When students discuss their own and others' writing ideas, they are in fact supporting and building on their own knowledge and repertoire of experiences. The belief that students benefit from sharing or collaborative activities stems from Vygotsky's (Bruffee, 1993; Oxford, 1997) social constructivism theory in collaborative learning. In his view, learners develop their cognition by interacting and communicating with people within their knowledge community. Individuals who are more skilled, competent, proficient or experienced provide scaffolding for learners to build their knowledge. Therefore, through collaborative activities, learners are able to do things that they could not do if they were on their own. In other words, individuals gain knowledge and practise new competencies as a result of internalisation through collaborative learning (Lipponen, 2002).

Bruffee (1993) and Oxford (1997) define collaborative learning based on Vygotsky's social constructivism theory, which postulates that ideas that one has are created from

one's interaction with the community and context in which one is situated. In other words, every individual is so strongly rooted in his or her social group that his or her cognitive system is largely influenced by the socio-cultural context within the community in which he or she is located. When put into an educational context, this means that in order to foster an environment where students are able to learn, the teacher has to provide appropriate guidance, support and scaffolding. Scaffolding is a widely-used concept in social constructivism theory to refer to the building blocks and supportive measures that are facilitated by the teacher to help students grow from basic to complex understanding of concepts. These building blocks are removed once the students have a good grasp of the concepts.

In addition, social constructivism theory emphasises the process instead of product of learning. If one looks at how the theory is applied in the second language learning context, the classroom community, which consists of peers and teacher(s), becomes the social group of the second language learners. As a result of the close proximity with the community, the learners' linguistic and cultural ideas are shaped to a large extent by the community in which they live or move about.

With the influence of social constructivism, collaborative learning is therefore defined as "a reacculturative process that helps students become members of the knowledge communities whose common property is different from the common property of knowledge communities they already belong to" (Bruffee, 1993, p.3). This means that students of different backgrounds, trainings and cultures have to adjust and adapt to be a part of a new community where they need to share and create knowledge.

2.3.2 Collaborative learning in constructing meaning: the face-to-face context

In language learning, there are many opportunities for students to work both cooperatively and collaboratively. Teachers use group work to encourage students to communicate and share ideas such as in project work and in practising speaking skills. Group work is also used in writing contexts where students are required to form pairs or groups to discuss or brainstorm ideas for the content of an essay; and to a certain extent, in peer review work where students act as the more competent or capable person within the learning environment. The findings of studies (Bejarano, 1987; Christison, 1990; Crismore, Syed Salim & Siti Fauzeyah, 1997; Jacobs, Gan & Bau, 1995; Kinsella, 1996; Long & Porter, 1985; Nunan, 1992; Pica, Young & Doughty, 1987; Suppiah, 1995; Zhuang, 1995) in the area of face-to-face collaborative language learning have generally shown that it promotes communicative competence, social and interpersonal skills, self-confidence and self-esteem. The investigation or exploration of these studies has focused mainly on how working in a team helped improve the members' oral-aural skills in the learning of a second or foreign language. In addition, the results demonstrate how through group project, the communicative competence of the members was enhanced. However, the extent of the impact or effect of group work on the brainstorming stage of the writing process has yet to be established.

The key to an effective collaborative learning environment lies in the value of discussion. Learners benefit most when they are able to gain or build knowledge during discussion or when communicating with their peers. The value of discussion therefore depends on its ability to stimulate learners' thinking and the co-construction of knowledge in a community (Scardamalia & Bereiter, 1987).

Scardamalia distinguishes between learning and knowledge building (2009) by postulating that learning is merely an act of acquiring information whereas knowledge building involves contribution to something new. For students to build knowledge, she says that they must be in a design mode. Learning activities or tasks should be geared towards knowledge-building. This is a continuation of Scardamalia and Bereiter's (1987) concept of knowledge telling and knowledge transforming. Specifically for writing, Scardamalia and Bereiter (1987) believe in providing intervention in instruction so that learners can move from a knowledge telling mode which represents immature writing to a knowledge transforming mode which refers to mature writing. In comparing these two models, Scardamalia and Bereiter indicate a number of differentiating factors such as the composing process, characteristics of text such as coherence, how well-formed texts are and whether writers take into consideration the readers, how they plan and the revisions writers make.

What is most interesting and most relevant to this study is the differentiation Scardamalia and Bereiter make in terms of the use of main ideas by mature and immature writers. The investigation of this study is concerned with scaffolding provided by peers in the form of pre-writing discussion. Scardamalia and Bereiter postulate that mature writers always have main points as their goal but immature writers would depend on models of structure to help them formulate their ideas. Additionally, the ideas generated by immature writers are mostly not sophisticated. Scardamalia and Bereiter therefore suggest intervention in teaching to help students move from information telling to information transferring by providing models and scaffolding.

The importance of providing scaffolding or more structured guidance for a successful learning experience is illustrated in Beatty and Nunan's (2004) study which aimed at investigating the difference between the use of the behaviourist model and constructivist model in an online collaborative learning environment. Their hypothesis that the constructivist method would generate more negotiation of meaning thus more collaboration among a group of English as a Second Language undergraduate students in Hong Kong was not supported by evidence. Beatty and Nunan randomly assigned ten pairs of students into two online discussion conditions – one group with an interface or instructional design which had easily available questions, tasks and hints and another group which did not have these guides or prompts readily available on the interface. These students were asked to answer questions based on Mary Shelley's *Frankenstein*. They were encouraged to discuss with each other in completing the assignment. In order to determine strategies Beatty and Nunan term as collaborative, non-collaborative and ambiguous, a coding scheme was designed. Quantitative and qualitative results of the analysis reveal that there were no significant differences between the two groups in the number of turns, words and average number of words per turn. Additionally, behaviours regarded as non-collaborative such as not picking up ideas and the use of avoidance in communication were displayed more in the constructivist condition than in the behaviourist condition. Beatty and Nunan also found that immature learners might find difficulty in selecting relevant and appropriate information presented in a “non-linear” (p. 181) manner on the Internet. They therefore concluded that the language maturity level of learners has a great bearing on the response to a particular instructional model. In the case of their study, this group of learners needed scaffolding and guidance in a structured manner in order to benefit most from their learning.

A similar finding was found in another study by Corden (2001) who followed a group of high school students over a one-year period to look at their discussion pattern and how they interpreted tasks. Corden's findings suggest that students require a set of commonly understood ground rules for discussion and completion of tasks to be facilitated successfully. How finely or openly the assignments are structured is a balance that teachers need to establish carefully since research has shown that tasks that require a higher level of thinking such as problem solving should be less structured than tasks with a lower level of thinking such as gathering information (Barnes & Todd 1977 cited in Corden, 2001). According to Nystrand, Gamoran and Heck (1991 cited in Corden, 2001), this is because the structure of discussion may make discussion members more inhibited in contributing ideas.

So far, the overview of research in collaborative learning seems to yield two observations. While it enhances an individual's communication and interpersonal skills, the quality of discussion and negotiation of meaning depend on the manner in which the task and discussion are structured.

2.3.3 Collaborative learning in constructing meaning: the online context

What has been discussed so far pertains to collaborative learning in the face-to-face environment. Collaborative learning can also be facilitated via the instrumentality of the computer. Such communication is termed computer-mediated-communication (CMC) (Herring, 1999). Examples of commonly used CMC tools for communication range from common computer-based ones such as email, instant messenger, audio and video chat via Skype, distribution list, electronic bulletin board and most recently twitter, to telecommunication tools such as the Short Messaging Service (SMS) and

Multimedia Messaging Service (MMS). In language teaching and learning specifically, the most commonly used CMC tools are email, chat room, discussion forum, video conferencing, blogs and wikis.

This section looks at the impact that CMC tools have on learning a second or foreign language and, in particular, on learning to write in a second language. It starts with a general overview of the literature related to the use of CMC tools for language learning and then focuses on writing.

The Internet may not be a new development as it has been in existence since the 1960s, but computer-assisted second language research (CASLA) started as an emerging discipline in ELT in the 1990s. Warschauer, Shetzer and Meloni (2000) contend that although studies in this area may not yield general conclusions, “specific insights into the impact of using particular on-line activities in particular circumstances” (p. 110) will help teachers have a better understanding of online language learning and will therefore help them to make informed decisions on why, how and when to use technology in the classroom.

Because of the ease of communication that online discussion tools provide for group discussions, teachers have started to implement them in their classrooms, some to replace the normal face-to-face classroom discussions. Therefore, there have been a number of researchers who have looked at different aspects of the impact of CMC tools. One of these efforts is studies that have attempted to find out if CMC tools help facilitate collaborative learning. Pychyl, Clarke and Abarbanel (1999) investigated how collaborative learning took place in two completely different contexts: a group of

8 to 11 year-olds creating webpages and eight graduate students posting their position paper for colleagues from other parts of the world to comment on. They found that in both contexts, group work and discussion were enhanced as there was a clear structure on how group members could participate and a clear distinction of contributions made by individual students. The former group benefited by learning how to work as a team and the latter gained different perspectives from the audience beyond their classroom.

Bump (1990) who used Computer Assisted Collaborative Discussion (CACD) software on the Local Area Network (LAN) in an English course, found great collaboration among students and between students and the teacher. He attributed the collaboration to the increased student participation, decentralisation of the role of the teacher and the increased emphasis on the student. In addition, he found that the students showed more honest communication, improved thinking and creativity.

In two other studies that made use of collaborative work, Shive (1999) and Soh and Soon (1991) reported that students who had worked together with their peers in another country using email found the language learning experience enriching, both linguistically and culturally. Shive's first project involved the teaming up of post-graduate students from the Chinese University of Hong Kong and the Teachers' College in Columbia University, New York to do a comparative study on the education systems in both contexts. His second project was a study of undergraduates of writing courses in the Chinese University of Hong Kong and the University of Oregon. The main writing tasks were to produce non-fiction writing pieces. Students acted as peer reviewers to give comments on writing drafts before they were

submitted. In both projects, Shive found that collaboration, in spite of the fact that they were done online and that the students were practically strangers at the beginning of the study, helped them become better writers. This was particularly true for the non-native speakers in Hong Kong; in comparison, the American native speakers received new insights and benefitted from the non-native speakers on both the subject and language. Soh and Soon's study, on the other hand, connected Singapore and Quebec students via email to discuss particular issues. Responses from students indicated that such collaborative work increased the students' willingness to make use of critical thinking skills and ability to write clear, forceful and effective drafts. Similar to Shive's finding, Soh and Soon's study also reveal that the students gained rich insights into others' cultures and lives.

In terms of group dynamics, Warschauer, Turbee and Roberts (1996) reported on studies which reveal that not only was there twice as much equality of participation in CACD than in face-to-face discussion but, in addition, women proposed ideas online as often as men. In face-to-face discussions, on the other hand, men usually initiated the first proposal five times more often than women. In addition, ideas suggested by those in a socially lower status group were accepted as often as those of a higher social status whereas in face-to-face context, ideas proposed by the latter were more likely to be accepted.

Ahern, Peck, and Laycock (1992) investigated the effects of teacher discourse in three conditions: questions only, statement only and conversational through the use of *Book Worm*, a synchronous chat tool that allows the user to browse sources in the database, write notes and ask for help. In the 'questions only' condition, the teachers

made use of mainly questions to engage the students in the chat. In the 'statement only' condition, their responses were mainly in statements. In the 'conversation' condition, the teachers interacted with the students in a conversation. Their results indicate that while the flow of interaction in the 'questions only' condition was linear, in the conversational environment, the most number of complex responses and peer-to-peer interaction were detected. In addition, after the initial posting, the teacher ceased to play a central role in the communication. Instead, he became a part of the group. Also, in terms of content, a higher percentage of participants in the third condition made use of external sources. They concluded that teacher intervention in synchronous chat poses a significant influence on the way students respond. Furthermore, peer interaction promotes learning and cognitive development, implying that collaborative learning has a positive influence on writing content.

Apart from studies that focused on the effects of CMC on collaborative learning, there is another category of research that compares face-to-face and online learning experience. Generally, though not conclusively, studies (Chun, 1994; Kern, 1995; Sengupta, 2001; Sullivan & Pratt, 1996; Warschauer, 1996) that compared CACD and conventional classroom discussions have found that students participate more and have more equal opportunity to participate in CACD than in the normal face-to-face context, they feel less stressful, their level of confidence increases and they have more mature and developed ideas. Researchers, however, differ in their findings related to accuracy of language and grammar.

In Sengupta's (2001) study, students exchanged and shared ideas with one another by posting and responding to messages posted on a bulletin board. She found that there

was a greater equality of opportunity for all the students to participate on the bulletin board. In another study, Leppanen and Kalaja (1995) asked their English for Academic Purposes (EAP) students to discuss their essay topics, write an outline, followed by two drafts of an essay and peer review the essay draft with their peers via computer conferencing. They found that there was more student talk in the online communication. In addition, students initiated new topics and elaborated more on their ideas.

Beauvois (1998a), in a study that surveyed students' feedback on their synchronous chat discussions, reported that 92% of the students experienced less stress in CACD than in the traditional classroom. Her students also found the CACD experience enjoyable and valuable. This resulted in increased participation, feedback and confidence. Skinner and Austin's (1999) study further strengthens this claim when their findings reveal that CACD did enhance their students' confidence and help overcome writing apprehension. Therefore, the use of CMC tools seems to be helping in lowering the anxiety level of students and offering them a less stressful learning environment.

The findings of research in CACD also suggest that it influences the quality of language output, in terms of the maturity of thoughts and grammatical accuracy. Because of the delayed response feature of the CMC tools, CACD allows students time to think about their ideas, phrase, rephrase and repair them before expressing their thoughts. Some researchers find this a positive effect on students' writing (Beauvois, 1998b; Leppanen & Kalaja, 1995; Pellettieri, 2000; Sengupta, 2001). Pellettieri asserts that because students who communicate via CACD have "more time

to process and monitor the interlanguage, synchronous network-based communication fosters the negotiation of meaning and form-focused interaction” (Pellettieri, 2000, p. 83). Warschauer also maintains that “electronic discussion can be a good environment for fostering use of more formal and complex language, both lexically and syntactically” (Warschauer, 1996, p. 22).

Kern (1995), on the other hand, is more cautious in claiming that CACD improves grammar accuracy. He argues that although there is a greater sophistication in students’ language output such as vocabulary and sentence structure, the conversational style of synchronous written communication may give rise to lesser attention to grammatical accuracy. He further suggests that because of this inaccuracy, students may be exposed to defective language.

Ocker and Yaverbaum (1999) explored the effects of face-to-face and asynchronous discussion on student collaboration in completing a group business case study project over 2 weeks. They focused on the usefulness of asynchronous discussion as a means to collaborate outside the class and whether it is an effective substitute for face-to-face discussion. Their results indicate that there is no difference between the asynchronous discussion and face-to-face group in the following respects: learning, quality of the written case analyses, content of the written case analyses, and solution satisfaction. However, they found that the face-to-face groups were more satisfied than the asynchronous discussion groups with the group interaction process and the discussion quality.

The results of existing research on the effects of new technology on the quality of writing are also mixed. Cononelos and Olivia (1993) used an electronic bulletin board on the Internet with an advanced Italian-language course, focusing on culture and society of Italy. They found that the students gained from feedback given by native speakers who were not teachers, but who shared common interests. They concluded that the use of the electronic bulletin board is more student-centred and thus an important factor in improving students' writing.

In Pennington and Brock's (1992) research which compared two different approaches to the individualised use of computers as supplements to university-level ESL writing courses, two groups of students used *Critique*, an IBM text analysis program plus a word processor. One group was guided by computer-generated feedback while the other group used the process-oriented tutorial approach. Pennington and Brock examined factors concerning student attitudes, written products and types of revisions made (encouraged by text-analysis program versus process-oriented tutorial approach). Their findings suggest that word processing together with conferencing help to promote the aims of process writing especially at the editing and proofreading stage such as the development of an internal monitor, favourable attitude towards writing and revising, and meaningful and extensive revision of written drafts. However, no conclusive claims were made by Pennington and Brock.

Haas (1989), who did a study in comparing university students who used a word-processing system and those who handwrote, found that less time was spent on planning using the computer than when writing by hand, especially at the initial stage, and there was less conceptual planning and more sequential planning by the computer

users than by the handwriting group. Haas suggests that this outcome happened probably because making changes was much easier with the computer. The students therefore were not overly concerned about making mistakes as these could be easily rectified using the computer. Instead, they focused more on shaping their thoughts than in worrying about language accuracy.

Oliver and Kerr's (1993) findings seem to concur with those of Haas. They studied marks obtained by 240 teacher-students in three categories: handwritten, type-written and word-processed where the students completed a questionnaire on writing strategies. The results indicate that students who used the word-processor scored higher than others. Later analyses show that the amount of revision was a factor in obtaining higher marks. They concluded that the reason the word-processed essays scored higher was probably due to the ease and convenience of the word-processor in facilitating revision.

In terms of writing performance, Zellermayer, Salomon, Globerson and Givon (1991) looked at five essays of sixty 13 to 15 year-olds to determine the influence of technology on their writing style. These students were divided into three categories: those who wrote using a conventional word-processor; those who used *The Writing Partner*, a CMC tool that provided guidance to writers during the writing process such as memory support, suggestions for evaluation and coherence, rhetorical elements, writing goals and audience, and those who wrote using *The Writing Partner* with guidance appearing only at the writer's request. The essays were rated by two judges on the number of ideas, coherence, idea development, cohesion and connectedness, and conclusions. The results show that the second group performed better.

Zellermayer et. al. (op cit) then did a post-experimental writing task to see whether the computer-aided writing program changed writing performance. The results show that the second group again did better. They therefore argued that students in the second group had internalised cognitive writing strategies offered and employed them.

Kellogg and Mueller (1993) did two studies which involved 16 novices and 69 experienced users of the word processors. Both groups of college students were trained to classify their thoughts (i.e. planning, writing, revising) while they were writing. They wrote an essay, with a 30-minute time limit. At intervals of thirty seconds, they were interrupted and had to indicate whether they were planning, writing or revising. The essays were then graded by two raters on content and style. Contrary to Haas' (1989) findings, they found that although more time was spent on planning and revising when using the computer, there were no significant differences in content and the hand-written essays had higher scores. They concluded that "using word-processors restructured the process of writing, but failed to improve performance" (p. 143).

In another study that looked at writing content, Hewett (2000) attempted to trace how group peer review or peer response influenced students' writing in the face-to-face versus online environment. Data collected were students' writing, journal, interview, teacher observation, transcripts of audio-recorded and online asynchronous discussion. His findings suggest that face-to-face discussion encourages more fluid idea generation in terms of abstract ideas and global thinking than asynchronous discussion, but the asynchronous discussion has an advantage over oral discussion for concrete revisions of content and form. In addition, the face-to-face discussion

establishes better interpersonal communication while the asynchronous discussion discourages intertextual idea exchanges because a student may read only comments directed to him/her and may not be bothered about comments made about others' writing.

So far, based on the findings of the studies that have been done on the impact of CMC (as compared to face-to-face) on language learning and in particular writing, a number of observations can be made. First, while some studies found participants to be less apprehensive when they took part in discussions online, others found participants anxious about their language skills as mistakes will be obvious and glaring in the written form. Second, although findings show that there is more balanced participation and contribution by the participants via the online discussion tools, there is still a small number of participants who do not contribute anything to the discussion. Because of the absence of the physical self, one could get away undetected without making any contributions. These could be uninterested participants or those who prefer to 'listen' and not 'speak'. Whatever the case, the CMC tools allow one to 'hide'. Third, while the delayed reply feature of the CMC tools allow for more expression of well developed and well thought-out ideas, some participants worried about the acceptance of their ideas. This fear is escalated when participants do not know each other well. Fourth, CMC discussion tools could assist in improving the quality of writing as they allow students to see the entire structure of their communication on screen which they can later analyse and change their mistakes thus improving their language and ideas. In addition, students have time to plan and edit their messages thus encouraging critical thinking. Fifth, the main disadvantage of CMC as opposed to face-to-face in a discussion is the lack of paralinguistic features.

The synchronous chat also lacks focus and elaborateness; participants find it hard to keep up with the discussion. Kern (2006), in discussing the question of whether the use of technology improves language learning, maintains that the issue is complex. He further asserts that there is a “need to refine the question to examine the myriad of ways in which computers are being used, by whom, in what contexts, and for what purpose” (p. 188). Even when these factors are established, the answer may still vary.

These studies in CMC and CACD have mostly focused on quantitative measures of syntactic complexity, lexical range, accuracy, writing fluency and questionnaires that attempt to elicit students’ attitude and behaviour. There is also a need for studies that observe and compare the actual processes learners engage in during CACD and face-to-face sessions. In addition, if this transfer of knowledge does take place, an observation and investigation of the patterns of such transfer should follow. Results of such an inquiry will not only provide invaluable insights to writing teachers on how student writers develop and organise their thoughts, they will also have implications for the methodology used in the teaching of writing. It is in this respect that the present study hopes to make a contribution to the literature.

2.4 Features of online text-based communication

2.4.1 Introduction

Any study into the use of digital and online communication requires an understanding of its language use. This section is therefore devoted to a discussion of the linguistic properties of chat communication. Indeed, the mode of communication in CMC varies – it could be text based or with the use of audio-visual, synchronous versus asynchronous, one to one versus one to many versus many to many, and time and

place dependent versus time and place independent. There are, in fact, four identifiable features of the synchronous chat, some of which are similar to face-to-face while some are significantly different. These features are categorised and summarised based on a selective survey of relevant literature in describing interaction patterns in online chat. They also incorporate Crystal's (2008) five distinctive features of texting which has great similarity with the online chat.

2.4.2 Feature 1: Time dependent

Similar to face-to-face communication, communication in the chat room is time dependent because all the participants must log on at the same time when they communicate. This also means that participants can get instant feedback on the comments or questions that they post.

One interesting observation of the chat room is that any lull period of even as short as less than a minute will provoke enquiries from other participants as to whether one is still present in the chat room. Therefore, chat rooms have frequent queries or references to confirm whether certain parties are still present in the chat or participants could warn others that they would be away for a period of time and then announce their return when they are back.

In a face-to-face situation, on the other hand, the interlocutor could witness the physical movements and expressions of fellow communicators. Therefore, there is no need to confirm the presence or absence of parties unless someone abruptly takes leave without indicating so.

2.4.3 Feature 2: Use of abbreviations, symbols, emoticons and simplified syntax

The use of abbreviations, emoticons and simplified syntax is frequent in the synchronous chat. This could be attributed to the conversational or speech-like nature of the chat room where one is conversing or chatting with the other parties, as if face-to-face. It is also a time-saving mechanism to enable chatters to type in as many words as possible. Cech and Condon (1998) refer to this as the ‘compression phenomenon’ and state that it is used as compensation strategies to overcome technical limitations of the computer. Additionally, the urgency to type fast has contributed to the brevity of the messages, using the simplest way possible. Not only are they brief, the messages when read aloud also sound like a conversation. Schneider, Kerwin, Frechtling and Vivari (2002) maintain that chat room users use abbreviations and emoticons as a way to increase their “social presence” (p. 33) in a communication medium where nonverbal communication cues cannot be observed. In addition, Chapelle (2001) notes that features in CMC environments include “simplified or reduced registers such as omission of subject pronouns, articles and copula, as well as use of contractions and abbreviations” (p. 89).

Although online chat is not phone texting, both share very similar features. A review of Crystal’s (2008) categorisation of the SMS texts is therefore helpful in understanding the distinct features of such text from other kinds of written texts. He identifies five characteristic features of text: pictograms and logograms, initialisms, omitted letters, non-standard spelling and shortening. Pictograms and logograms refer to symbols to represent a word, part of a word or sound. Examples given by Crystal (2008, p. 37 & 38) are: “*b* for ‘be’”, “2 for ‘to’ or ‘too’”, “@ for ‘at’”, “*b4* for ‘before’”, “*2day* for ‘today’”, “xxx for ‘kisses’” and “:-) or ☺ for ‘smile’”.

‘Omitted letters’ occur when a word is shortened by either deleting letters in the middle or at the end. Examples are: “*msg* for ‘message’”, “*rite* for ‘write’” and “*txtin* for ‘texting’” (Crystal, 2008, p. 46).

‘Shortening’ refers to the removal of part of a word which is usually at the end or at the beginning. Examples given by Crystal are: “*gran* for ‘grandmother’”, “*uni* for ‘university’”, “*bro* for ‘brother’”, “*doc* for ‘doctor’” and “*gov* for ‘government’” (Crystal, 2008, p. 51).

‘Initialisms’ as defined by Crystal refer to the use of initial letters of words similar to what is usually done with proper words like BBC (British Broadcasting Corporation), CNN (Cable News Network) and CNA (Channel News Asia). Examples are: “*Y* for ‘Yes’”, “*FTF* for ‘face to face’”, “*OMG* for ‘Oh my God!’” and “*LOL* for ‘laughing out loud’” (Crystal, 2008, p. 42).

The fifth category of texting feature highlighted by Crystal is non-standard spellings which refer to intentional spelling of words in a certain way mainly for ease and convenience, such as “*cos* or *cuz* for ‘because’”, “*luv* for ‘love’”, “*thru* for ‘through’” and “*wot* for ‘what’” (Crystal, 2008, p. 48 & 49).

Some characteristics not discussed by Crystal that are present in online chat include the use of abbreviations, symbols, emoticons and simplified syntax. Emoticons, in particular, are widely used to express feelings and to compensate for the lack of nonverbal cues, mainly facial expressions and gestures that are present in face-to-face

communication. The main difference between the use of nonverbal cues in face-to-face and synchronous chat modes of communication is that in the former context, the listeners are the ones that interpret the meaning of the nonverbal cues; whereas in the synchronous chat context, the speakers verbalise and express their own emotions and feelings as a way to reduce the risk of misunderstanding between speakers.

Nonetheless, for communication to take place and messages to be conveyed effectively in the synchronous chat, participants will have to be familiar with and will have to understand what the emoticons and abbreviations represent.

The syntactic structure of the language used in the chat room is also interesting and varied. It ranges from one-word utterances, a demonstration of feelings via emoticons, phrases, brief noun clauses, to simple sentences and paragraphs with complex sentences. Sotillo (2000) compared the syntactic complexity of English as a Second Language (ESL) learner output in synchronous and asynchronous CMC. Her study found that because of the longer time lapse in the asynchronous mode, in this case the discussion forum, students using the asynchronous mode produced sentences which were more complex than those using the synchronous mode. More subordinate and embedded subordinate clauses were used. In the chat room, on the other hand, students used shorter clauses and sentences.

Indeed, both the chat room and SMS are inundated by frequent use of abbreviated spelling of words, content or lexical words without verbs, dropping of articles, prepositions and slang, even in an academic context where the discussion focuses on academic issues and topics. There are, however, many other sophisticated abbreviated words that have been concocted and many more to appear in the future.

An example cited from Crystal (2008, p. 26) is “*F u cn rd ths thn wats th prblm?*” which means “If you can read this what’s the problem?”.

2.4.4 Feature 3: Nature of ‘talk’

Nature of ‘talk’ here refers to how participants communicate or how conversations are carried out in the chat room. The first issue is the presence of openings and closings in the conversation. In the face-to-face context, greetings and farewells are common in any type of interaction. However, in the synchronous chat room, unless the participants use pseudonyms or nicknames, the technology can automatically detect the identities of the participants. Therefore, it is optional for openings and closings to be present in the chat room (Murray, 2000). In other words, participants can enter the chat room without identifying themselves or addressing or acknowledging the other participants, and leave without signing off. Despite the option to choose whether to give greetings or farewells, chat room data indicate that acknowledgements, greetings and farewells are frequent.

The second issue with the nature of ‘talk’ is the length of responses, which varies between the chat room and discussion forum. In a study conducted by Schneider, Kerwin, Frechtling and Vivari (2002), face-to-face discussion and chat room discussion were compared. When they looked at the number of words per comment, they found that chat room participants used very brief utterances. They attributed this to the urgency felt by participants to post their responses before the discussion proceeds to other topics. The urgency to say something fast stems from the wait time in the chat room, which is short, and the expectation of other participants who may get impatient if they do not receive immediate replies. In addition, in an active chat

room, the page scrolls up so fast that participants may not have time to read a lengthy message. And if they want to read the message after it moves up from the working screen, they will have to scroll up the page for the message. This creates inconvenience and the effect is that chat room participants usually keep their responses brief. In addition, experienced chatters break down their sentences or thoughts into small units as a strategy to hold on to their turn and to maintain the attention of the other participants.

The third issue of the nature of 'talk' is turn-taking. Sacks, Schegloff and Jefferson (1974) postulate that there is a turn-taking system governing every conversation. This applies to chat as well. Among others, they suggest features and rules applicable to the construction of turn, allocation of turn and coordination of the transfer of turn. In addition, repair mechanisms are used where there are overlaps in a conversation. A number of studies have looked at the number of turns in the chat room. Chun's (1994) study looked at the writing products of students studying German who used chat between 15 and 25 minutes. She found that the number of entries or turns ranged from 2.8 to 17.8 for each student. Kern (1995), when comparing transcripts of oral discussion and chat log of a chat room discussion, found that there were 2 to 3.5 times more turns in synchronous chat. This indicates not only the frequency of turn-taking, but also the participation level of members in the chat room.

In terms of time lapse between turns, it is very minimal or sometimes even non-existent in the chat room. Also, there are many overlaps within each conversation. As for sequence in the chat room, although it displays the current-speaker-selects-next turn-taking structure (Sacks, Schegloff & Jefferson, 1974), there are many

occurrences where speakers self-select. Therefore, the possibility and potential for participants overlapping one another is much greater than in the face-to-face context (Murray, 2000).

McKinlay, Procter, Masting, Woodburn and Arnott (1994) compared turn-taking behaviours and the role of turn-taking protocols in face-to-face versus synchronous chat modes. They assumed that the lack of paralinguistic features, in addition to the added cognitive burden of using technology and social presence would pose difficulties in turn-taking structure. Due to these problems in turn-taking, they hypothesised that the participants would try to reproduce turn-taking behaviour in face-to-face communication to reduce delays and overlaps between turns. Participants in both face-to-face and synchronous chat mode paired up to do a gap-filling task where they had to convey to each other the content of a given paragraph. Two conditions were explored in the synchronous chat mode, explicit and implicit turn-taking mechanism. In explicit turn-taking, participants signalled their intention to contribute and to listen whereas in implicit turn-taking, intentions were not made known.

McKinlay, Procter, Masting, Woodburn and Arnott (1994) analysed the length of pauses between statements, number of overlapping statements, scores based on the amount and accuracy of information passed, and the participants' appraisal of the effectiveness of turn-taking signals. The results reveal that all the participants in the face-to-face mode were immediately aware of overlapping. Similarly, in the explicit turn-taking synchronous chat mode, although there were pauses and overlaps, the participants were able to complete the given task. However, in the implicit turn-

taking synchronous chat mode, instances of pauses and overlaps were the highest. This implies that most of the time, the participants were unaware that overlapping occurred.

Therefore, in turn-taking, unlike face-to-face communication, chat room discourse does not conform to the no overlap principle and principle of orderly turn alternation (Herring, 1999).

2.4.5 Feature 4: Focus of discussion

Staying focused on a topic is one of the most difficult things to control in a chat room, even when participants are given specific tasks to do and accomplish. One of the aspects that McCarthy, Miles, Monk, Harrison, Dix and Wright (1993) attempted to look at in their study was the maintenance of focus in a synchronous communication mode. They asked the participants to complete a task and found that their participants had a difficult time staying on task. This finding implies that there is a likelihood and natural tendency for chatters to side-track. Ideas bounce around and certain threads of an idea may be further pursued. Therefore, the entire communication consists of multiple threads, some of which may not be relevant to the topic. It is difficult to keep track of the multiple discussions that are going on in a single chat session unless everyone stays focused all the time.

2.5 Chapter summary

This chapter starts with the aim of arguing for a need for research done on the stages of a writing approach that has been implemented in first and second or foreign language writing for the past few decades. Specifically, one of the stages, namely the

brainstorming stage, which is usually carried out in group or pair work as a teaching methodology in the classroom has not yet been well-researched even though the individual writer's thought processes while drafting have been studied through the use of think-aloud protocols (Smagorinsky, 1991). In addition, through a discussion of the evolution of the process writing approach into genre-based process writing approach and a survey of research and studies, evidence shows that much has been done mostly to look at the impact of the process writing approach on students' learning at the macro and micro levels. However, there is still little done on the impact of planning, namely group brainstorming session, on individual writing in both face-to-face and online environments.

The chapter also surveys literature and research on collaborative learning and how meaning is constructed in a community. Again, there is much said about the positive effects of collaborative discussion on an individual and there is also mention about the amount of scaffolding or guidance to be given in order not to stifle any discussion. Most importantly, in relation to the interest of this study, there is much yet to be done in ascertaining the influence of group discussion on individual writing.

A third area that the chapter discusses is the use of online or computer-mediated-communication tools in the social and academic contexts of literacy practices. The discussion entails a description of key characteristics of synchronous chat in order to establish an understanding of the communication and the chat scripts of the study.

CHAPTER THREE METHODOLOGY ONE – PILOT STUDY

This methodology chapter aims to focus on three aspects of the research. First, it describes a pilot study that was carried out prior to the main study. Second, it discusses analytical approaches, in particular a framework that was developed to code and analyse data of face-to-face (F2F) and synchronous chat discussion sessions. Third, it does a critical evaluation and reflection on the pilot study and the proposed framework to address and resolve flaws or shortcomings of the data collection methodology and analysis tools. This exercise will subsequently inform the methodology of the main study.

3.1 Pilot Study

The students selected for the study were in the English for Academic Purposes (EAP) tutorial classes in Semester 1, 2002, at the Faculty of Engineering (FoE), National University of Singapore (NUS). These students took the Qualifying English Test as described in Chapter One and were required to read an English for Academic Purposes (EAP) course. Because they majored in Engineering, the English for Academic Purposes course they took was the one offered at the Faculty of Engineering. Generally, students at the Faculty of Engineering are allocated to these classes based on two criteria: their major discipline and the timetable of their core modules in that semester. The Faculty of Engineering first groups students according to their respective disciplines such as Mechanical, Civil, Environmental, Chemical, Electrical and Electronic, and Computer Engineering. Within each discipline, students are assigned to different English for Academic Purposes tutorial classes, taking into consideration the timetable of their core modules.

There were 20 English for Academic Purposes classes in total in the semester when the pilot study was conducted, of which the researcher taught two. One of the researcher's classes was designated the experimental group and the other was designated the control group. Due to administrative reasons and constraints, both groups chosen for the study had to be classes taught by the researcher. Therefore, the selection of students for the study was not random. Detailed information on the profile of participants in the experimental and control groups will be discussed in Section 3.1.1.

The purposes of the pilot study were threefold: one, to pre-empt any unanticipated logistic issues involved in collection of data for the main study. One of the key administrative concerns was the availability of a computer lab with at least 20 workstations with network access. At the National University of Singapore, language classes were designed and conducted for students at the respective faculties; thus, classrooms and computer labs used for tutorials were managed by staff of the respective faculties, in this case the Faculty of Engineering. Therefore, any booking of facilities would have to be done through the faculty which had a reservation priority for Engineering related modules. This required advanced planning of the exact dates the study was to be conducted and possible rescheduling of tutorial timetable if there was no computer lab available.

Another concern was related to the chat room software, a key research tool that would be used for the study. Even though the content management system (CMS) that housed the chat feature, known as the Integrated Virtual Learning Environment (IVLE), had gone through several modifications, revision and upgrading, there was

possibility of access and stability problems in a computer lab that was unfamiliar to the students as well as the researcher.

In short, in terms of logistics, although efforts had been made to ensure everything was in place prior to the date of the study, there could be some unforeseen difficulties that were beyond the expectation of the researcher. Therefore, should any unexpected event were to occur, it could be noted and rectified before the main study was conducted.

The second purpose of the pilot study was to do a trial of the research design and to examine if it could adequately answer the research questions and to address potential flaws. The plan was to collect data from the beginning of the process writing cycle, namely the brainstorming discussion session, to the submission of the final written draft. Nonetheless, the focus was on three stages of the cycle which included discussion for ideas, individual outlines students wrote immediately after the discussion, and the first written draft after the outlining exercise. In addition, it was equally important to test the clarity of both instructions given to students for the discussion session and the prompt for the writing task. All these were key variables that could affect reliability, direction of discussion and to some extent content and quality of writing.

The third which was the key purpose of the pilot study was to analyse the collected data using an analytical framework (see Section 3.1.6) developed for the purpose of this investigation. The use of a framework would involve data coding, instructions for and training of raters, all of which were necessary in order to establish consistency, reliability, and confidence for the framework. Therefore, the pilot study would help the researcher to address shortcomings of the framework and coding

procedures so that relevant and appropriate changes could be made before they were implemented in the main study.

3.1.1 Profile of participants

The pilot study was conducted on two classes of first-year undergraduate Engineering students who were enrolled in an English for Academic Purposes module, EG1471.

One class (control group) did their discussion in the conventional face-to-face mode while the other class (experimental group) discussed via the chat. The demographic information of both groups of students is displayed in Table 3.1.

Table 3.1 Gender and national origin of control (face-to-face) and experimental (chat) groups in pilot study

| | | Group | | Total |
|------------------------|-----------------|------------------------|---------------------|-------|
| | | Control (face-to-face) | Experimental (Chat) | |
| Gender | Male | 15 | 5 | 20 |
| | Female | 2 | 7 | 9 |
| | Total | 17 | 12 | 29 |
| National origin | Singaporean | 5 | 5 | 10 |
| | Non-Singaporean | 12 | 7 | 19 |
| | Total | 17 | 12 | 29 |

There were 17 students in the control group and 12 in the experimental group. These students came from different English learning backgrounds: 19 or 65.5% of them were non-Singaporeans who learned English either as a second or foreign language. These foreign students were mainly from Asian countries such as Malaysia, China and Vietnam. In these countries, English is not the medium of instruction. It is one of the subjects taught in elementary and secondary schools. Student size in a classroom, qualifications of teachers in teaching English, access to supplementary and support learning materials, family background of students, and exposure to English outside of

classroom not only vary from one Asian country to another, they also vary within a country depending on whether students come from rural or urban areas. The rest (i.e. 10 or 34.5%) were Singaporeans who used English as the medium of instruction since they were in pre-school. However, they were non-native speakers of English. Generally, between the non-Singaporean and Singaporean students, the latter had more exposure to the use of English both in and out of the classroom.

In terms of gender, the number of females in the control group of 17 was low, with a female-male ratio of approximately 1:7 whereas in the experimental group of 12, there was an almost equal number of females and males, with a female-male ratio of approximately 1:1.

In terms of academic performance and achievements, the Engineering faculty at the National University of Singapore has one of the highest cut-off marks for academic requirements. This means that students must have very good pre-university results to get enrolled into an Engineering course. Therefore, most of the students in both classes had excellent results in their GCE 'A' level exam or equivalent. Many received scholarships either from the Singapore government or governments of their home countries. In short, these were bright, intelligent students but they required help in expressing and communicating their ideas clearly in academic writing in English.

3.1.2 Description of course and teaching methodology

EG1471 is a 48-hour writing course that helps to prepare students to improve their academic writing skills, specifically in recognising their strengths and weaknesses which will assist them in making appropriate revision to their writing independently. All this is done through discussion or sharing of ideas, reading passages related to

essay topics, doing research on essay topics, working on grammar exercises, and writing paragraphs and essays of about 600 words. Classes meet twice a week; each tutorial session is two hours.

The genre-based process writing approach was adopted as the teaching and learning methodology of the module. Each writing task in the module followed a cycle: first, there was a presentation of genre which was followed by exercises analysing the key features of the genre; second, students would brainstorm topics and ideas in groups, do an outline independently, and write the first draft individually; subsequently, students would do a peer review exercise; and finally, based on comments given by peers, students would revise their draft before submission (see Figure 3.1).

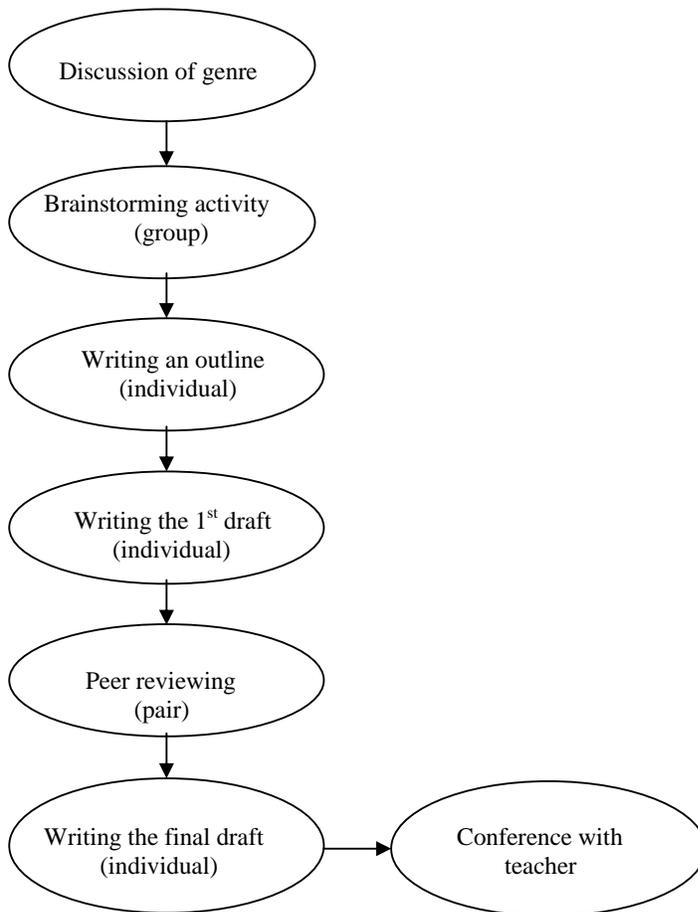


Figure 3.1 Writing cycle

Twice a semester, students would meet with their teacher for an individual conference session to discuss their writing strengths and key areas of improvement. Within each writing cycle, there were tutorial sessions where students did relevant reading assignments, grammar exercises and learned the rhetorical structure of each type of academic essay.

In terms of content and organisation, students were evaluated on the clarity of their arguments, namely whether the essay had a clear and strong thesis statement or main argument, main supporting ideas that advanced and developed the thesis, and examples and evidence that helped to build and strengthen the main supporting ideas. The structure of essay introduced to the students is a five-paragraph model (see Appendix 1), which starts with an introduction followed by body paragraphs and a conclusion. It is an essay structure that is commonly recommended for student writers in writing course books (Brannan, 2002; Kelly & Gargaliano; Kelly & Lawton, 1998; Langan, 2001; Low & Pan, 2006; Smalley, Ruetten & Kozyrev, 2001; Sokolik, 2000) for English for Second Language (ESL) and English for Foreign Language (EFL) students.

Throughout the course, students were required to write three types of expository essay in the following sequence: cause-effect, problem-solution and comparison-contrast. The length of each essay was between 500 and 650 words. At the time when the pilot study was conducted, the writing task assigned to the students was a problem-solution essay. Prior to the tutorial session of the pilot study, students had had instruction and practice on how to write a clear thesis statement and a topic sentence, in addition to how to build their case, elaborate and support their arguments in the specific genre.

Students were also familiar with the process involved, namely the writing cycle as illustrated in Figure 3.1 on page 67.

The procedure which is normally followed in this class is as follows. For the problem-solution structure (see Figure 3.2), the students are presented with two alternative models. In the first model, the situation and description of the problem constitute the introductory paragraph of the essay; this is followed by either two or three key solutions in the next three paragraphs; the last paragraph contains the conclusion. In the second alternative, as employed in the pre-writing reading article (Appendix 10), the situation and description of the problem constitute the first and second paragraphs of the essay; the third and fourth paragraphs contain the proposed solutions and the final paragraph is the conclusion. The procedure outlined above was adopted in the pilot study.

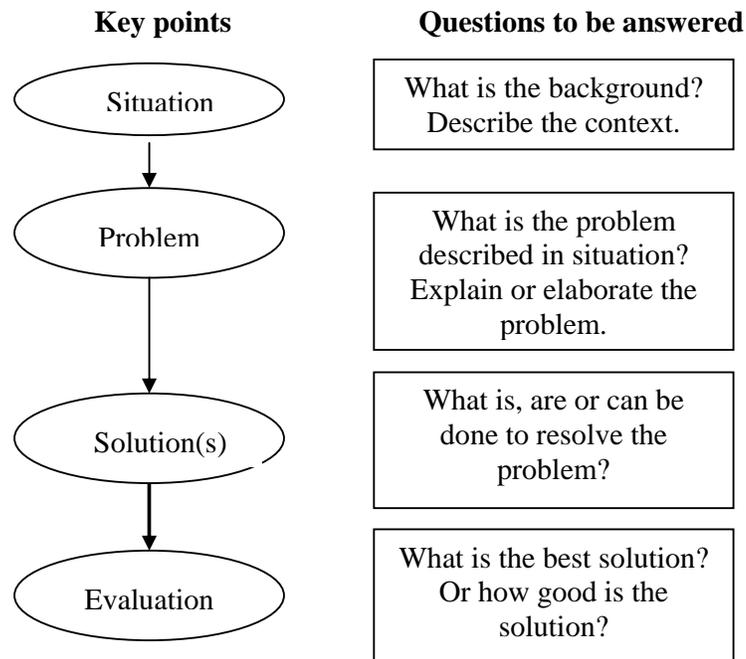


Figure 3.2 Macrostructure of a problem-solution essay

3.1.3 Procedure

At the beginning of the tutorial session, both the control and experimental classes were randomly divided into four teams respectively to brainstorm topics and main supporting ideas that they could use for their individual essay. Both groups received the following instructions:

Instructions to the face-to-face control group

In the last tutorial lesson, we read and analysed a problem-solution essay on solutions to the problem of water shortage. In this tutorial lesson, you will form a group with two or three other classmates to brainstorm ideas for a problem-solution essay that you will write on your own and submit for grading. In your brainstorming session, you should

- a. discuss possible problems and the respective and related situations or contexts;*
- b. talk about potential solutions to each problem; and*
- c. suggest some examples or evidence to support each solution.*

You may decide to stick to just one problem area instead of talking about a few. You will be given about 20 to 25 minutes for your discussion. After the discussion, individually, you should decide on one problem area or one main topic on which you would like to write an essay. Work out an outline by the end of the tutorial lesson.

Using the outline, write the first draft of the problem-solution essay of between 500 and 650 words. Do the essay as homework if you are unable to finish it before the end of this tutorial lesson. You must print the first draft and bring it to the next tutorial lesson for a peer review exercise.

Instructions to the chat experimental group

In the last tutorial lesson, we read and analysed a problem-solution essay about solving the problem of water shortage. In this tutorial lesson, you have been assigned randomly with two or three other classmates to brainstorm ideas for a problem-solution essay that you will write on your own and submit for grading.

Instead of discussing face-to-face, you will discuss using the IVLE chat. Please logon to your IVLE workspace and check if you have been assigned a chat group. Please raise your hand if you have not been assigned one.

With your chat team members, you should

- a. discuss possible problems and the respective and related situations or contexts;*
- b. talk about potential solutions to each problem; and*
- c. suggest some examples or evidence to support each solution.*

You may decide to stick to just one problem area instead of talking about a few. You will be given about 20 to 25 minutes for your discussion. After the discussion, individually, you should decide on one problem area or one main topic on which you would like to write an essay. Work out an outline by the end of the tutorial lesson.

Using the outline, write the first draft of the problem-solution essay of between 500 and 650 words. Do the essay as homework if you are unable to finish it before the end of this tutorial lesson. You must print the first draft and bring it to the next tutorial lesson for a peer review exercise.

Please raise your hand if you encounter any problem with the chat software. As I am also one of your chat team members, if you have any questions related to the brainstorming exercise to ask me, please do so in the chat.

The duration of the brainstorming session was approximately 25 minutes. When the discussion ended, the face-to-face control group hand-wrote their mind map or outline (see Appendix 2) independently while the chat experimental group did their outline, also individually, on the computer. Some of them started drafting their individual essay but most had just enough time to complete their outline. Therefore, all the students completed the first draft out of class as homework.

Although at the onset of the pilot study the researcher was aware that the instruction “*Do the essay as homework if you are unable to finish it before the end of this tutorial lesson.*” might pose a possible threat to the validity of the research, there were time and administrative constraints which did not allow for students to complete their essay during the tutorial session. By allowing students to finish their essay as homework would introduce possible sources of uncontrolled variation. More specifically, students who completed their essays as homework would have had more time devoted to it (i.e. essay) than students who finished their essay in the tutorial session. In addition, the former would have had access to sources of information which were not available to those who finished the essay in the tutorial session. This problem was addressed through the administration of a semi-structured interview to find out if students had made use of other sources to search for ideas for their essay (more detailed discussion in section 3.1.4 Research Methodology).

Another concern involved the conditions under which the students wrote their essay. The face-to-face control group handwrote whereas the chat experimental group word

processed it. Again, this was due to administrative constraints, namely the availability of computers for the face-to-face group. However, since all the students wrote the essay as homework and the submitted draft was word-processed, the medium in which they drafted their essay was the same.

When students attended the next tutorial lesson, they peer reviewed each other's draft. The focus of the exercise was on content and organisation but students could highlight language errors or question expressions and sentence structure used. Students need not stick to their original brainstorming team but could pair up with someone who was not in the brainstorming discussion team when doing the peer review exercise. To ensure that students knew what each other's role was, a brief practice was done using a checklist (see Appendix 3), which was subsequently used as a guideline in the actual peer review activity. Keeping in mind feedback from peers, students revised their draft and submitted it before the end of the tutorial.

3.1.4 Research methodology

A few research tools were employed in carrying out the pilot study: audio-recording of and chat facility for the brainstorming and peer review sessions, collection of students' individual outlines and drafts, and a semi-structured interview. Collection of data was done over two tutorial lessons. Figure 3.3 illustrates chronologically the pre-writing, writing, post-writing activities and data collected at each level of the data collection process. Activities done in class are framed in solid ovals while activities done out of class are in dotted ovals. The type of data collected is indicated in solid boxes. Although the duration of each tutorial was two hours, in Tutorial 1 only the second half was allocated for brainstorming exercise. This was done in line with the

scheduled lesson plan where in the first half of Tutorial 1, students did some language activities.

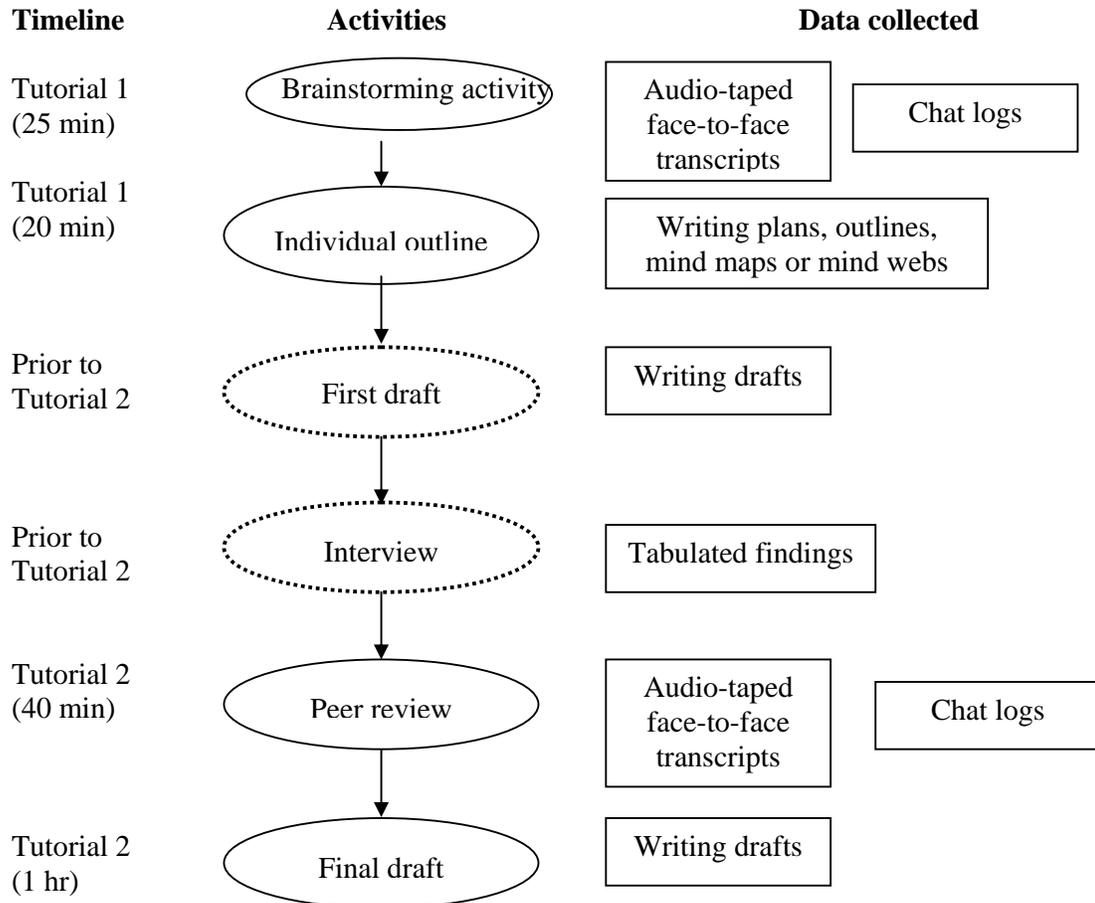


Figure 3.3 Data collection process

In Tutorial 1, the lesson for the control group was conducted in a normal classroom with no access to computers. The brainstorming discussion of each team was recorded using an audio recording device. Therefore, in a class of four teams, four audio recording devices were used with each device placed in the middle of the team. Students were told to first test if each device was in good working condition before they started their discussion. It was observed that the students did not seem to notice the presence of the audio recording device once the discussion was in progress. After

collecting the audio recording of the face-to-face discussion, the researcher transcribed them in three stages. In stage one, the researcher attempted to transcribe all the discussion content as well as particles and fillers. In stage two, while checking the accuracy of the transcription, the researcher paid extra attention to demarcation of turns so that they were accurately represented in the transcript. Format and layout were also considered to establish consistency in presentation of data. Stage three was mainly a proofreading exercise in addition to ensuring again that the transcription had captured the content of the brainstorming discussion.

In Tutorial 2 students met in a computer lab. In the first 40 minutes of Tutorial 2, students did a peer review exercise face-to-face. Subsequently, they revised their draft immediate on the computer and submitted the final draft by the end of Tutorial 2. As for the experimental group, both tutorial lessons were conducted in a computer lab. Due to constraints in resources, only one discussion team in the face-to-face control group was audio-taped and later transcribed. However, chat logs of all four teams in the experimental group were kept and analysed.

The semi-structured interview (see Appendix 4) was an attempt to ascertain if there were variables that might have influenced the content of students' essays, besides the brainstorming discussion. It was conducted by the researcher, an hour before Tutorial 2. All the students participated in the interview. The researcher interviewed each student individually for approximately five minutes.

For the discussion of the pilot study, although data were collected from the brainstorming session to the final draft, the analysis focused only on stages from the brainstorming session to the first draft, to trace and track how students who did their

brainstorming in the face-to-face and chat modes made use of the discussed ideas in their individual writing drafts. Additionally, on top of collecting data for the study, students were requested to complete a consent form (see Appendix 5) to indicate that participation was an option and to acknowledge that they understood their involvement would have no consequence to their grades.

3.1.5 Research questions

Data collected attempted to answer the following research questions:

- a) What was the time on task during the discussion? Did students deviate from the topic of discussion? If so, what was the proportion of time that students were on task as opposed to time off task?
- b) What were the main ideas mentioned in the brainstorming session?
- c) How in-depth did students discuss the main ideas? Did they provide support, evidence or argument for the main ideas?
- d) Did ideas discussed in the brainstorming session appear in students' individual draft? Did initiation of an idea have an impact on whether it was used in the student's own draft?
- e) Were there any intervening factors (besides ideas initiated in the brainstorming session) that influenced the ideas in the draft? If yes, what were they?
- f) What are some observable similarities and significant differences that can be found between face-to-face and synchronous chat mode of discussion?

Findings of these questions will be presented in a later section of the chapter, along with the framework or model employed in analysing the data and answering the research questions.

3.1.6 Literature on frameworks and analysis models

Central to this study is the discussion session that was conducted either via face-to-face or chat mode. The discussion transcripts were used as the main source of data to look at how knowledge or content was initiated, negotiated and shaped as a group and later “metamorphosed into writing” (Plowman, 1993, p. 151). In order to make sense of the discussion transcripts and to trace the content built in the discussion to a piece of written text, two things are involved: first, the definition of a unit of analysis or what constitutes a unit in the discussion transcripts and second, the establishment of a coding scheme or an analytical framework to analyse the content of both discussion and text. Both are interrelated. The discussion transcripts would have to be divided or segmented into units which would be assigned specific codes.

Mason (1992) in examining methodologies used for evaluating computer conferencing or discussion via the use of computer technology, recognises the importance of a qualitative analysis of the content of the interaction in order to gain a better understanding of the learning that has taken place and how knowledge is created within that specific community. This is emphasised again by Gunawardena, Lowe and Anderson (1997) who reiterate the importance of such an analysis to gain further insights into the experience of a group co-creating knowledge in computer conferencing. Similarly, this concern is echoed by researchers investigating face-to-face interaction discourse (Burton, 1981; Sinclair & Coulthard, 1975). This is an area in which the proposed framework used in this research aims to address, that is to enable an observation and analysis of how content co-constructed as a group, in face-to-face and chat modes, is represented in each individual’s writing.

3.1.6.1 Content and interaction analysis models

In the case of this pilot study, the framework and unit of analysis used must be applicable to both spoken and written discourse, namely the transcripts of the face-to-face and chat discussion. There have been a number of studies that have made use of content or interaction analysis models as their analytical framework. Table 3.2, in chronological order, summarises a few aspects pertaining to these models: the mode of discussion (whether it is asynchronous or synchronous computer discussion or face-to-face discussion), the definition of unit of analysis, and the key areas of investigation.

Table 3.2 Summary of existing content and interaction analysis frameworks (Garrison & Anderson, 2003, p. 133)

| Study | Year | Mode of communication | Unit of analysis | Key areas of investigation |
|-------------------------|-------------|------------------------------|--|--|
| Ahern, Peck and Laycock | 1992 | asynchronous | Message | Investigated direction of students' interaction and content of the students' responses |
| Henri | 1992 | not stated | Thematic unit (not consistent in all 5 dimensions) | Presented 5 dimensions in analysing content of (and learning) computer conferencing: participative, interactive, social, cognitive, and metacognitive. |
| Waggoner | 1992 | asynchronous | Not mentioned | Presented a case study involving quantitative and qualitative analyses of four areas: ¹ the extent to which elements of face-to-face communication are present in computer conferencing, ² participation analyses both as observed and as self-evaluated, ³ knowledge gained, ⁴ leadership |

| | | | | |
|------------------------------|------|--------------------------------------|---|--|
| Plowman | 1993 | face-to-face | Key words (notes), sentences (essay) | Identified key words in face-to-face discussion (notes), traced them to draft and final draft in collaborative writing |
| Newmann, Webb & Cochrane | 1995 | face-to-face & asynchronous | Thematic unit | Presented content analysis framework to assess cognitive processes and critical thinking in CSCL context |
| Howell-Richardson & Mellar | 1996 | asynchronous | ¹ Message level for relationship between messages ² Illocutionary act for interaction analysis (syntactic structure) | Investigated hypothesis that small differences in course design and behaviour of forum moderator will influence nature of participant interaction and patterns of participation with the same student body Trialled methodology used to make such comparisons |
| Gunawardena, Lowe & Anderson | 1997 | asynchronous | Message | Presented Interaction Analysis Model for examining social construction of knowledge in computer conferencing Used the model to identify and trace patterns of negotiation of meaning how knowledge is co-constructed in a CSCL context |
| Mowrer | 1996 | asynchronous (4 students each group) | Topic in forum | Investigated student-teacher interaction by categorising topics of posting into 16 groups Identified 4 interactive communicative categories that show interaction pattern between student and teacher: service learning, activities input, |

| | | | | |
|-------------------------|------|-----------------------------|---|---|
| | | | | positive feedback, and grade assessment |
| Hara, Bonk & Angeli | 2000 | asynchronous | Paragraph (assuming each paragraph contains one idea) | Examined how online environment encouraged higher-order cognitive and metacognitive processing and how it fostered interaction, based on five variables: student participation rate, interaction pattern, social cues, cognitive and metacognitive aspects of messages, depth of processing Framework adapted from Henri's and Howell-Richardson & Mellar's, focusing on cognitive and metacognitive aspects |
| Coffin & Hewings | 2005 | asynchronous | Linguistic expressions or realizations or utterances (not sure if it's word, phrase, or sentence level) | Compared use of computer conferencing for academic debates and arguments, which are transferred to written assignments (process of argumentation) Used systemic functional grammar engagement as framework (6 categories): endorse, distance, non-endorse, proclaim: expect, proclaim: pronounce, probablilise |
| Fitze | 2006 | face-to-face & synchronous | Clause (<i>t</i> unit), word (type-token ratio & Gini coefficient) | Compared discourse and participation patterns of face-to-face and synchronous discussions using <i>t</i> test, type-token ratio, and Gini coefficient (equality of participation) |
| North, Coffin & Hewings | 2008 | face-to-face & asynchronous | <i>t</i> unit | Investigated argumentative talk using coding scheme based on moves |

Most of these analytical frameworks presented in Table 3.2 attempt to analyse interaction and content of asynchronous computer conferencing in order to understand how learning takes place in an online environment. There are, however, three studies that involved face-to-face discussion: Plowman (1993), Newman, Webb and Cochrane (1995), Fitze (2006) and most recently North, Coffin and Hewings (2008).

The key focus of Plowman's (1993) research was to investigate how a discussion could contribute to the construction and shaping of new ideas and meanings which were subsequently represented as text, written collaboratively by the same discussion group members. Using reverse engineering, that is tracing back from final draft to first draft and face-to-face discussion notes, Plowman traced a collaborative writing process (at revision stage) of five master's students. She did a matching exercise (using key words) and attempted to establish the extent of content in the final draft (using sentences) that could be found in the first draft and discussion notes. Although Plowman does not indicate specifically the unit of analysis she used in the matching exercise, inferring from the procedure she described in tracing the content, it seems that key words (in notes) and sentences (in essay drafts) were used as her units of analysis in notes and drafts respectively.

To analyse interaction and roles played by discussion group members, Plowman developed a coding scheme that includes four categories:

“procedural (deciding appropriate approaches for content and allocation of roles); substantive (asking questions and offering explanations concerned with the subject domain); executive (talk concerned with the writing process and style); and group (building group identity, jokes, off-task)” (p. 152).

Plowman found and concluded that the social dimension of a face-to-face discussion, with nonverbal communication cues inherently present, is closely linked to the co-creation of meaning and content and that it (face-to-face discussion) is not easily replaced by computer supported medium such as email and fax. Taking into consideration the research was done prior to the widespread use of online discussion forum and chat, it is easy to understand such an observation. In terms of development and organisation of ideas, Plowman found discussion helpful for writing but she cautioned that there should be an efficient way of capturing and transferring the content of a discussion into text.

Although the context and conditions of Plowman's study differ from this pilot study, the methodology used, namely the tracing of content from final draft to discussion and the establishment of a coding scheme to analyse talk, is similar. However, while Plowman's study offers insight into how text is *co-authored* based on a discussion, findings of this pilot study hope to provide some understanding on the generation of a text *individually* written following a discussion that aimed to construct content *collaboratively*.

Newman, Webb and Cochrane's (1995), and Fitze's (2006) are two other studies besides Plowman's that aimed to investigate patterns of interaction and co-construction of message and meaning in a face-to-face discussion. Additionally, both studies attempted to compare such patterns in face-to-face and online discussions: Newman, Webb and Cochrane used asynchronous mode whereas Fitze used synchronous mode. Newman, Webb and Cochrane built on three existing models: Mason's (1992) evaluation model of Computer Supported Co-operative Work (CSCW), Henri's (1992) content analysis model and Garrison's (1992) evaluation

model of critical thinking in Computer Supported Co-operative Learning (CSCL) to assess aspects of critical thinking, specifically to differentiate between critical and uncritical thinking. Newman, Webb and Cochrane drew on Mason's proposal for online discussion messages to be analysed according to their educational values which include whether participants build on what has been said, whether they refer to their respective experiences, whether they make use of materials provided or other materials and sources, and whether they bring in new ideas for the discussion. From Henri, Newman, Webb and Cochrane referred specifically to indicators proposed in her cognitive skills dimension such as making clarifications, inferences and judgements, and using strategies. They incorporated these indicators into Garrison's critical thinking stages and included other indicators based on their own experiences and observations to come up with a framework with opposite paired indicators. They labelled these pairs as critical (represented by a '+' sign), and uncritical (represented by a '-' sign) thinking descriptors. An example of a pair is relevant statements (R+) and irrelevant statements (R-). Once the transcripts were coded, the indicators assigned '+' and '-' were totalled and the critical thinking ratio established to reflect the quality of the discussions.

Fitze took a more quantitative approach in his comparison. Although not as elaborate and extensive as Newman, Webb and Cochrane's analytical framework, Fitze too created a coding scheme that tried to capture students' interaction in terms of requests, feedback, social pleasantries, and what he termed as "meta-communications" (p. 82) such as expressions of one's feelings of the subject of discussion.

North, Coffin and Hewings' (2008) framework focuses on analyzing argumentative talk. Their data was first segmented using *t*-unit followed by moves namely, "discussion, social, procedural, and other-related field" (p. 263). Since the thrust of the research was on argumentative talk, they further categorized the discussion move into "(1) claim, (2) thesis, (3) recommendation and (4) counter-claim" (p. 263). The framework is purported to be able to provide argumentative talk in a linguistic perspective as well as in seeing how interaction and ideas are developed.

Similar to Plowman's method of analysis, the methodologies employed by Newman, Webb and Cochrane, Fitze, and North, Coffin and Hewings in analysing their data, specifically features of comparison between face-to-face and online discussions, shed light on data analysis methods of this pilot study which included a coding scheme applicable to the analysis of interactive discourse and content development of face-to-face and online (in this case, synchronous mode) discussion. In particular, Newmann, Webb and Cochrane coded statements in the transcripts based on messages posted that could clearly be identified using their paired indicators. Any non-relevant and uncertain areas were left un-coded. The statements "may be phrases, sentences, paragraphs or messages containing one unit of meaning, illustrating at least one of the indicators" (p. 9). Each statement could have a few indicators. The methodology in which Newmann, Webb and Cochrane coded the transcripts is similar to the way in which the raters in this study coded the transcripts except that the raters were asked to state as much as possible only one code. This was done in order to help establish more accurate comparisons among categories of descriptors in which multiple tagging of the same unit of meaning may have an effect (on accuracy). Like Plowman, Newmann, Webb and Cochrane, and Fitze, quantitative measures were employed for

comparison in this study. The total number of units coded under every category of descriptor was tabulated and percentages were established upon the total number of units of the entire transcripts.

The coding scheme developed for this pilot study was also influenced by works of Ahern, Peck and Laycock (1992), Henri (1992) and Waggoner (1992) that attempted to examine content and interaction of a computer discussion. In Ahern, Peck and Laycock's study, they categorised and coded asynchronous transcripts of 81 undergraduate students in two ways: the direction of their interaction and content of the students' responses. For direction of interaction, they wanted to find out if the students' messages to the entire group were linked to any previous messages, referenced or directed specifically to an individual's response. In terms of content, messages were coded as either unsupported or supported with explicit reference to students' own experience or authority. The unit of analysis was determined at the message level. In other words, each message constituted a unit of analysis. The transcripts were coded by two raters. Their scores matched over 90% of the cases. Subsequently, a chi-square was used to determine whether there was an association between rates of participation and response content.

Henri (1992), attempting to tap on the richness of the computer conferencing data and to understand more about the learning process occurring in computer conferencing, developed a more elaborate and comprehensive content analysis model (compared to Ahern, Peck and Laycock's). It consists of five dimensions: participation, social, interaction, cognitive and metacognitive. She asserts that in examining a CMC learning context, one needs to consider three aspects: what is said, how it is said, and

the processes and strategies in handling the subject of discussion. The quality of what is said, Henri contends, can be determined by looking at how logical, coherent, relevant and clear ideas presented are. The second aspect on how it is said can be observed through an analysis of the participation frequency of individuals, social presence and interaction pattern or the inter-connectedness of messages. The third aspect, that is processes and strategies, is an area that Henri claims earlier researchers have neglected. Therefore, the cognitive and metacognitive dimensions of her model are targeted to identify students' thinking processes and learning strategies. Henri proceeds to explain in detail the definition and indicators of each dimension of the model and concludes with the presentation of a matrix consisting of five dimensions as mentioned earlier. In her model, Henri uses thematic units as her unit of analysis.

While Henri's (1992) content analysis model has been used in part or adapted in evaluating different aspects of group discussions, mostly in computer conferencing, it is lacking in a number of areas. One of the key contentions is her definition of unit of analysis. She indicates that the identification of a unit is based on the meaning in the messages. However, she has not clearly defined what this means, making it difficult for others to use her model (Gunawardena, Lowe & Anderson, 1997; Howell-Richardson & Mellor, 1996). In addition, Gunawardena, Lowe and Anderson (1997) and Newman, Webb and Cochrane (1995) who used Henri's cognitive dimension in evaluating critical thinking in face-to-face and computer modes, found that while Henri's model "indicated the presence and frequency of participants employing cognitive skills, it did not explain the learning process taking place within the group through the process of interaction among the participants" (Gunawardena, Lowe & Anderson, 1997, p. 406). Another critique relates to Henri's participation dimension.

As observed by Gunawardena, Lowe and Anderson, the frequency count of students' participation should be considered, at most, a quasi-quantitative measure of the nature of participation. In addition, they feel that participation should not be treated as a separate issue from the qualitative analysis of the other dimensions. Finally, while Henri mentions the importance of what is said, her five-dimension model does not address the criteria of indicators used to identify and describe quality of content.

Following Henri's five-dimension content analysis model, there have been a number of researchers (Coffin & Hewings, 2005; Fitze, 2006; Gunawardena, Lowe & Anderson, 1997; Hara, Bonk & Angeli, 2000; Howell-Richardson & Mellar, 1996; Mowrer, 1996; Newmann, Webb & Cochrane, 1995; Plowman, 1993) who developed similar coding schemes to analyse discussion and computer conferencing data. It is important to note from Table 3.2 that the unit of analysis defined in these frameworks varies. There does not seem to be a consensus in what constitutes the most appropriate unit of analysis. What appears pertinent are the nature of the discussion data (synchronous versus asynchronous) and the aim of the study. For example, in Howell-Richardson and Mellar's (1996) framework, there are two categories of units of analysis: one, at message level to identify the relationship between messages namely how content is built or developed; and two, illocutionary act to observe interaction patterns. In fact, the range encompassing units of analysis is broad as it varies from utterances, phrases, sentences, paragraphs, to topic headers, messages and meaning.

In addition, the focus and context of investigation differ. Early studies (Ahern, Peck & Laycock, 1992; Henri, 1992; Waggoner, 1992) looked at general interaction and

participation patterns. Later studies began to focus on specific areas such as cognitive, metacognitive processes and higher order thinking skills (Newmann, Webb & Cochrane, 1995; Hara, Bonk & Angeli, 2000; Coffin & Hewings, 2005).

Another observation concerns the mode of communication. Except for Plowman's (1993), Newman, Webb and Cochrane's (1995) and Fitze's (2006) studies, the rest made use of the discussion forum which is an asynchronous mode of computer conferencing. Therefore, their findings and patterns of interaction presented pertain specifically to the asynchronous mode while there is a lack of research investigating synchronous communication and comparison between it and face-to-face mode of discussion.

Most importantly, while most might have attempted to trace what is said, how it is said and strategies on dealing with the topic (Henri, 1992), only a few investigated the relationship between a discussion session and what is produced in the written mode (Coffin & Hewings, 2005; Plowman, 1993), in particular, how collaborative work in speech or speech-like modes translates into individual representation in text form.

One of the key gaps in the literature is the lack of direction in approaching the analysis of both online (specifically synchronous) and conventional face-to-face discussion data that can allow for comparisons to be made between both, and conclusions and implications to be drawn for the teaching of writing. Nonetheless, these analytical models (Ahern, Peck & Laycock, 1992; Fitze, 2006; Gunawardena, Lowe & Anderson, 1997; Hara, Bonk & Angeli, 2000; Henri, 1992; Howell-Richardson & Mellar, 1996; Mowrer, 1996; Newmann, Webb & Cochrane, 1995; Waggoner, 1992) have provided a good reference and basis for the development of a

framework that is applicable to this study. The specific ways in which these models have influenced the proposed analysis model and how the proposed framework aims to address the gaps of previous models will be discussed in detail in Section 3.1.6.4 Genre-based content analysis model.

3.1.6.2 Rhetorical structure theory

Besides the content and interaction analysis frameworks, the proposed coding scheme drew on Mann and Thompson's (1986, 1988) rhetorical structure theory (RST) in relation to its concept of implicit relations existing between the propositional content of sentences and the hierarchical structure of a piece of text. It follows the view that different types of academic paper have distinctive rhetorical and discourse structures that ESL students have to learn to recognise and produce (Crookes, 1986).

RST was originally developed to analyse discourse structure or function of a piece of text. It describes texts and offers a systematic and analytical way of determining if the text is coherent. However, it does not intend to look at the processes involved in creating texts (Mann, 1999). Central to RST is the rhetorical relationships linking every part of a text. That means every part of a text exists for a reason and usually has communicative value to make the text coherent. Therefore, RST identifies hierarchical structures in a piece of text and characterises them in terms of the functional relations that bind parts of text together.

Key to RST analysis and its hierarchical structure is the identification of a nucleus and its related satellite(s). In a very simplistic way, this concept could be equated with the idea of a thesis statement, a topic sentence and its support or evidence. The identification of nuclei and their respective satellites in a text is important because this has close bearing to the relations they hold with one another, such as solutionhood,

evidence, justification, cause, background and many others. Mann and Thompson (1988) have shown how the removal of a nucleus results in difficulty in comprehending the central message, whereas the absence of a satellite has negligible effects on the understanding of the meaning of a text. Similarly, the absence of a thesis statement in an essay or a topic sentence in a paragraph will have a negative effect on its coherence.

The following problem-solution paragraph extracted from a student's essay is an illustration of the identification and relationship between the topic sentence (nucleus in Mann and Thompson's term) and its supporting details (satellites in Mann and Thompson's). For easy reference, each sentence is numbered using the superscript.

“¹Lastly, the Land Transport Authority recommends certain equipments and fuel types to the public to reduce the pollution produced by the cars. ²The road users are encouraged to install a catalytic converter in each of their vehicle. ³This catalytic converter converts the harmful gases, which are given off together with the exhaust fumes, into gases which are friendly to the environment. ⁴Unleaded petrol is the only type of petrol which you can find in Singapore. ⁵As compared to leaded petrol, unleaded petrol is more environmentally friendly. ⁶Vehicles using diesel to run have to pay a certain amount of tax every year. ⁷Hence, exhaust fumes produced from the vehicles would be cleaner with the usage of the catalytic converter and unleaded petrol.”

Sentence 1 is the topic sentence of the paragraph. It introduces two solutions to reduce air pollution caused by cars: equipment and fuel. The supporting details as reflected in Sentences 2 and 3 elaborate on equipment and Sentences 4 to 7 on fuel. One may argue that without Sentence 1, the rest can still be understood. However, it is Sentence 1 that provides the central idea of the paragraph which links the rest of the sentences together as a coherent unit.

RST has been used in many studies (Marcu, 2000; Marcu, Romera & Amorrotu, 1999; O'Brien, 1995; Sanders 1997; Sanders, Spooren & Noordman, 1992; Sanders &

van Wijk, 1996; van Wijk & Sanders, 1999) to analyse text coherence. The main form of data for these studies has always been written texts but there have been efforts (Stent, 2000; Torrance & Bouayad-Agda, 2001) to apply RST in spoken discourse. Stent attempted to annotate task-oriented dialogues using RST while Torrance and Bouayad-Agda tried to infer students' thoughts (and rhetorical structure) captured in think-aloud protocol and trace them in students' essay. The assumption was that thoughts generated during pre-writing stage would form partial representation of the written draft. Stent found RST lacking in addressing the intricacies of dialogues and developed a new coding scheme that expands on the existing rhetorical relations developed by Mann and Thompson (1986, 1988).

There are two main categories in Stent's expanded version of RST: the first category is concerned with utterances in a dialogue. She postulates that in a task-based dialogue involving at least two parties, the relationship of adjacency pairs such as question-answer, suggestion-acceptance, and, greeting-acknowledgement are as important as the content of the dialogue. This appears similar to the concept applied in interaction analysis models except that Stent's framework relies heavily on adjacency pairs. The unit of analysis she suggests is based on rhetorical structure of the dialogue that could be separated by linking words such as 'since', 'because', 'therefore' or a pause in speech or a complete clause. The second main category in Stent's framework is what she terms "subject-matter and presentational relation distinction" (p. 4). She maintains that RST relations can be further split into two sub-categories: one that deals with information and another intention. Stent claims that her framework is a bridge between both.

Research on various content and interaction analysis models and RST has provided this study good grounding for the development of a framework to annotate and relate what is discussed (spoken discourse) and what is written (written discourse). While interaction analysis models look at the process of learning that takes place in a discussion, the relational propositions in RST provide a bridge for content and intention to be linked between a discussion and its corresponding texts.

In this pilot study, prior to drafting, students had an opportunity to analyse a reading text and to discuss the organisation and structure of problem-solution essays. Therefore, when students brainstormed ideas for their writing task, they were operating within a problem-solution framework or schemata. Additionally, in the instructions given, namely

In your brainstorming session, you should

- a) discuss possible problems and the respective and related situations or contexts;*
- b) talk about potential solutions to each problem; and*
- c) suggest some examples or evidence to support each solution.*

the structure of the discussion session was already clearly indicated. In other words, in a structured discussion such as the brainstorming activity in this pilot study, while each team might differ in the topic they discussed and wrote, the context in which they were operating was that of a problem-solution genre. As such, students were aware that in their discussion they would need to state the problem, address the situation or background of a problem, and suggest and elaborate on solutions to solve it. Similarly, in their writing, students would have to include such content.

Therefore, relational propositions in Mann and Thompson’s RST like “solutionhood, evidence, justification, background, circumstance” (1986, p. 60-66) provide a taxonomy of categories which could be applied in the analysis of both the transcripts (face-to-face and chat room) and written text. In other words, the rhetorical patterns of a written text can be traced back to the discussion preceding it.

This relates to how content of a brainstorming session can be linked to written texts. One of the considerations of a coding scheme that attempts to trace and track idea threads from a discussion to a text is that it must take into consideration the rhetorical structure of the task. This, indeed, has prompted the present study to come up with a content and interaction analysis framework that is able to take into account the genre of the essay, the interaction pattern in the discussion, and content or ideas that are identifiable or discernible based on their rhetorical relationship with one another. The third aspect concerning content is where Mann and Thompson’s relational propositions contribute to the development of descriptors of the coding scheme, as displayed in Table 3.3.

Table 3.3 Relational propositions

| Mann and Thompson (1986, 1988) | Proposed framework |
|---------------------------------------|---|
| Solutionhood | |
| Evidence | |
| Justification | |
| Motivation | |
| Reason | |
| Sequence | |
| Enablement | |
| Elaboration | Elaboration (in Knowledge Construction) |
| ▪ Set-member | |
| ▪ Generalisation-instance | Example (in Knowledge Construction) |
| ▪ Whole-part | |
| ▪ Process-step | |
| ▪ Object-attributes | |
| Restatement | Repetition (in Knowledge Construction) |
| Condition | |
| Circumstance | |
| Cause | |

The descriptors of ELABORATION, EXAMPLE, and REPETITION in the KNOWLEDGE CONSTRUCTION dimension of the content and analysis framework proposed for this study were derived from Mann and Thompson's ELABORATION, ELABORATION: GENERALISATION-INSTANCE, and RESTATEMENT respectively. There is however a difference in the hierarchical relationship ELABORATION and GENERALISATION-INSTANCE in Mann and Thompson's RST and that in ELABORATION and EXAMPLE of the proposed framework. GENERALISATION-INSTANCE is a sub-category of ELABORATION in the former while EXAMPLE is on the same hierarchical level as ELABORATION in the latter. Take the principle of a topic sentence and supporting details in a paragraph as an example, both ELABORATION and EXAMPLE can be the supporting details without EXAMPLE being always appearing only after ELABORATION.

3.1.7 Unit of analysis

Smagorinsky defines unit of analysis as a "section of text that states a single idea" (Smagorinsky, 1991, p. 346), which is most often a single sentence, in analysing protocols collected from his subjects while they were drafting an essay. Expanding on Smagorinsky's definition of unit of analysis, this study identified the utterances that state a single idea/propositional content or intention/purpose as a turn. This is in line with data for analysis collected which consisted of transcripts of face-to-face and chat discussion sessions. The use of a turn as the unit of analysis is both a practical and pragmatic method since turns are easily identifiable in face-to-face and chat transcripts and they are almost invariably mono-functional. Most often each turn

centres on a specific purpose associated with the assigned task, which is brainstorming ideas for a problem-solution essay. Example (1) is an illustration of such an instance:

(1)

| Turn | Participant | Utterance |
|------|-------------|-----------------------------|
| 003 | LJ: | hello all |
| 004 | DF: | what topic shall we choose? |
| 005 | JJ: | shall we do e same topic |

[Pilot study, chat 4]

All three chat participants: LJ, DF, and JJ had a purpose in their contribution. In turn 003, LJ was establishing contact with the rest. DF, in turn 004, tried to elicit ideas for an essay topic from her fellow chat members. In turn 005, JJ proposed that they work on the same topic. In short, this example illustrates that each turn has a single purpose.

Though not often, there are instances in the transcripts where each turn consists of more than a single idea. Turn 340 in example (2) is an illustration of such an occurrence.

(2)

| Turn | Participant | Utterance |
|------|-------------|---|
| 339 | JM: | But you all don't need go service every day <i>lor</i> . |
| 340 | WC: | We don't service every day, of course <i>lah</i> . But the servicing is based on your usage of the car, <i>what</i> , right? Eh.. It doesn't mean if you don't service in Singapore, you can't do it in other countries. Like my father service in |

[Pilot study, face-to-face]

WC in the first section of turn 340 was expressing his agreement with JM and elaborating that one need not take the car for servicing every day. He then continued with another line of thought which is no longer related to whether the car needs to be

sent for servicing. He suggested that servicing of cars can be done outside of Singapore like his father does (see **bold** text). In doing so, WC had introduced a new element (though related to the same thread of servicing cars) in the discussion which should be considered as a separate idea. In such a case, the turn will be deemed as consisting of an extended turn. The coding of the turn will therefore receive a suffix (in alphabets) as shown in example (2a). Turn 340 in example (2) has now been broken into two and labelled as 340a and 340b.

(2a)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 339 | JM: | But you all don't need go service every day <i>lor</i> . |
| 340a | WC: | We don't service every day, of course <i>lah</i> . But the servicing is based on your usage of the car, <i>what</i> , right? |
| 340b | WC: | Eh.. It doesn't mean if you don't service in Singapore, you can't do it in other countries. Like my father service in |

[Pilot study, face-to-face]

Below is another illustration of how an extended turn is established. As observed in example (3a), WC's remark in **bold** suggesting that the group stop the discussion has a different propositional content compared with his earlier comment about the conclusion of the essay.

(3a)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 395 | WC: | Then the conclusion will be ... What's the conclusion? You think of it yourself. I think we should stop now. Stop, stop. |

[Pilot study, face-to-face]

Turn 395 was thus further divided into two, as illustrated in example (3b), to differentiate and reflect the rhetorical proposition in both: turn 395a about how the conclusion of the essay should be handled and turn 395b as an attempt to end the discussion.

(3b)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 395a | WC: | Then the conclusion will be ... What's the conclusion? You think of it yourself. |
| 395b | WC: | I think we should stop now. Stop, stop. |

[Pilot study, face-to-face]

Once turns have been established as units of analysis, they are coded at two levels: level 1 for function and level 2 for rhetorical meaning. The coding of turns at two levels is necessary in this study because it facilitates answer to the first three research questions (see 3.1.5 Research questions) in investigating the proportion of time students spent on and off task, the ideas they discussed, and what they were talking about when they were off task.

Level 1, function, places the discussion at four dimensions: TASK CONCEPTION, MANAGEMENT OF DISCUSSION, KNOWLEDGE CONSTRUCTION, and SOCIAL AND METACOGNITIVE. These dimensions closely resemble level 1 categories in Plowman's (1993) taxonomy (see Table 3.4).

Table 3.4 A comparison between Plowman's (1993) and the proposed framework

| Plowman (1993) | Proposed framework |
|-----------------------|---------------------------|
| Executive | Task Conception |
| Procedural | Management of Discussion |
| Substantive | Knowledge Construction |
| Group | Social & Metacognitive |

Plowman uses categories such as EXECUTIVE, PROCEDURAL, SUBSTANTIVE and GROUP to identify functions of talk and roles of participants in her subjects' group discussions. Similarly, the proposed framework for this study intends to capture the function of discussion during the brainstorming sessions. A more detailed

comparison between Plowman's categories and the categories proposed for this study will be discussed in section 3.1.7.1 Proposed framework: genre-based content analysis model.

At Level 2 of analysis, this study aimed to look at the propositional content of talk within each Level 1 function. In short, the propositional content of a discussion is closely related to the function of talk. If, for example, the function of talk is categorised as TASK CONCEPTION, it follows that the content of the discussion (which may constitute a few turns) is concerned with establishing requirements and structure of a task. This creates a parent-child type of relationship and sub-categorisation where all turns related to TASK CONCEPTION are subsumed under the said category.

Such categorisation of talk bears similarity to Sinclair and Coulthard's (1975) and Burton's (1981) systems of analysis, specifically the final two categories, MOVE and ACT. While Sinclair and Coulthard's scheme intends to capture and analyse conventional teacher-centred classroom discourse, Burton's adapted scheme of Sinclair and Coulthard's attempts to include analysis of casual conversation. In the case of this study, the principal motivation was to identify and analyse the nature of discussions in an academic pre-writing context. The interaction is among participants of a focus discussion group unlike Sinclair and Coulthard's teacher-student interaction using the Initiation-Response-Feedback model and Burton's casual conversation. Therefore, although the proposed framework borrows the hierarchical concept of categorisation from Sinclair and Coulthard, and Burton, it differs in the upper three levels of the hierarchy and is mainly concerned with MOVE and ACT.

In addition, even though the proposed framework does not intend to adopt Sinclair and Coulthard's (1975) and Burton's (1981) systems of analysis, it draws from them descriptors within each RANK. In view of this, it may be fruitful to do a brief comparison of categorisation in the three schemes, as presented in Table 3.5.

Table 3.5 Categorisations of schemes

| Sinclair and Coulthard (1975) | Burton (1981) | This study |
|--------------------------------------|----------------------|-------------------|
| LESSON | INTERACTION | ACTIVITY |
| TRANSACTION | TRANSACTION | TASK |
| EXCHANGE | EXCHANGE | ESSAY THEME/TOPIC |
| MOVE | MOVE | MOVE |
| ACT | ACT | ACT |

There are five RANKS in Sinclair and Coulthard's (1975) and Burton's (1981) systems of analysis: LESSON (INTERACTION for Burton), TRANSACTION, EXCHANGE, MOVE, and ACT. At the most basic level is an ACT. At the next level is a MOVE followed by and an EXCHANGE, a TRANSACTION and a LESSON. For this study, at the highest hierarchical level is an ACTIVITY. An ACTIVITY in the general scheme of a language course syllabus refers to a planned action taken in a class lesson that focuses on building a particular skill, in this case writing skills.

Within a writing ACTIVITY, there are TASKs which spell out specific purpose, audience, context and requirements demanded of students in completing them. Because a TASK does this, students are expected to operate within an agreed or given framework. When applied to a pre-writing brainstorming task, participants are expected to generate ideas related to essay themes or topics.

Following a writing TASK is a TOPIC. Once a brainstorming task is assigned to students, it follows that the discussion that pursues relate to a particular essay theme or topic. In addition, each topic falls into a specific genre of academic writing: comparison-contrast, cause-effect, problem-solution, process and argumentation. In other words, participants of a brainstorming session engage in discussions that move towards establishing consensus and achieving goals or objectives of a TASK.

The final two categories, MOVE and ACT, are the main focus of this study because they form the discourse for analysis. If Sinclair and Coulthard's (1975) and Burton's (1981) ACT is recognisable based on its syntactical structure namely a clause, then an ACT in this study is realised in the form of a turn which is performed or expressed by a proposition and may be exhibited in the form of interrogatives (questions), imperatives (commands), and declaratives (statements). They are produced within specific situations which encompass "all relevant factors in the environment, social conventions, and shared experience of the participants" (Sinclair & Coulthard, 1975, p. 28).

In terms of form, a turn may be represented by a word, phrase, clause or sentence. The crucial point is that the word, phrase, clause or sentence represents the function and propositional content of the talk. An illustration is given in example (4). There are a few possible replies that Speaker 2 can give to mean that he or she would like to suggest the topic of animal abuse. Additionally, the replies can be realised in different grammatical forms such as a word, a phrase and a sentence as demonstrated in Speakers 2a, 2b and 2c:

(4)

| | Turn | Possible Responses | Form |
|-------------|-------------------------------------|---------------------------|-------------|
| Speaker 1: | What topic are we going to discuss? | | |
| Speaker 2a: | | Animal abuse | Word |
| 2b: | | Probably animal abuse | Phrase |
| 2c: | | I'd say animal abuse. | Sentence |

In summary, the unit of analysis for the transcripts in the pilot study is a turn. In addition, the function and propositional content of the talk are two key elements in analysing each turn.

3.1.7.1 Proposed framework: Genre-based content analysis model

Once transcripts were segmented according to turns, each turn was coded based on its function in the context of a discussion, namely Level 1 coding. Upon establishing the function, the propositional content of each turn was coded, namely Level 2 coding. The assigned codes derived from a framework developed for this study, hereafter termed as the genre-based content analysis model. Drawing on Smagorinsky (1991), a coding scheme was developed to capture three broad purposes of a brainstorming discussion session: TASK CONCEPTION, MANAGEMENT OF DISCUSSION, and KNOWLEDGE CONSTRUCTION. Again adapting from Smagorinsky (1991), occasions in which discussion participants' thoughts are interrupted because of their own thought processes or interrupted by other participants are identified as performing a METACOGNITIVE purpose. For instances where participants deviate from the focus of the discussion, they are treated as having a SOCIAL purpose. Both SOCIAL AND METACOGNITIVE purposes form another broad category of the genre-based content analysis model. The complete coding scheme is displayed in Table 3.6. In

presenting, discussing and explaining the model, examples were taken from the pilot study data, namely a face-to-face discussion and four chat discussion sessions.

Table 3.6 Genre-based content analysis model

| TASK CONCEPTION | |
|---------------------------------|--|
| Category | Definitions |
| STRUCTURE | Statements or questions concerned with the structure or format of the essay |
| PLANNING/ ORGANISATION | Statements or questions about the organisation of ideas |
| REQUIREMENT | Statements or questions concerned with the requirement of the task |
| LANGUAGE | Statements or questions concerned with the use of language or expressions |
| MANAGEMENT OF DISCUSSION | |
| Category | Definitions |
| CONTACT | Establishing contact or rapport, usually at the beginning of the session, as a form of greeting; Checking connection or checking if members are still in the discussion |
| ELICITATION | Eliciting or seeking contributions for content; Inviting or prompting certain members to participate or explain or elaborate |
| FOCUS | Focusing or refocusing of group to the task or knowledge construction; Providing direction for discussion; Seeking or asking for direction of discussion; Managing discussion so that it is focused on the intended topic |
| SUGGESTION | Instructing certain members to do something (either in a serious or playful manner); Suggesting a plan of action |
| CONSENSUS | Seeking clarification or confirmation from others on the acceptance or non-acceptance of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Giving confirmation or decision on something |
| KNOWLEDGE CONSTRUCTION | |
| Category | Definitions |
| INITIATION | Introducing or stating an idea or proposition; Identifying a problem; Proposing a solution to a related problem |
| ELABORATION | Elaborating or explaining an idea, proposition, problem or solution; Scaffolding of own or others' idea, proposition, problem or solution |
| EXAMPLE | Giving specific examples or evidence to an idea, proposition, problem or solution |
| REPETITION | Repeating or reaffirming acceptance of or agreement to an idea, suggestion, |

| | |
|---------------------------------|---|
| | proposition, problem, solution, example, evidence or explanation; Re-phrasing an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| AGREEMENT | Concurring, agreeing, confirming or accepting an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| DISAGREEMENT | In a direct manner, not accepting an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Expressing doubts or dubious about ideas brought up |
| ACKNOWLEDGEMENT | Verbally indicating understanding or comprehension of what another speaker(s) said which does not necessarily mean Agreement; Praising or giving positive encouragement; Claiming ownership of an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| CLARIFICATION | Asking question, raising doubt or raising concern (for understanding) about any aspect of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Seeking confirmation of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Seeking for specific term or information; Checking for accuracy of factual information; Prompting for more explanation or elaboration |
| SEARCH | Asking question, raising doubt or raising concern about any aspect of an idea, suggestion, proposition, problem, solution, example, evidence or explanation that prompts others or self to re-examine what's been said |
| REFERENCE (external links) | Making reference to course material, textbook, article, Internet sources, authority, family, friends, own experience or knowledge etc. |
| REFERENCE (internal links) | Making links between ideas mentioned within the discussion; Making reference to contributions made by group participants |
| NEGOTIATION | |
| - ARGUE/CHALLENGE | Arguing or challenging an idea, proposition, problem or solution put forth |
| - COUNTER ARGUE/ DEFEND | Counter arguing or defending challenged idea, proposition, problem or solution |
| - CONTRAST | Providing a contrasting view (not necessarily challenging) to an idea, proposition, problem or solution |
| - COUNTER-PROPOSE | Counter proposing another idea, proposition, problem or solution |
| SUMMATION | Summarizing or synthesising ideas put forth in the discussion; Refining, reformulating or re-organising ideas |
| JUDGEMENT | Making judgement or evaluation of others' or own ideas |
| RESPONSE | Responding to a specific question asked but without any elaboration; Offering a reply to a specific question |
| SOCIAL AND METACOGNITIVE | |
| Category | Definitions |
| OFF TASK | Stating or bringing up topics or issues that are beyond the scope of the discussion |
| PROCESS/INTERRUPTED | Starting to say or contribute something but was interrupted by another |

START person;
Starting a line of thought but then abandoning it

TASK CONCEPTION

The first dimension of the genre-based content analysis model is TASK CONCEPTION. It is similar to Smagorinsky's (1991) task conception except that Smagorinsky's coding scheme was designed to analyse think-aloud protocols of writers while they were composing a definition text. For Smagorinsky, TASK CONCEPTION refers to writers' "understanding of task constraints and requirements including the assignment, the instruction, the raters' expectations, or staying on topic" (p. 349). In addition to drawing from Smagorinsky's definition, this model also makes reference to Plowman's (1993) EXECUTIVE which is "talk concerned with writing process and style" (p. 152). In the genre-based content analysis model, a task is a pre-defined activity usually set by the teacher or a negotiated agreement between the students and the teacher. A task has objectives and requirements in which members carrying out the task need to understand well. In terms of a writing task assigned to students, it usually informs students of the intended audience or reader, purpose and context. This is followed by requirements concerned with the structure or format of the essay. However, not all members interpret a task in the same way. This therefore creates the need for negotiation of task conception among members. A few functions have been defined (see Table 3.7) to identify the discourse of TASK CONCEPTION.

Table 3.7 Genre-based content analysis model: TASK CONCEPTION

| Category | Definitions |
|---------------------------|---|
| STRUCTURE | Statements or questions concerned with the structure or format of the essay |
| PLANNING/ ORGANISATION | Statements or questions about the organisation of ideas |

REQUIREMENT Statements or questions concerned with the requirement of the task

LANGUAGE Statements or questions concerned with the use of language or expressions

STRUCTURE

STRUCTURE is concerned with negotiation of format or structure of a writing task.

While Smagorinsky's (1991) FORM includes structure of the essay and concerns for words and sentences, this model makes a differentiation between structure and language. Discussion on structure usually occurs when members of a discussion group are unclear or unsure of or are discussing the rhetorical structure of an essay.

For example, at the beginning of a face-to-face discussion in example (5a), WC said this:

(5a)

| Turn | Participant | Utterance |
|------|-------------|--|
| 051 | WC: | I think each paragraph can have more than one problems with more than one solutions. That means one situation, with some problems and some solutions. So, the paragraph will be situation then problem, solution, problem 1, solution 1, problem 2, solution 2, problem 3, solution 3. Then, we lengthen the passage lah. |

[Pilot study, face-to-face]

In this example, WC was concerned with the structure and format of the essay, which was a problem-solution one. He was in fact organizing the content (namely situation, problem and solution) that should be included in the essay, sequentially and logically from one paragraph to another. However, his last comment "Then, we lengthen the passage lah." shows that WC was concerned about the length requirement of the writing task. Therefore, the function of this comment is not STRUCTURE but REQUIREMENT hence a separate unit of analysis (051b), as highlighted in (5b).

(5b)

| Turn | Participant | Utterance |
|------|-------------|---|
| 051a | WC: | I think each paragraph can have more than one problems with more than one solutions. That means one situation, with some problems and some solutions. So, the paragraph will be situation then 2, problem, solution, problem 1, solution 1, problem 2, solution 2, problem 3, solution 3. |

051b WC: **Then, we lengthen the passage *lah*.**

[Pilot study, face-to-face]

REQUIREMENT

REQUIREMENT is basically talk concerned with demands set by a task. Besides what is being stated in task instructions such as length of essay and citation of sources, REQUIREMENT also includes instructions given by the teacher on what students should do during a discussion and in performing a writing task. In the following excerpt (example 6) from a chat discussion, DO in turn 013, followed by SL in turn 014, sought the group's clarification on whether they were to brainstorm ideas as a group. After getting confirmation from QM in turn 015 and DO in turn 016, SL in turn 017 again tried to clarify if everyone was to write the topic that they would discuss. SL's intention was hence to ascertain instructions given for the assignment thus the turn was coded REQUIREMENT.

(6)

| Turn | Participant | Utterance |
|------|-------------|----------------------------------|
| 013 | DO: | we're supp to do this as a grp?? |
| 014 | SL: | are we suppose to do in a group? |
| 019 | QM: | do as a group |
| 020 | DO: | yup do it as a grp |
| 021 | SL: | are we supp to to the same topic |
| 022 | DO: | yupyup |

[Pilot study, chat 2]

PLANNING/ORGANISATION

PLANNING or ORGANISATION is another category under TASK CONCEPTION.

Expanding on Henri's (1992) general description of planning in her analytical model of metacognitive skills, PLANNING in this genre-based analytical model refers to discussion on how to arrange ideas or points mentioned for the essay. Because each brainstorming session focuses on one particular genre of essay, the arrangement of

ideas falls into rhetorical patterns pertaining to that genre. In examples (7) and (8), it can be seen that WC and JL (face-to-face discussion members), and JH and YF (chat members) tried to place content of their discussion within the problem-solution essay structure (see Figure 3.2, p. 69).

In example (7) turn 039, WC suggested including environmental issues in the introduction of the essay while JL continued WC's line of thought by proposing that the introduction include current situation of specific countries in relation to environmental issues. In chat 1 as shown in example (8), JH proposed to use the impact of air pollution as the basis to describe the problem and how to reduce pollution as the solution. In both these instances, these students were in fact trying to organise content according to the macrostructure of a problem-solution essay they had been taught.

(7)

| Turn | Participant | |
|-------------|--------------------|---|
| 039 | WC: | The introduction will be environmental issues that we.. |
| 040 | JL: | The situation will be the current .. ah.. situation in most countries or Singapore. |

[Pilot study, face-to-face]

(8)

| Turn | Participant | |
|-------------|--------------------|---|
| 036 | JH: | impact of air pollution should be our problem? |
| 037 | YF: | i think can |
| 038 | JH: | then how to reduce air pollution be solution part |

[Pilot study, chat 1]

LANGUAGE

The last category under TASK CONCEPTION involves concerns about language. This includes comments made about grammar, vocabulary use and mechanics. Although during a brainstorming discussion, the focus is usually not on language, there are

occasions where members of a discussion show concern about language use. The following example (9) was taken from the face-to-face discussion where WC commented on the awkwardness of the phrase “using equipment and better fuel”. He was implying that the group should think of a better phrase than the existing one.

(9)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 271 | WC: | We'll think about nicer sentence <i>ah</i> . Very awkward <i>what</i> , using equipment and better fuel. |
| 272 | JL: | That's why I come for English classes. If I am good, I no need to come for English classes. |

[Pilot study, face-to-face]

In the chat discussion, LANGUAGE was observed mostly when members corrected their own or others' spelling mistakes.

MANAGEMENT OF DISCUSSION

MANAGEMENT OF DISCUSSION is the second dimension of the genre-based content analysis model. While TASK CONCEPTION looks at the requirement and structure of a task, MANAGEMENT OF DISCUSSION considers how members in a discussion interact with one another in order to perform a given task. This concept is similar to Plowman's (1993) PROCEDURAL, namely “deciding appropriate approaches for content and allocation of roles” (p. 152).

In an attempt to balance between capturing the intricacies of interactions among discussion members and keeping the descriptors less specific and not so limiting, five categories have been identified (see Table 3.8).

Table 3.8 Genre-based content analysis model: MANAGEMENT OF DISCUSSION

| Category | Definitions |
|-----------------|--|
| CONTACT | Establishing contact or rapport, usually at the beginning of the session, as a form of |

| | |
|-------------|--|
| | greeting; Checking connection or checking if members are still in the discussion |
| ELICITATION | Eliciting or seeking contributions for content; Inviting or prompting certain members to participate or explain or elaborate |
| FOCUS | Focusing or refocusing of group to the task or knowledge construction; Providing direction for discussion; Seeking or asking for direction of discussion; Managing discussion so that it is focused on the intended topic |
| SUGGESTION | Instructing certain members to do something (either in a serious or playful manner); Suggesting a plan of action |
| CONSENSUS | Seeking clarification or confirmation from others on the acceptance or non-acceptance of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Giving confirmation or decision on something |

CONTACT

The first category CONTACT demonstrates the effort of members to establish contact or rapport with one another. It bears some similarities to Fitze's (2006) social formulas which include greetings, farewell wishes, words of appreciation, and apologies. CONTACT usually occurs at the beginning of a discussion, especially in a chat environment where members cannot see one another physically. It is also like a group building mechanism for members who are not familiar with one another to establish contact and rapport especially in cases where some members do not know one another prior to the discussion session.

A second function of CONTACT is re-confirming if members are still present, both physically and cognitively, with the discussion. This is roughly equivalent to Sinclair and Coulthard's (1975) CHECK which functions to help the teacher ascertain if the lesson is progressing smoothly so that any obstacles to communication can be addressed. However, the key difference between the function of CONTACT in this model and Sinclair and Coulthard's CHECK is that the former involves discussion among peers while the latter focuses mainly on teacher talk.

CONTACT is especially significant in the chat environment where members are not able to see one another thus prompting them to check when a particular member is inactive. Regular users of chat would agree that one can be in different chat rooms at the same time without being detected by others. One could also be technically online in a chat discussion but physically not at the computer.

In example (10), LJ greeted the other chat participants twice, once when she first joined the chat discussion (in turn 010) and another time when she had not received response from the rest of the group members (in turn 012). While her first greeting functions as a means to establish contact, her repeated greeting in turn 012 was an attempt to check connection in response to KL's remark that she (KL) could not detect LJ's presence in the chat room. Therefore, in both her hellos (turns 010 and 012), LJ was attempting CONTACT which operated on two different functions of establishing CONTACT and re-confirming CONTACT.

(10)

| Turn | Participant | Utterance |
|-------------|--------------------|-------------------|
| 010 | LJ: | hello |
| 011 | KL: | oh, can't see, LJ |
| 012 | LJ: | hello |

[Pilot study, chat 4]

ELICITATION

The second category of management of discussion is ELICITATION. ELICITATION is a common feature in all discussions and conversations which calls for a linguistic response (Burton, 1981; Sinclair & Coulthard, 1975). When a member invites or prompts others for ideas or contributions to the discussion, he or she is eliciting information or knowledge from them. One could also seek the opinion of a particular member by identifying his/her name. This function is present in Howell-Richardson

and Mellar's (1996) interaction analysis model of structural properties. In the first instance, the invitation is open to all but in the latter it is directed to a specific person. In examples (11), (12) and (13) all three students: WC, SL and YF, were trying to solicit ideas from the group.

(11)

| Turn | Participant | Utterance |
|-------------|--------------------|------------------|
| 033a | WC: | What else, huh? |

[Pilot study, face-to-face]

(12)

| Turn | Participant | Utterance |
|-------------|--------------------|-----------------------|
| 039 | SL: | or what u all suggest |

[Pilot study, chat 2]

(13)

| Turn | Participant | Utterance |
|-------------|--------------------|-------------------------|
| 023 | YF: | OK WHAT TOPIC U SUGGEST |

[Pilot study, chat 1]

FOCUS

Another phenomenon common to all discussions is diversion. In both face-to-face and chat environments, members could digress and talk about issues not concerning the task or topic of discussion. When an attempt is made to re-focus the group's attention to the task at hand, it functions as FOCUS in MANAGEMENT OF DISCUSSION. This is similar to Sinclair and Coulthard's (1975) starter whose function is to provide direction of a conversation towards a particular area. Besides this re-focusing function, FOCUS could refer to a member's request to know what the discussion is about and a response to such a request.

In the face-to-face excerpt below (example 14), WC was trying to draw his group's focus and attention back to the discussion on pollution caused by vehicles in

Singapore. On the other hand, in both chat 1 (example 15) and chat 4 (example 16), JH and JJ were seeking direction from their respective group members. Nonetheless, they are all examples of FOCUS.

(14)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 235 | WC: | Okay, let's get back to the topic. Our focus is pollution from vehicles on the road in Singapore. |

[Pilot study, face-to-face]

(15)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 087 | JH: | i think i am lost from the discussion already |

[Pilot study, chat 1]

(16)

| Turn | Participant | Utterance |
|-------------|--------------------|------------------------------------|
| 122 | JJ: | what r u talking about? i am lost! |

[Pilot study, chat 4]

SUGGESTION

The fourth category in the MANAGEMENT OF DISCUSSION dimension is SUGGESTION. Different from Sinclair and Coulthard's (1975) DIRECTIVE which requests for a "non-linguistic response" (p. 41), SUGGESTION here refers to both a linguistic and a non-linguistic response. It refers to members' suggestion of a plan on how the discussion should proceed or a member instructing others to do something. SUGGESTION could sometimes be misinterpreted as FOCUS since a call for focus could appear in the form of interrogatives (functioning as suggestions) or commands (functioning as instructions). The way to make a distinction between both is to consider the interaction before and/or after, as illustrated in example (17).

(17)

| Turn | Participant | Utterance |
|-------------|--------------------|------------------|
| 017 | CH: | hehheh |
| 018 | YF: | ha ha so fun |

019 CH: hello
 020 CH: lets discuss

[Pilot study, chat 1]

In turn 020, although the way in which CH's phrased his request "lets discuss" makes it sound like a SUGGESTION, he was in fact attempting to draw the others' attention to the discussion. Turn 019 confirms CH's intention to get the rest to focus.

In other words, if there is a coding decision to be made between FOCUS and SUGGESTION where a member requests for the rest to get back to the discussion, the turn should be coded as FOCUS instead of SUGGESTION. Example (17) illustrates the point that although the form of the utterance is imperative, it does not follow that the function is necessarily SUGGESTION. Instead, the function may be of another category depending on the context and intention of the said interaction.

In the following face-to-face interaction (example 18) and (example 19), JL on two occasions in turns 079 and 085 playfully instructed WC to do something. Therefore, they should be coded SUGGESTION and not FOCUS.

(18)

| Turn | Participant | Utterance |
|------|-------------|---|
| 078 | WC: | Air, there's a lot of examples, solutions. Go to water. Industrial wastage. Land, dumping of waste, the ... the.. the... ah... radioactive.. radioactive... |
| 079 | JL: | Can you (referring to WC) list out then type ... write an email to me? |
| 080 | All: | Laugh |

[Pilot study, face-to-face]

(19)

| Turn | Participant | Utterance |
|------|-------------|---|
| 084 | WC: | So, our thesis is <i>ah</i> .. |
| 085 | JL: | WC, take out a pen, list down the problems. |
| 086 | WC: | Yes, JL. Problem number one, what's the problem number one? |

[Pilot study, face-to-face]

CONSENSUS

The fifth category of MANAGEMENT OF DISCUSSION is CONSENSUS which applies to situations where members seek clarification or confirmation from others on the acceptance of an idea. It could also refer to members' voting for a particular idea. Specifically, CONSENSUS in MANAGEMENT OF DISCUSSION means agreement with the direction that a discussion is taking, but not necessarily agreement with a particular idea. Here again, there may be issues in differentiating between CONSENSUS and AGREEMENT in KNOWLEDGE CONSTRUCTION which can be resolved as illustrated in the following chat exchanges.

QM, SL and DO were participants of a chat team. They had come up with a few suggestions on essay topics. In this excerpt (example 20), both QM's questions (turns 027 and 029) show her intention to seek her team members' opinion on which topic to focus. Therefore, DO's response "I'm okay with anything" is her decision or her vote to go with the majority thus CONSENSUS under MANAGEMENT OF DISCUSSION. It was not categorised as AGREEMENT under KNOWLEDGE CONSTRUCTION because DO's reply does not signify her acceptance of an idea thread but it functions as a decision that she had arrived at. In other words, although the interaction touches on content, it could be considered as CONSENSUS if the intention of the participants is to get some sort of agreement among themselves.

(20)

| Turn | Participant | Utterance |
|------|-------------|---|
| 027 | QM to ALL : | okay so how????social issues?environmental?? or general matters? |
| 028 | SL to ALL : | cos i noe quimei very interested in this topic |
| 029 | QM to ALL : | i think social issues??? |
| 030 | DO to ALL : | i'm okay with anything |

[Pilot study, chat 2]

KNOWLEDGE CONSTRUCTION

The third and most important dimension of the genre-based content analysis model is KNOWLEDGE CONSTRUCTION. This concept was drawn from Gunawardena, Lowe and Anderson's (1997) interaction analysis model that focuses on how knowledge is constructed socially in computer-mediated communication, specifically in a debate using the discussion forum. They propose five phases in this co-construction of knowledge: "sharing/comparing, dissonance, negotiation/co-construction, testing tentative constructions, and statement/application of newly-constructed knowledge" (p. 413). While Gunawardena, Lowe and Anderson's (1997) model emphasises argumentative features and participants' evaluation of one another's contributions, the KNOWLEDGE CONSTRUCTION dimension of this model attempts to analyse how knowledge and content are constructed among peers in a collaborative environment where participants try to arrive at consensus. It is what Plowman (1993) terms as SUBSTANTIVE which to her refers to participants "asking questions and offering explanation concerning with the subject domain" (p. 152).

The key distinction between KNOWLEDGE CONSTRUCTION and MANAGEMENT OF DISCUSSION is that the former is concerned with the topic or theme of essay whereas in the latter, participants talk about the direction of the discussion and its progress.

In order to ensure that the coding scheme is able to recognise and capture different categories of KNOWLEDGE CONSTRUCTION, a set of 15 functions (see Table 3.9), where the functions are defined by their illocutionary force (Brown & Yule, 1983).

Table 3.9 Genre-based content analysis model: KNOWLEDGE CONSTRUCTION

| Category | Definitions |
|-----------------|--|
| INITIATION | Introducing or stating an idea or proposition; |

| | |
|-------------------------------|---|
| | Identifying a problem; Proposing a solution to a related problem |
| ELABORATION | Elaborating or explaining an idea, proposition, problem or solution; Scaffolding of own or others' idea, proposition, problem or solution |
| EXAMPLE | Giving specific examples or evidence to an idea, proposition, problem or solution |
| REPETITION | Repeating or reaffirming acceptance of or agreement to an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Re-phrasing an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| AGREEMENT | Concurring, agreeing, confirming or accepting an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| DISAGREEMENT | In a direct manner, not accepting an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Expressing doubts or dubious about ideas brought up |
| ACKNOWLEDGEMENT | Verbally indicating understanding or comprehension of what another speaker(s) said which does not necessarily mean Agreement; Praising or giving positive encouragement; Claiming ownership of an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| CLARIFICATION | Asking question, raising doubt or raising concern (for understanding) about any aspect of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Seeking confirmation of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Seeking for specific term or information; Checking for accuracy of factual information; Prompting for more explanation or elaboration |
| SEARCH | Asking question, raising doubt or raising concern about any aspect of an idea, suggestion, proposition, problem, solution, example, evidence or explanation that prompts others or self to re-examine what's been said |
| REFERENCE (external links) | Making reference to course material, textbook, article, Internet sources, authority, family, friends, own experience or knowledge etc. |
| REFERENCE (internal links) | Making links between ideas mentioned within the discussion; Making reference to contributions made by group participants |
| NEGOTIATION | |
| - ARGUE/CHALLENGE | Arguing or challenging an idea, proposition, problem or solution put forth |
| - COUNTER ARGUE/ DEFEND | Counter arguing or defending challenged idea, proposition, problem or solution |
| - CONTRAST | Providing a contrasting view (not necessarily challenging) to an idea, proposition, problem or solution |
| - COUNTER-PROPOSE | Counter proposing another idea, proposition, problem or solution |
| SUMMATION | Summarising or synthesising ideas put forth in the discussion; Refining, reformulating or re-organising ideas |
| JUDGEMENT | Making judgement or evaluation of others' or own ideas |
| RESPONSE | Responding to a specific question asked but without any elaboration; |

INITIATION

INITIATION is the first and one of the most important features of KNOWLEDGE CONSTRUCTION. Many coding schemes (Burton, 1981; Henri, 1992; Howell-Richardson & Mellar, 1996; Newman, Webb & Cochrane, 1995) have used different terms to represent introduction or initiation of new ideas. INITIATION recognises contributions that address key issue(s) of a task within a specific genre. For instance, in the problem-solution genre, ideas brought up which have direct relation to key problems and/or key solutions are deemed INITIATION; in the cause-effect genre, causes and effects; in the comparison-contrast genre, similarities and differences; and in the argumentative genre, key arguments and anticipation for counter-arguments. In other words, INITIATION is the introduction of an idea which contributes to the requirement of the brainstorming task; more specifically, in the problem-solution genre, it is identification of key problems and proposal of possible solutions to those problems.

The use of INITIATION here is different from Sinclair and Coulthard's (1975) OPENING MOVE in an EXCHANGE. Defining INITIATION using discourse criteria may allow for the same idea to be categorised more than once since the same idea could occur twice or more times. However, in order for an initiated idea to be traced and tracked to its original contributor or contributor(s), the use of propositional term in defining INITIATION seems more appropriate and fitting for the purpose of this study.

Following are examples of two different functions of INITIATION. In the first instance (example 21), CH's reply in turn 024 to YF's question is a proposal of the problem

“pollution” to be discussed for their problem-solution essay. In the second example (22), both JH and CH were providing solutions to the problem of air pollution.

Therefore, both instances were categorised as INITIATION as they fulfil two main criteria: first, the suggestions of the problem and solutions were the first time such ideas were mentioned in the discussion; and second, both suggestions are directly related to the topic of discussion.

(21)

| Turn | Participant | Utterance |
|-------------|--------------------|-------------------------|
| 023 | YF to ALL: | OK WHAT TOPIC U SUGGEST |
| 024 | CH to ALL: | pollution |

[Pilot study, chat 1]

(22)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 076 | JH to ALL : | Education is the key to reduce air pollution. in order for ppl to know the importance of it.. |
| 079 | CH to ALL : | limiting the amount of pollutants to be released into the atmosphere |

[Pilot study, chat 1]

ELABORATION

The second category of knowledge construction is ELABORATION, a function similar to Burton’s (1981) COMMENT. ELABORATION is closely linked to INITIATION as it is expansion of initiated ideas. It is considered based on the rhetorical structure of a particular genre. That means if members are discussing problems and solutions, one would expect elaboration that is related to “solutionhood” in addition to other more commonly observed rhetorical features such as “background”, “justification”, and “evidence” (Mann & Thompson, 1986, 1988).

Ideas presented in the context of this study can be identified as initiation of something new or development or building of an already initiated idea. Whether an idea is

considered new or an expansion of an already mentioned idea depends on the rhetorical relation between two sets of ideas. For example, in a problem-solution context, suggestions contributing to solution(s) of a problem are deemed new ideas; whereas, suggestions helping to elaborate or expand on an already stated solution fall into the latter category. This again corresponds with Mann and Thompson's (1986, 1988) relational propositions "solutionhood" for solutions and "evidence, justification, background, circumstance" (1986, p. 60-66) for elaboration or expansion of a solution.

In the face-to-face example below (example 23), when WC talked about leaded petrol the second time (turn 030), he was explaining the idea of using it as a way to solve the problem of air pollution caused by vehicles, hence ELABORATION.

(23)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 028 | WC: | That means you ... Leaded petrol. You see <i>wah-lah-way</i> damn smart <i>man</i> . |
| 029 | JL: | You can elaborate into a paragraph. |
| 030 | WC: | Lead petrol, unleaded petrol, CO become CO2 using converter; CO become CO2 <i>what</i>. |

[Pilot study, face-to-face]

In the next example (24), it can be observed that the team was attempting two things simultaneously: one, to narrow down the topic of air pollution and two, to give more elaboration to the topic, from a general problem of air pollution to looking at the impact of it. CH's turn 035 in example (24) is therefore an illustration of ELABORATION.

(24)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 032 | YF: | SO THE PROBLEM IS AIR POLLUTION? |
| 033 | JH: | air pollution is a problem itself? hehe |
| 034 | CH: | how shld the q b like? |
| 035 | CH: | the impact of air pollution? |

036 JH: impact of air pollution should be our problem?

[Pilot study, chat 1]

A third example of scaffolding of ideas can be seen in the following chat discussion (example 25) where QM built on or added onto SL's idea of melting of ice caps by suggesting the subsequent effect, namely the rise of sea levels. Analysed based on the rhetorical structure situated in a problem-solution genre, these are elaboration on the problem of air pollution. Therefore, although members of the discussion seemed to be talking about the effects of global warming in particular, as the context is that of a problem-solution genre, the content is in fact an expansion or explanation on the problem of air pollution.

(25)

| Turn | Participant | Utterance |
|------|-------------|--|
| 078 | SL: | global warming causes rise in temp...melting of ice caps |
| 079 | QM: | then the rising sea levels.,yah |

[Pilot study, chat 2]

In short, ELABORATION is both an attempt to elaborate or explain as well as to scaffold or build on own or others' ideas.

EXAMPLE

EXAMPLE is the third category of the KNOWLEDGE CONSTRUCTION dimension. It refers to specific evidence and instances of an idea which Newman, Webb and Cochrane (1995) classify as justification in their content analysis framework.

EXAMPLE is different from ELABORATION in its contention for and identification of specific details. EXAMPLE is observed only if there is in-depth discussion of a particular idea thread. It provides additional information which bears the rhetorical relationship of INSTANCE to the previous utterance (Mann & Thompson, 1986, 1988) whereas ELABORATION provides additional information of the same kind. The

distinction can usually be detected from the manner in which members of a discussion phrase it.

An illustration of EXAMPLE can be observed in the following face-to-face interaction (example 26). JL attempted to contribute an example which started with “Let’s say ...” However, the complete thought of his example took four turns to be realised, namely in turn 380.

(26)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 374 | JL: | Like we have fines, we have bans. |
| 375 | WC: | Bans on what? |
| 376 | JL: | Let’s say, let’s say your car |
| 377 | WC: | speeding |
| 378 | JL: | No, produce exhaust fumes on the road |
| 379 | WC: | A lot of exhaust then you get fine. |
| 380 | JL: | Then the traffic police go pass. If they see, they’ll ask your car to sign up for a test. If let’s say you are tested |
| 381 | WC: | fail |
| 382 | JL: | it doesn’t pass, right, you are fined. |

[Pilot study, face-to-face]

REPETITION

The fourth category REPETITION is commonly observed in all interactions. It is evident in both Henri’s (1992) and Newman, Webb and Cochrane’s (1995) schemes. It refers to ideas that have been mentioned and are re-said, either in their original form, that means the same words or phrases, or re-phrased. There is no additional information contributed in REPETITION. In the following face-to-face example (27), “car exhaust” was first brought up by WC in turn 023 and later repeated by JL in turn 025. In such cases, the second time the idea thread was mentioned, it would be coded REPETITION.

(27)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 023 | WC: | You know, the car exhaust , you can put the catalytic converter, you know, that kind of stupid stuff? |
| 024 | JM: | Then everybody can just ... |

025 JL: You can say the **car exhaust**. The problem is the **car exhaust**,

[Pilot study, face-to-face]

AGREEMENT and DISAGREEMENT

The next two categories AGREEMENT and DISAGREEMENT are basically members' acceptance or non-acceptance of ideas brought up. Howell-Richardson and Mellar (1996) label AGREEMENT as CONFIRM and DISAGREEMENT as REJECT/DISAGREE. Burton (1981), on the other hand, uses ACCEPT to refer to participants' understanding and agreement of what was said earlier.

In a face-to-face context, with only audio-taped transcription of verbal interaction and with no visual being captured, AGREEMENT and DISAGREEMENT can only be identified if they are verbally or linguistically represented since non-linguistic responses cannot be captured. However, in a chat environment, members could make use of emoticons to express their agreements, disagreements and doubts.

In the chat discussion example below (example 28), DO (in turn 101) agreed with SL's initiation of idea in turn 100. All these are instances of participants' acceptance of ideas mentioned.

(28)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 100 | SL: | movement of currents also cause the fishes to decline in pop i read |
| 101 | DO: | yup and the animals to migrate |

[Pilot study, chat 2]

DISAGREEMENT, on the other hand, is refutation of an idea. Coffin and Hewings (1995) in their investigation of the efficacy of discussion forum in developing students' argumentative skills make use of the concept of ENGAGEMENT in Systemic

Functional Linguistics to analyse their data. One of the categories, NON-ENDORSE, has a similar function as DISAGREEMENT that is to indicate participants' non-acceptance of views. Gunawardena, Lowe and Anderson (1997) term this DISSONANCE.

Members of a discussion could also disagree in an indirect manner without saying "no" or "I don't agree" or they could raise doubts about an idea. In such cases, the turns prior to and after that particular utterance need to be considered carefully so that the intention of the speaker can be interpreted accurately. This is because in different contexts, the same utterance can reflect one of these three intentions: disagreement, negotiation, or motivation to re-examine an idea.

An example of a direct disagreement is illustrated in the following face-to-face excerpt (example 29). JM's response "No lah" in turn 299 is a direct negation of or objection to JL's interpretation of what she meant.

(29)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 298 | JL: | Okay, okay. She (JM) said she wants to talk about solutions about air pollution from vehicles |
| 299 | JM: | No lah. |

[Pilot study, face-to-face]

In the next scenario (example 30) where there is an absence of use of negation form, JM's response to JL's idea of the addition of noise pollution in turn 177 can be interpreted as disagreement to show in an indirect manner that she would not want to accept the inclusion of noise pollution.

(30)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 175 | WC: | So we put it as the last one (ah). The first one ...COE, to cut the number of vehicles on the road. Air pollution... |

| | | |
|-----|------------|--|
| 176 | JL: | Why not we use the pollution by cars, by vehicles on the road? Then we can come up with noise pollution |
| 177 | JM: | Eh.. you are enlarging... |
| 178 | WC: | Pollution from vehicles. |

[Pilot study, face-to-face]

ACKNOWLEDGEMENT

The seventh category ACKNOWLEDGEMENT refers to members' indication that they are listening or paying attention to what is being said. Sometimes, when making acknowledgements, one could use words like "okay", "yes", "uhuh" (Burton, 1981) but it does not necessarily signify acceptance or agreement. Therefore, in cases where the speaker's intention could be interpreted either as agreement or acknowledgement, the context in which the utterance occurs must be taken into account, as illustrated in the following chat discussion (example 31).

DO's "ohh ok that's gd" (in turn 088) is an acknowledgement of QM's point about an article that she read, instead of an agreement with QM's point.

(31)

| Turn | Participant | Utterance |
|------------|--------------------|--|
| 085 | SL to ALL : | and also becos of changes in temp tt some animals cannot adapt and want to shift their habitat |
| 086 | DO to ALL : | change in climates |
| 087 | QM to ALL : | cos' the whole article got mentioned abt one treaty...wat kyoto protocol... |
| 088 | DO to ALL : | ohh ok that's gd |

[Pilot study, chat 2]

Besides functioning as an indication that one is acknowledging what others contribute in a discussion, ACKNOWLEDGEMENT also refers to compliments and/or encouraging words given to other members. Mowrer (1996) who develops a coding scheme to analyse students' content in a discussion forum labels this as encouraging comments. As illustrated in example (32), JH was both acknowledging CH's contribution of

ideas as well as encouraging him to keep on contributing ideas to the discussion (as observed in turn 052).

(32)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 049 | CH to ALL : | impacts |
| 050 | CH to ALL : | environment |
| 051 | CH to ALL : | human |
| 052 | JH to ALL : | good good good... keep on feeding us... |

[Pilot study, chat 1]

In some instances, though rare, members of a discussion group may compliment themselves on the idea that they themselves brought up, as seen in one of the following face-to-face excerpts (example 33):

(33)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 028 | WC: | That means you ... Leaded petrol. You see <i>wah-lah-way</i> damn smart man. |

[Pilot study, face-to-face]

In this example, WC seemed to be excited that he himself had thought of the idea “leaded petrol” thus complimenting himself “damn smart man”.

CLARIFICATION

The eighth category of KNOWLEDGE CONSTRUCTION, CLARIFICATION, encompasses making enquiries that help to enhance understanding. These enquiries include seeking confirmation of ideas mentioned, asking for specific information, and checking for accuracy of information. Most often, like Howell-Richardson and Mellar’s (1996) REQUEST, CLARIFICATION prompts or activates further explanation and elaboration or repetition of an idea. In examples (34) and (35), both CH (chat 1) in turn 098 and JL (face-to-face) in turn 132 were trying to confirm how particular ideas fit into the discussion and essay framework. They were hence performing clarification function.

(34)

| Turn | Participant | Utterance |
|------|-------------|---|
| 095 | CH to ALL : | but wat r the solns? |
| 096 | YF to ALL : | ask them not to buy cars |
| 097 | YF to ALL : | ask them to use public tpt |
| 098 | CH to ALL : | soln to health or soln to pollution? |

[Pilot study, chat 1]

(35)

| Turn | Participant | Utterance |
|------|-------------|---|
| 130 | JL: | No, it must not be near the river so that it will not cause water pollution. |
| 131 | JM: | But now we are doing air pollution. |
| 132 | JL: | Because of the air pollution, we should, should pollute the water. So, it's still, so, the main idea is still air pollution (or what?) |

[Pilot study, face-to-face]

In another instance, a member could be questioning reasons or logical explanations of a mentioned point such as JM's response (in turn 294) to WC's suggestion to include law against noise level as seen in example (36). JM was expressing her disagreement as well as questioning WC's reasoning of including noise in a problem-solution discussion focusing on air pollution.

(36)

| Turn | Participant | Utterance |
|------|-------------|---|
| 292 | WC: | The law can include the .. the.. the noise level. |
| 293 | JL: | Or you can include |
| 294 | JM: | But this is air. Why are you talking about that? |

[Pilot study, face-to-face]

SEARCH

SEARCH is the ninth category under KNOWLEDGE CONSTRUCTION. Borrowed from Smagorinsky (1991), it refers to interaction that involves more than asking for clarification. As a result of SEARCH, it triggers and prompts the person who initiated or brought up an idea to re-examine, re-analyse or review what he or she said which could lead to a change of what was suggested earlier. It therefore involves some degree of reflection and self-evaluation.

REFERENCE

REFERENCE forms the tenth and eleventh categories of KNOWLEDGE CONSTRUCTION.

During a discussion, participants could refer to sources such as an article, an internet source and course materials to substantiate their points and arguments. When this happens, they are making “external references”, a concept similar to Howell-Richardson and Mellar’s (1996) REFER and Newman, Webb and Cochrane’s (1995) OUTSIDE KNOWLEDGE.

On the other hand, if participants refer to contributions made by others earlier in the discussion or link what they are suggesting with what was said by another person, they are making “internal references”. INTERNAL REFERENCE is distinguishable from REPETITION in that participants make clear the link or relationship between their own (new) idea and the one that was mentioned by another, instead of mere repetition of what was said.

In the first two instances below (examples 37 and 38), JL was making reference to external sources: course materials in the first case and his friend in the second. In chat 2 (example 39), QM was also referring to an article in *Time Magazine* about global warming (a topic that the group was discussing). These are instances demonstrating EXTERNAL REFERENCE.

(37)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 058 | JL: | (referring to the example given in <i>Materials Book</i>) For this passage, right, the topic sentence is banning of IRCs converter. |

[Pilot study, face-to-face]

(38)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 384 | JL: | Oh! My friend say it’s up... must send the car on the third year then yearly after the third year. |

[Pilot study, face-to-face]

(39)

| Turn | Participant | Utterance |
|------|-------------|---|
| 063 | QM to ALL : | problems...i got inside the time magazine..hehe |

[Pilot study, chat 2]

As for making a distinction between INTERNAL REFERENCE and REPETITION, the following face-to-face discussion (example 40) is an illustration. Although the participants used words like “your”, “my”, “you” and reference to a person such as “WC’s” and “JL”, these should not be confused with making internal references. In this discussion, participants were repeating ideas that were contributed by specific persons. In addition, there is no evidence of any new idea thread being linked to “catalytic converter”, which would be required if one was to code the turn as INTERNAL REFERENCE. INTERNAL REFERENCE applies only if the reference to an idea is linked to an ELABORATION or an EXAMPLE.

(40)

| Turn | Participant | Utterance |
|------|-------------|--|
| 149 | WC: | From vehicles. Okay then number one. Number one is ...? Number one’s what? |
| 150 | JM: | Your catalytic converter. |
| 151 | WC: | My catalytic converter. WC’s catalytic converter. Second one will be JL , reducing of cars - COE. |
| 152 | JL: | JL , implementing of COE. |
| 153 | JM: | Then the third one is the lead thing <i>lah</i> , the lead, the fines or whatever you talk about. |

[Pilot study, face-to-face]

NEGOTIATION

NEGOTIATION is the twelfth category of KNOWLEDGE CONSTRUCTION. It is a process where participants of a discussion argue, counter-argue and counter propose to negotiate for meaning, and/or provide a contrasting view to ideas mentioned. It is through this process that ideas are either consolidated or abandoned. NEGOTIATION is

prominent in a content analysis model focusing on argumentative skills
(Gunawerdena, Lowe & Anderson, 1997).

In example (41), WC expressed his concern in turn 041 regarding the limited scope of focusing on Singapore thus providing the group with a contrasting view of the issue. His contribution was coded NEGOTIATION (CONTRAST) since his intention was to give another perspective thus considered as negotiation for an expansion of scope. JL's response to WC's in turn 042, on the other hand, is indeed a defense of his suggestion to focus on Singapore. Therefore, it was coded as NEGOTIATION (DEFEND).

(41)

| Turn | Participant | Utterance |
|------|-------------|--|
| 040 | JL: | The situation will be the current .. ah.. situation in most countries or Singapore. |
| 041 | WC: | We highlight, Singapore would be very very .. the scope is very small. |
| 042 | JL: | You don't make the scope too big <i>what</i>. Because you need to provide a solution. |

[Pilot study, face-to-face]

Another illustration of NEGOTIATION can be observed from the interaction among WC, JM and JL in the following face-to-face excerpt (example 42). In an attempt to defend her suggestion of restricting the number of cars a family could own in order to solve air pollution caused by vehicles, JM questioned (and in the process of doing so defending her idea) WC on the reason he disagreed with her proposed solution (in turn 313). JL picked up WC's thread of reasoning by asking JM to consider her proposal from the perspective of a rich person. JM's response (in turn 316) "Okay *lah*. You only can have how many cars on the road *lah*." to both JL and WC demonstrates that she remained convinced with her suggestion hence defending her argument. In both segments, JM was negotiating for and defending her view.

(42)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 312 | WC: | This solution, I will not agree with you. |
| 313 | JM: | Why not? Why cannot? |
| 314 | JL: | If I am rich, how many car I have in my house? |
| 315 | WC: | Yeah. |
| 316 | JM: | Okay lah. You only can have how many cars on the road lah. |

[Pilot study, face-to-face]

SUMMATION

In most discussion sessions, there are occasions where a participant of a discussion group attempts to summarise or synthesise or pull together what has transpired. When this occurs, it falls into the category of SUMMATION in KNOWLEDGE CONSTRUCTION. Besides summarising ideas, one could refine and re-phrase ideas and situate them within a specific context. Nonetheless, SUMMATION should not be confused with REPETITION although inevitably, when summarising, one repeats what has been mentioned in a discussion. Smagorinsky (1991), Howell-Richardson and Mellar (1996), and Sinclair and Coulthard (1975) have a category each in their respective coding schemes that describes either summary or closure: SUMMATION for Smagorinsky, SUMMARISE for Howell-Richardson and Mellar, and CONCLUSION for Sinclair and Coulthard.

As seen in example (43), WC was doing more than repeating what had been discussed. In fact, he attempted to summarise ideas by arranging them in the problem-solution essay structure.

(43)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 317 | WC: | Okay. I repeat our topic easy – pollution from the vehicles on the road, Singapore context. First one, reducing number of vehicles on the road. Second one, using equipments and better fuels. Third one will be, |

[Pilot study, face-to-face]

JUDGEMENT

The next category, JUDGEMENT, is concerned with judgement and evaluation of both own and others' ideas. This is a concept adapted from Smagorinsky's (1991) JUDGEMENT which refers to evaluation of (own) ideas that one produces. It is also an expansion of Henri's (1992) more general definition of JUDGEMENT, namely "making decisions, statements, appreciations, evaluations and criticisms" (p. 129). Newman, Webb and Cochrane (1995), in addition, call it CRITICAL ASSESSMENT. Sinclair and Coulthard (1975) though have a category, EVALUATE, that assesses others' responses, refer to a teacher's evaluation of his or her students' reply instead of own ideas.

JUDGEMENT is not so much as expressing disagreement or negotiating meaning as an indication of how one views an idea. In the context of a problem-solution discussion, JUDGEMENT is given most commonly to suggested solutions to a problem. As illustrated in example (44), JL's remark "crap" (in turn 309) though rude shows his opinion of JM's suggestion to limit the number of cars a family can have. His remark is indeed his opinion or judgement of the idea.

(44)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 305 | JM: | Yeah, fine. So you said, one family cannot have how many cars. Only have how many cars then. |
| 306 | JL: | Is it, is there such a law? |
| 307 | WC: | Is there such a law <i>ah</i> ? |
| 308 | JM: | I say. |
| 309 | JL: | Crap. |

[Pilot study, face-to-face]

RESPONSE

The final category under KNOWLEDGE CONSTRUCTION is RESPONSE. As with Sinclair and Coulthard's (1975) REPLY, it refers to interaction where members give a reply without any further elaboration. In addition, it usually follows CLARIFICATION.

It could be a one-word, one-phrase or one-sentence answer to a particular enquiry but it does not attempt to expand on the reply. Example (45) is an illustration of response. Both WC's (in turn 137) and JM's replies (in turn 139) do not contribute to the construction of knowledge; instead, they were responding to questions asked by JL.

(45)

| Turn | Participant | Utterance |
|-------------|--------------------|--------------------------------------|
| 136 | JL: | So, what do we do for problem three? |
| 137 | WC: | Up to your imagination. |
| 138 | JL: | Okay, problem number three. |
| 139 | JM: | Up to your imagination. |

[Pilot study, face-to-face]

SOCIAL AND METACOGNITIVE

The fourth and final dimension of the genre-based content analysis model is the SOCIAL AND METACOGNITIVE dimension (see Table 3.10). It consists of only two categories: OFF TASK and PROCESS/INTERRUPTED START. Plowman (1993) has a category, GROUP, which she defines as “building group identity, jokes, off task” (p. 152).

Table 3.10 Genre-based content analysis model: SOCIAL AND METACOGNITIVE

| Category | Definitions |
|---------------------------|---|
| OFF TASK | Stating or bringing up topics or issues that are beyond the scope of the discussion |
| PROCESS/INTERRUPTED START | Starting to say or contribute something but was interrupted by another person; Starting a line of thought but then abandoning it |

OFF TASK

OFF TASK refers to conversation or discussion that does not contribute to the completion of the task. Sinclair and Coulthard (1975) term this ASIDE, Smagorinsky (1991) PERIPHERAL STATEMENT, Mowrer (1996) MISCELLANEOUS COMMENTS, Henri (1992) SOCIAL, and Plowman (1993) GROUP. It is when members deviate from

the topic of discussion and venture into other areas such as their personal lives, school work, and observation of things that interest them. Off task discussion can be seen as part of a team building exercise that could contribute to how well a discussion proceeds and the harmony of the group, which as a result may create a sense of group belongingness important in fostering interpersonal relationship among all members and help to enhance solidarity with other members. Examples (46), (47), and (48) are illustrations of off task communication in both chat and face-to-face environments.

(46)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 003 | CH: | later got phy tut? |
| 004 | JH: | got... but no do |
| 005 | JH: | champion brand |
| 006 | YF: | going to win money in the upcoming matches today |
| 007 | CH: | u made yr bet? |

[Pilot study, chat 1]

(47)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 031 | QM: | hey my name is Qiumei...hehe...not Qiumei |
| 032 | SL: | okie <i>lah</i> |

[Pilot study, chat 2]

(48)

| Turn | Participant | Utterance |
|-------------|--------------------|-------------------------|
| 398 | WC: | JL, stop staring at JM. |

[Pilot study, face-to-face]

PROCESS or INTERRUPTED START

The second category, PROCESS or INTERRUPTED START is taken from Smagorinsky's (1991) FALSE START. It is defined as line of thought started then abandoned or line of thought interrupted by other speakers. When referred to an individual's inner thoughts and speech, similar to thinking aloud where one speaks whatever that is in one's mind without first organising and processing it, it is a metacognitive strategy. However, when one's line of thought is interrupted or assisted by others, it becomes thoughts that are constructed socially. INTERRUPTED START is an important function

to capture the co-construction of meaning and knowledge because it is verbalisation or articulation of inner ideas that otherwise may not be externalised. Sometimes, one may have a vague idea of what is in the mind and is unable to find words to express it. However, when externalised either in spoken or written form, one is able to conceptualise the idea more firmly and clearly.

As observed in example (49), JM, JL and MC attempted to formulate their respective ideas but they either could not find the right words to describe and express them or the ideas that they had have yet to take shape and be externalised.

(49)

| Turn | Participant | Utterance |
|------|-------------|---|
| 036 | JM: | Then .. |
| 037 | JL: | Then, you can have, you can have .. <i>ah..</i> |
| 038 | MC: | Then it's like ... |

[Pilot study, face-to-face]

Meanwhile, the interaction in example (50) shows how one's line of thought could be interrupted during a discussion. In this case, WC's enquiry in turn 102 was interrupted by JL's question yet WC still managed to complete his thought in turn 104.

(50)

| Turn | Participant | Utterance |
|------|-------------|---|
| 102 | WC: | Is it okay if we write ... |
| 103 | JL: | Can we write on... some a bit on air, a bit on water? |
| 104 | WC: | General? |

[Pilot study, face-to-face]

Usually, when one's thought has been interrupted by another person, the line of enquiry moves with the interrupted thought, as shown in the example (51). WC in turn 209 began with something about the sound of vehicles but abandoned it when JL brought up a point about sports car.

(51)

| Turn | Participant | Utterance |
|------|-------------|---|
| 209 | WC: | And furthermore, your, your sound of vehicle didn't have a |
| 210 | JL: | Those sports car .. those which are |
| 211 | WC: | not modified |

[Pilot study, face-to-face]

Based on the elaborated model, the face-to-face and chat transcripts were coded and analysed accordingly.

3.1.8 Analyses

After all the face-to-face and chat transcripts of the pilot study were segmented and coded by the researcher, two raters were invited to code 10% of the face-to-face and chat transcripts using the genre-based content analysis model. This exercise was to ascertain the reliability of the coding scheme. Both raters were provided with notes (see Appendix 7) explaining what the study was about and what they were required to do. In addition, a brief training session was conducted to familiarise them with the coding scheme. Table 3.11 lists the percentages of agreement established for Level 1 dimensions and Level 2 categories between both raters (R2 and R3), and between each rater and the researcher (R1).

Table 3.11 Percentage of agreement (1)

| Raters | Agreed (Level 1 dimensions) | Agreed (Level 2 categories) | Total no of turns |
|---------------|------------------------------------|------------------------------------|--------------------------|
| R1 & R2 | 90 (84.9%) | 81 (76.4%) | 106 |
| R1 & R3 | 89 (84%) | 77 (72.6%) | 106 |
| R2 & R3 | 90 (84.9%) | 80 (75.5%) | 106 |
| R1, R2 & R3 | 82 (77.4%) | 69 (65.1%) | 106 |
| Mean | 83.8% | 72.4% | |

It could be observed from findings in Table 3.11 that the mean percentage of agreement between raters and among three rates when tagging turns according to Level 1 key dimensions on function is high at around 83.8% but it is approximately 72.4% for specific categories at Level 2 on propositional content.

The first task that raters had to perform was to assign a Level 1 dimension to each turn. The four major categories are TASK CONCEPTION, MANAGEMENT OF DISCUSSION, KNOWLEDGE CONSTRUCTION, and SOCIAL AND METACOGNITIVE. Prior to this coding exercise, the transcripts had been parsed according to turns based on the rationale and procedures discussed in section 3.1.7 Unit of analysis. Since the researcher was the only person to do the segmentation, the exercise was repeated twice within a two-week interval in order to ensure that turns and expanded turns were clearly numbered.

In coding the pilot study data using the genre-based content analysis model, the three raters consisting of the researcher and two independent raters disagreed with 24 turns (i.e. 22.6% of total turns coded) on the coding of Level 1 dimensions. Among these 24 (out of a total of 106) turns where the codes assigned by all three raters did not match, it could be observed that 45.8% (see Table 3.12) was a mismatch between MANAGEMENT OF DISCUSSION and KNOWLEDGE CONSTRUCTION, 25% each between MANAGEMENT OF DISCUSSION and TASK CONCEPTION, and between TASK CONCEPTION and KNOWLEDGE CONSTRUCTION. In addition, there was one turn (i.e. 4.2%) in which all three raters assigned three different dimensions to it.

Table 3.12 Mismatches in raters' coding Level 1 dimensions

| Mismatches between | Frequency | % |
|---|------------------|----------|
| MANAGEMENT OF DISCUSSION and TASK CONCEPTION | 6 | 25 |
| MANAGEMENT OF DISCUSSION and KNOWLEDGE CONSTRUCTION | 11 | 45.8 |
| TASK CONCEPTION and KNOWLEDGE CONSTRUCTION | 6 | 25 |
| (in) all three categories | 1 | 4.2 |
| Total | 24 | 100 |

Generally, there were more turns, though the difference is small, in the chat discussion than in the face-to-face discussion where the mismatches occurred, specifically 25.8% (16 out of 62 turns) for chat and 18.2% for face-to-face (i.e. 8 out of 44 turns). This finding implies that the main difficulty in coding the discussion transcripts for Level 1 dimensions is in deciding if a particular turn falls under the category KNOWLEDGE CONSTRUCTION or MANAGEMENT OF DISCUSSION. This, in particular, seems to be more of a problem in the chat discussion than in the face-to-face discussion. In the face-to-face discussion, there was only 1 out of 8 mismatched turns that represented a discrepancy between KNOWLEDGE CONSTRUCTION and MANAGEMENT OF DISCUSSION. However, for the chat discussion, it was found that 64% of the mismatched turns were of this nature. In more than half of these cases, the researcher's codes matched with one of the raters'. Example in Table 3.13, taken from a chat discussion, gives an illustration of the discrepancy.

Table 3.13 Example of discrepancy between KNOWLEDGE CONSTRUCTION and MANAGEMENT OF DISCUSSION (1)

| Turn | Participant | Utterance | Rater 1 (researcher) | Rater 2 | Rater 3 |
|------------|-------------|--|------------------------------|------------------------------|--------------------------|
| 039 | SL: | or what u all suggest | mgmt | mgmt | mgmt |
| 040 | QM: | okay...environmental???or social? | mgmt | mgmt | mgmt |
| 041 | DO: | hmm actually if we do env we can touch on our article | knowledge (agreement) | knowledge (agreement) | mgmt (suggestion) |
| 042 | DO: | I wanna go to the toilet!!!! | social (off task) | social (off task) | social (off task) |

[Pilot study, chat 2]

SL, QM and DO were participants of this chat discussion. They were at the point of deciding what specific topic on pollution they should discuss for their essay. In turn 039 in the example, all three raters agreed that SL intended to elicit contribution from

the rest. In response to SL's call for contribution, QM sought the rest's feedback on whether to talk about environmental pollution or social pollution. In turn 041 where the discrepancy occurred, the researcher, who was Rater 1, and Rater 2 felt that DO agreed with the environmental pollution suggestion (which was implied but not mentioned explicitly) and supported her decision by indicating that they could refer to an article that they had regarding environmental pollution. Therefore, to Rater 1 and Rater 2, the closest code was AGREEMENT under KNOWLEDGE CONSTRUCTION. Rater 3, on the other hand, saw DO's intended meaning as a suggestion to refer to the article. She thus coded it as SUGGESTION under MANAGEMENT OF DISCUSSION. However, during a post-coding session where all three raters talked about the discrepancy, Rater 3 agreed that even though she saw the discussion thread as a suggestion, it was not a suggestion for plan of action for the discussion. Instead, it was related to the theme or topic of their essay. Therefore, it should be categorised as KNOWLEDGE CONSTRUCTION.

Table 3.14 is another example that illustrates Rater 1 and Rater 3's coding of a turn under KNOWLEDGE CONSTRUCTION while Rater 2 placed it under MANAGEMENT OF DISCUSSION. This example involves the question of whether the student meant to elaborate an idea mentioned earlier (thus categorised as KNOWLEDGE CONSTRUCTION) or to provide direction for the discussion (hence MANAGEMENT OF DISCUSSION).

Table 3.14 Example of discrepancy between KNOWLEDGE CONSTRUCTION and MANAGEMENT OF DISCUSSION (2)

| Turn | Participant | Utterance | Rater 1 (researcher) | Rater 2 | Rater 3 |
|------|-------------|-----------|-------------------------|---------|---------|
|------|-------------|-----------|-------------------------|---------|---------|

Earlier part of discussion

| | | | | | |
|---------------------------------|-------------------|--|--------------------------------|---------------------|--------------------------------|
| 023 | YF: | OK WHAT TOPIC U SUGGEST | mgmt | mgmt | mgmt |
| 024 | CH: | pollution | knowledge | knowledge | knowledge |
| 025 | CH: | air pollution | knowledge | knowledge | knowledge |
| <i>Later part of discussion</i> | | | | | |
| 034 | CH to ALL: | how shld the q b like? | task | task | task |
| 035 | CH to ALL: | the impact of air pollution | knowledge (elaboration) | mgmt (focus) | knowledge (elaboration) |
| 036 | JH to ALL: | impact of air pollution should be our problem? | knowledge | knowledge | knowledge |
| 037 | YF to ALL: | I think can | knowledge | knowledge | knowledge |

[Pilot study, chat 1]

In this situation, Rater 1 and Rater 3 thought that CH's response to his own question "how shld the q b like?" was an attempt to narrow down the scope of a suggestion made earlier to write about air pollution. Turn 035 therefore functions as an elaboration. However, Rater 2 read that as an attempt made by CH to provide a direction for the discussion. Both Raters 1 and 3 argued that CH's response could not fall under MANAGEMENT OF DISCUSSION due to two reasons: first, it was a content-loaded response. Second, if one traced back to threads earlier in the discussion (in turn 025), CH was indeed trying to focus on a small area of air pollution. In fact, the subsequent responses from JH in turn 036 and YF in turn 037 confirmed that CH was talking about the content but not management of discussion. As indicated by Hara, Bonk and Angeli (2000), it is not always easy to accurately interpret implicit intentions. Moreover, where subjective judgement is involved, there are potentials for differences in opinion. Nonetheless, the key thing is to be consistent in ascribing the same code to similar contexts and to refer to the situation in which an interaction occurs.

Table 3.15 gives three examples of mismatches between KNOWLEDGE CONSTRUCTION and TASK CONCEPTION, and between MANAGEMENT OF DISCUSSION and TASK CONCEPTION. In the first example (turn 008), while Raters 1 and 2 coded WC's utterance as repetition of the content that he mentioned earlier, Rater 3 interpreted it as WC's effort to organise his points. In the next turn (009), Raters 1 and 2 concurred that JM was asking for suggestions or contributions from the rest solutions to the three types of pollution. Rater 3, on the other hand, saw it again as an attempt to organise points. In the last mismatched turn (010) highlighted in the example, although all three raters coded the segment as task conception, Rater 3 again differed in her coding, this time in the Level 2 category. She followed her two earlier codes of PLANNING and saw that again as another attempt to organise the essay. Raters 1 and 2, however, felt that WC was expressing his doubt on the task requirement of including solution in the essay thus coded it as REQUIREMENT.

Table 3.15 Example of mismatches in coding

| Turn | Participant | Utterance | Rater 1 (researcher) | Rater 2 | Rater 3 |
|------|-------------|---|-------------------------------|-------------------------------|------------------------|
| 006 | WC: | 3 pollution <i>lah</i> : air, water, land. | knowledge | knowledge | knowledge |
| 007 | JM: | Then you have to come up with the solution <i>le</i> . | task | task | task |
| 008 | WC: | Okay, okay <i>lah</i>. 3 air pollution <i>lah</i>. Air pollution the main topic then 3 air <i>lor</i>. | knowledge (repetition) | knowledge (repetition) | task (planning) |
| 009 | JM: | Then, what's the solution? | mgmt (elicitation) | mgmt (elicitation) | task (planning) |
| 010 | WC: | No solution <i>what</i>. What solution? | task (requirement) | task (requirement) | task (planning) |
| 011 | JM: | You have to come up with the solution <i>what</i> . | task | task | task |

[Pilot study, face-to-face]

This example highlights an important issue in coding. Once an assumption is made, a rater could base his or her judgement of subsequent turns on it. While this is needed for consistency of coding within the same discussion, it may create difficulties when different raters have different sets of assumptions. One key source of this difference in assumption in the pilot study was that raters were asked to code only excerpts of transcripts. Although they were given full or complete transcripts of the discussions, they might not have paid attention or referred to what was discussed earlier.

Mismatches in coding also appeared in the chat discussion where participants used emoticons to express their feedback. It might be easy to interpret emoticons that express feelings such as happiness (with smileys such as 😊 or 😄) or sadness (with a drooping mouth 😞), but it became tricky to code when participants used them to indicate their agreement, disagreement, or doubt concerning ideas mentioned, as shown in Table 3.16. Even with information on what each emoticon in chat means (see Appendix 8), deciphering the exact intention and meaning of participants could still be problematic. Like the concept of nonverbal cues, smileys are ambiguous and can have different meanings when used by participants.

Table 3.16 Emoticons – mismatches in meaning

| Turn | Participant | Utterance | Rater 1 (researcher) | Rater 2 | Rater 3 |
|------|-------------|----------------------------------|------------------------------|------------------------------|-----------------------------|
| 033 | DO: | yah I think so too | mgmt | mgmt | mgmt |
| 034 | QM: | 😬 <emoticon “baring teeth”> | social (off task) | social (off task) | mgmt (consensus) |
| 035 | SL: | Environmental issues shld b okie | knowledge | knowledge | knowledge |
| 036 | QM: | okay loh | knowledge | knowledge | knowledge |

[Pilot study, chat 2]

In this example, Raters 1 and 2 thought that emoticon 🤔 in turn 034 did not contribute to the discussion thus coded it as OFF TASK (SOCIAL AND METACOGNITIVE dimension). Besides, this emoticon does not appear like an expression of happiness. Therefore, it conflicted with the flow of discussion which Raters 1 and 2 felt was of a positive tone of agreement. This was further substantiated by QM's response "okay loh" two turns after her emoticon 🤔. In contrast, Rater 3 saw it as an acceptance of a topic to be discussed. She therefore coded it as CONSENSUS under MANAGEMENT OF DISCUSSION. These mismatches have demonstrated a few key learning points about the assignment of codes which will be discussed in section 3.1.9.

3.1.8.1 Tracking and tracing ideas discussed (in discussion) and used (in text)

After coding all the turns, the frequency of occurrences of all the codes was established. The objective of this exercise was to determine quantitatively which features were revealed most prominently in the discussion and which the least. Such findings would provide a general overview of interaction patterns as well as knowledge building process in a collaborative environment. This was followed by an in-depth qualitative analysis of the key findings to determine possible explanations and interpretations of observed patterns.

In order to trace if ideas discussed appeared in students' individual writing drafts, reverse engineering method of analysis was employed. Analysis started at the end product, namely students' essays which were parsed according to sentences. These were compared with turns in transcripts categorised as INITIATION, ELABORATION, EXAMPLE, NEGOTIATION, and SUMMATION, each with an assigned idea code. The same raters who coded the face-to-face transcripts and chat scripts were again invited

to code two essays based on instructions given (see Appendix 7). The following section explains how the raters coded the essays.

An idea code refers to a numbering system developed to establish the extent to which ideas discussed during a brainstorming session appeared in the students' individual writing draft. It involves careful tracking and tracing of ideas and allows convenient tracking of ideas in the text to the originator(s) in the discussion.

Table 3.17 demonstrates how transfer of ideas was tracked. In the left column are sentences of a paragraph taken from a student's essay. The student was a participant in the face-to-face discussion. In the right column are idea threads mentioned in the face-to-face discussion which were given specific codes (as listed in the middle column, under "Idea code"). The absence of an idea code tag in Table 3.17 means that it is an idea that is not present in the discussion. These are new ideas added by the student when he wrote the essay. The tagging of new ideas will be discussed in the next example in Table 3.18.

Table 3.17 Tracking of ideas from text to discussion

| Sentence | Idea code | Turns in discussion |
|---|-------------|-------------------------|
| ¹ The relevant authorities in Singapore took measures to reduce and limit the number of vehicles on the road in order to reduce the amount of pollution produced by the vehicles. | S2 | reducing number of cars |
| ² The Land Transport Authority of Singapore implemented a rule of having to own a Certificate of Entitlement (COE) before a consumer can purchase a vehicle. | S1; S2.1 | rules; COE |
| ³ By limiting the number of COEs issued per month, the number of new vehicles that is introduced on the road per month would be limited by this scheme. | | |

| | | |
|--|------|-----------------------------------|
| <p>⁴Another measure that the government took was to introduce the concept of “Park and Ride”.</p> | S2.2 | Park N Ride |
| <p>⁵This scheme encourages car owners, especially those who work in the city area, to park their vehicles at a MRT station nearest to their home and take a train to reach their workplace.</p> | | |
| <p>⁶Hence, it would reduce the number of vehicles traveling on the roads leading to the city areas.</p> | S2 | reducing number of cars |
| <p>⁷In order to reduce the number of Singaporeans owning vehicles, the government spent great efforts to design and build a good public transportation system.</p> | S2.4 | good public transportation system |
| <p>⁸The MRT transportation system, which stretches round the island, is able to bring anyone to the central part of most towns in Singapore.</p> | | |
| <p>⁹Working closely with the MRT authorities, the SBS and TIBS bus services provide rides to almost every part of Singapore, even reaching the most deserted corners.</p> | | |
| <p>¹⁰With such a public transport system, you will not feel inconvenient even if you do not own a car in Singapore.</p> | | |
| <p>¹¹With such measures implemented, the number of vehicles on the road would be greatly reduced.</p> | S2 | reducing number of cars |

Table 3.18 is a detailed example of how this tracking and tracing method was employed. In Table 3.18, the third body paragraph of CH’s essay was parsed according to sentences. CH was a member of chat 1. Keeping in mind the rhetorical characteristics of a problem-solution genre, suggestions related to a problem and its respective solutions were assigned an idea code using the same numbering system which will be explained in more detail section 3.1.9.2.

Briefly, if a problem is mentioned, it will have an idea code that starts with “P”; if a solution is mentioned, “S”. Expansion or development of a related problem or

solution receives a decimal point following the number of that particular problem or solution.

When assigning idea codes that relate both ideas in discussion and text, the first consideration one has to keep in mind are turns in discussion that have been idea coded. If the same idea is detected in text, the idea code used for tagging in discussion will be linked to the text. This allows one to identify which ideas in discussion appear in a student’s draft. In cases where a student includes something not mentioned in discussion, that particular idea will be deemed a new idea. The code assigned to it still follows the decimal point numbering system except that it will have “new” as its prefix, for example “newS1.1” or “newS1.1.1” (see Table 3.18).

There were also occasions in the data where an idea stated in a sentence did not contribute to the discussion, flow or coherence of the paragraph it was situated. This is explained in Mann and Thomson’s RST (1986, 1988) as gaps in text coherence. For such instances, no idea code would be given to the sentence.

Table 3.18 Transfer of ideas from chat discussion to text – CH

| Sentence | Idea code | Ideas in discussion |
|---|-----------|---------------------|
| ¹ Lastly, by educating everyone on the impact of air pollution, one will be able to relate to their own health if they have decided to go against reducing air pollution. | S1 | education |
| ² Self-awareness is an important basic issue to curb air pollution. | newS1.1 | |
| ³ For example, when one is able to relate the harmful effects of ultra violet radiation to skin cancer and eye cataracts, one will think again when they wanted to use things that contain chlorofluorocarbon (cfc) which they know will destroy the ozone layer and allow the harmful radiations to enter the atmosphere. | newS1.1.1 | |

| | | |
|--|-----------|-----------|
| ⁴ Car owners are also advised to fit a catalytic converter at the exhaust pipe of their cars to reduce the emission of harmful gases which will cause illness such as bronchitis, asthma and, most importantly, brain damage to children. | newS1.2 | |
| ⁵ By educating the people who burn up forest to open up land for cultivation of crops, the benefits from such will be vital as once a fire is started, it will be really hard to put it under control. | newS1.3 | |
| ⁶ By recommending these people the use of fixed plot of land and the use of artificial nutrients, they will be happy enough to turn to such sources. | newS1.3.1 | |
| ⁷ Hence educating the masses by the government will prove to be useful in cutting down air pollution. | S1 | education |

As observed in CH's paragraph, only one idea thread 'education' in sentence 7 of chat 1 discussion could be traced to the written text. In the discussion, JH (another member of chat 1) when suggesting one of solutions to solve air problem, wrote this in his chat interaction "Education is the key to reduce air pollution. in order for ppl to know the importance of it." Except for this key idea, the rest (excluding the last sentence) were elaboration that CH added to his paragraph thus they were coded with a prefix "new". Since the last sentence served as a summary of the paragraph, the idea code assigned to it was the same as the one given to the first sentence.

The same method of analysis was applied to face-to-face and chat transcripts and their corresponding essays. Once this was done, a summary of transferred ideas was created to present answers to the following questions: a) total number of ideas in draft, b) total number and percentages of key ideas and supporting details traced from discussion to essay, c) number and percentages of new ideas in draft, and d) percentages of ideas drawn from own contribution in discussion and from others. A more detailed analysis was done following this to determine if there was any pattern or basis in which students selected ideas to be included in their draft.

3.1.9 Findings and discussion

3.1.9.1 Time on task

Time on task refers to the extent to which members of a discussion group focused on the discussion topic. This was established through the identification of turns in transcripts coded SOCIAL AND METACOGNITIVE – OFF TASK where teams chatted and engaged in small talks or on issues that have totally no bearing on the discussion topic as illustrated in example (52).

(52)

| Turn | Participant | Utterance |
|------|-------------|---|
| 180 | LJ: | hungary |
| 181 | JJ: | sigh i am just waiting to die |
| 182 | KL: | or you want to fight |
| 183 | KL: | no, don't die, wait for me |
| 184 | LJ: | no need to wait. i die already |
| 185 | KL: | hihi |
| 186 | JJ: | hahaha |
| 187 | DF: | chat chat more meaningful.....hungry.....dying..... |
| 188 | KL: | u die because of hungry |
| 189 | LJ: | no <i>la</i> |
| 190 | JJ: | i die coz of programming |

[Pilot study, chat 4]

Table 3.19 compares the percentage in which the face-to-face and chat teams were on task. It can be observed that in the face-to-face discussion team, students spent 98% of the time discussing their writing task. Students were focused on generating ideas for their essay and did not deviate much from the task at hand. However, for the chat teams, the percentage of time on task varies from 41% to 84.1%, giving an average of 55%.

Table 3.19 Comparison of time on task

| Group | OFF-TASK turns | Total number of turns | Percentage (%) of OFF-TASK turns |
|-----------------------------|----------------|-----------------------|----------------------------------|
| face-to-face | 8 | 389 | 2.0 |
| Chat 1 | 102 | 173 | 59.0 |
| Chat 2 | 67 | 186 | 36.0 |
| Chat 3 | 17 | 107 | 15.9 |
| Chat 4 | 107 | 182 | 58.8 |
| Total (chat) | 293 | 648 | 45.2 |
| Total (face-to-face + chat) | 301 | 1046 | 28.8 |

In addition, interaction in the face-to-face team was lively with constant teasing and laughter. On the whole, the team sounded enthusiastic and motivated throughout the discussion; students not only tried to complete the assignment but they also showed interest and keenness in the subject. An example (see 53) of this cohesiveness and task-oriented attitude is illustrated below:

(53)

| Turn | Participant | Utterance |
|------|-------------|---|
| 003 | WC: | (O)kay. What problems? |
| 004 | JM: | Pollution <i>lo</i> . |
| 005 | JL: | Pollution? |
| 006 | WC: | Pollution? Land pollution, water pollution, air pollution? No.. no! 3 main pollution <i>lah</i> : air, water, land. |
| 007 | JM: | Then you have to come up with solution <i>le</i> . |
| 008 | WC: | Okay, okay <i>lah</i> . 3 air pollution <i>lah</i> . Air pollution the main topic then 3 air <i>lor</i> . |
| 009 | JM: | Then, what's the solution? |
| 010 | WC: | No solution <i>what</i> . What solution? |
| 011 | JM: | You have to come up with the solution <i>what</i> . What's the problem then what's the solution. |
| 012 | WC: | I thought we come up with 3 types of problems? |
| 013 | JM: | Yeah... and no solution? Ha...ha...ha... |
| 014 | JL: | I thought the essay is about ... |
| 015 | WC: | You come up with the problem then you come up with the solution <i>lah</i> . |
| 016 | JL: | You must talk about the situation then the problem. |
| 017 | JM: | Situation? |
| 018 | JL: | Situation now. |

[Pilot study, face-to-face]

On the other hand, among the four chat teams analysed, only one team (chat 3) spent relatively much time, namely 84.1%, on their discussion topic. The other three teams spent only an average of 48.7% of the discussion time talking about their assignment. One could speculate a few factors contributing to the lack of focus in most chat discussions in the experimental group. Chat is generally perceived as an informal mode of communication between friends and acquaintances for social and interpersonal interaction. When employed in an academic context to discuss study-related matters, it may require a change of mindset that takes time for chat members to get used to. This informal environment is further reinforced with an abundant use

of slang expressions, emoticons and abbreviations, all of which signify and resemble a casual instead of an academic tone. In addition, the absence of physical face-to-face element may contribute to a lack of urgency in addressing topics of discussion. Incoherence in interaction (Herring, 1999) in chat could also contribute to the lack of focus.

Excerpts of chat 1 (example 54) and chat 2 (example 55) below are examples of informal and casual way of communication among chat members. In example (54), members shared what they felt about their Physics tutorial while in example (55) students' small talk ranged from personal observations to their studies.

(54)

| Turn | Participant | Utterance |
|------|-------------|---|
| 103 | JH: | si bei sian sia <so boring> later still got physics tutorial and go in and let her smoke! |
| 104 | JH: | and also programming tutorial.. which our lab 2 result will be announced |
| 105 | CH: | she super fast |
| 106 | JH: | life sucks this week.. |
| 107 | JH: | and if we dun sucks,.... we blow! muahahahahaha |
| 108 | YF: | you sure the lab 2 results come out ?? |
| 109 | CH: | lab2 sure bang balls |
| 110 | CH: | i lick |
| 111 | CH: | hahah |
| 112 | YF: | i already bang to the wall |
| 113 | JH: | my friend got full marks! god damn it |
| 114 | JH: | and his programme not very weklk written one |
| 115 | CH: | wat the ... |
| 116 | JH: | i think my physics lab is confirm gone <i>one</i> |
| 117 | YF: | whoa he must be very good |
| 118 | JH: | change reading until like dunno <i>what</i> |
| 119 | JH: | he is not very good.. his code is from me <i>one!</i> |
| 120 | JH: | and my physics lab report ANYHOW write <i>one!</i> |
| 121 | JH: | sigh..... can we drop physics?!?!?!?!?!? |
| 122 | YF: | nevr mind we don get back the phsics lab results rright |
| 123 | CH: | i also wan |
| 124 | JH: | last year EV and Chem engine no need takre physics one <i>le</i> |
| 125 | CH: | huh serious <i>ah</i> |
| 126 | JH: | u also want <i>wht?</i> |

[Pilot study, chat 1]

(55)

| Turn | Participant | Utterance |
|------|-------------|---|
| 130 | JJ: | difan <Chinese name of student, DF> u reminds me the maths lecturer |
| 131 | LJ: | grab the idea |
| 132 | DF: | intuition |

133 KL: ah, the teacher dancing very well
134 LJ: dancing?
135 DF: oh, that is ballet actually.....
136 DF: 😊 <emoticon “smile (showing interest)”>
137 KL: yes, u see, in the lecture, he always dance and i always sleep

138 KL: 😄 <emoticon “very happy”>

139 JJ: he dances very funny
140 JJ: 😜 <emoticon “tongue sticking out”>
141 KL: hihi, or we change the topic about him?
142 JJ: ok
143 KL: my teacher, the greatest dancer in lecture?
144 JJ: r u intend to finish ur outline during this lesson?
145 DF: can..... then move the topic to whom?
146 KL: haha, it's great.
147 JJ: let's talk about programming!!!!!!!!!!
148 DF: actually not leh, just wanna have fun
149 DF: 😡 <emoticon “angry”>
150 KL: hihi, oh
151 KL: 😭 <emoticon “crying”>
152 KL: how can I do the test today.
153 KL: you remind me of my sadness
154 JJ: i think i will die
155 DF: okay okay programming is more important
156 JJ: for the programming
157 KL: do you review much
158 JJ: no i haven't finish reading the last chapter

[Pilot study, chat 4]

However, the casual and friendly atmosphere on chat did not seem to have affected chat 3, namely the chat team with the highest percentage of time on task. A closer look at chat 3 chatlog and the rest reveals some observations that could provide possible explanations to the discrepancy in time on task. Because one student who was supposed to be in chat 3 was absent on the day of the brainstorming session, chat 3 had only two members, both foreign students from China (PRC). There were three members each in the other chat teams: chat 1, chat 2 and chat 4. In short, the size of a chat group consisting of only two members might have put some pressure on each other to contribute ideas relevant to the assigned task. In addition, one sensed “getting-the-job-done” attitude prevailing throughout chat 3 discussion which was absent in the other chat teams, as displayed in examples (56a) and (56b).

(56a)

| Turn | Participant | Utterance |
|------|-------------|--------------------------------|
| 011 | CC: | we should talk about our topic |
| 012 | ZZ: | what should we write |

[Pilot study, chat 3]

(56b)

| Turn | Participant | Utterance |
|------|-------------|-----------------------|
| 033 | CC: | what are our points ? |
| 039 | CC: | any other points? |

[Pilot study, chat 3]

This attitude was also observed in the face-to-face control group and demonstrated through constant reminders of focus on topic. As illustrated in examples (57a) to (57c), JM was the member in the face-to-face team who kept the discussion on track and on task. Periodically in turns 009, 011, 056, and 249 she directed and reminded the team on what needed to be discussed.

(57a)

| Turn | Participant | Utterance |
|------|-------------|---|
| 008 | WC: | Okay, okay <i>lah</i> . 3 air pollution <i>lah</i> . Air pollution the main topic then 3 air <i>lor</i> . |
| 009 | JM: | Then, what's the solution? |
| 010 | WC: | No solution <i>what</i> . What solution? |
| 011 | JM: | You have to come up with the solution <i>what</i>. What's the problem then what's the solution. |

[Pilot study, face-to-face]

(57b)

| Turn | Participant | Utterance |
|------|-------------|--|
| 054 | JM: | Actually, his ideas also not bad. can write quite a lot <i>lor</i> . If you, if you, only write one problem then one solution. |
| 055 | WC: | You, then, you'll be trying to lengthen your essay without any substantial points. It depends <i>lah</i> if you can get a very good problem, a very good solution. |
| 056 | JM: | Can we go on? |

[Pilot study, face-to-face]

(57c)

| Turn | Participant | Utterance |
|------|-------------|--|
| 248 | JL: | Can have four points <i>lah</i> . Then conclusion. |
| 249 | JM: | Three points <i>lah</i>. Why you want to write so much? |

[Pilot study, face-to-face]

Analysis on TASK CONCEPTION of chat 3 shows that both members in chat 3 talked only about requirements of the task but did not touch on language or structure of essay. In other words, they were most concerned about fulfilling requirements of the task hence this could have contributed to more talk on content. Statistics of the other three chat teams show that although they spoke about requirement, there was evidence of structure as well. Table 3.20 shows the frequency of REQUIREMENT and STRUCTURE turns in respective teams. Displayed as well are percentages which represent the ratio between number of turns in a particular category and the total number of turns of the entire transcript.

Table 3.20 Frequency of occurrence of REQUIREMENT and STRUCTURE

| Group | Number of turns - REQUIREMENT | Percentage (%) - REQUIREMENT | Number of turns - STRUCTURE | Percentage (%) - STRUCTURE | Total number of turns |
|--------------|--------------------------------------|-------------------------------------|------------------------------------|-----------------------------------|------------------------------|
| Face-to-face | 18 | 4.5 | 37 | 9.3 | 398 |
| Chat 1 | 2 | 1.2 | 14 | 8.1 | 173 |
| Chat 2 | 29 | 15.6 | 20 | 10.8 | 186 |
| Chat 3 | 11 | 10.3 | 0 | 0 | 107 |
| Chat 4 | 4 | 2.2 | 1 | 0.6 | 182 |

Another observation concerns CLARIFICATION feature in KNOWLEDGE CONSTRUCTION dimension. Chat 3 members spent a considerable amount of time clarifying (i.e. 17% of the entire discussion) what was said and checking what each other meant. There were also instances where both used Chinese in their discussion but the talk was still on task. In contrast, the average percentage of time spent on clarification for chat 1 and chat 4, discussion teams with the lowest percentage of time on task, is 2.5%.

In summary, the face-to-face control group seemed to be more focused as compared to the chat groups although there were differences observed between chat 3 with

84.1% of time on task and the other chat teams with a lower percentage of time on task.

3.1.9.2 Quantity and quality of idea threads

Identification of ideas and the hierarchical relationship among one another is necessary in order to establish their rhetorical relation in discussion and in text. Turns coded with INITIATION, ELABORATION, and EXAMPLE in transcripts were selected. Each of these turns was then assigned an idea code using a numbering system that represents both the hierarchy of ideas in relation to the key issue(s) discussed and the rhetorical relation ideas have with one another in the context of the task and discussion. Turns coded CLARIFICATION, NEGOTIATION, and REFERENCE were considered next. If an idea was developed as a result of clarifying, negotiating and making references either externally or internally, it would be assigned an idea code accordingly.

Take a few sentences (in continuous text) of WC's (face-to-face participant) essay as an illustration (see Table 3.21). WC began the third paragraph of his essay by introducing "legislation" as one way to help reduce pollution from vehicles. This idea can be traced back to the face-to-face discussion, in which "legislation" is coded as idea "S1": "S" to represent solution and the numerical figure "1" to mean the first solution contributed in the discussion. By the same token that "legislation" was introduced as a solution as shown in example (58) extracted from the discussion, it was assigned the code KNOWLEDGE CONSTRUCTION: INITIATION. Because the second sentence in Table 3.21 is a new example not found in the face-to-face discussion, there is no matching code. This new idea would be assigned a "new"

prefix followed by a numeric figure (in this case, number 3 representing the third new idea in the essay) to indicate that it is an idea added by the student. The third sentence, on the other hand, can be matched to JL’s contribution as displayed in example (58) as an elaboration of “legislation”.

Table 3.21 Sentences from WC’s essay

| Sentence | Idea code | Ideas in discussion |
|---|-----------|------------------------------|
| ¹ The pollution from vehicles can also be curbed through legislative means. | S1 | INITIATION - legislation |
| ² In Singapore, we have an Environmental Pollution Control Act (EPCA), implemented on 1st April 1999, to provide a legislative network to control pollution. | new3 | EPCA |
| ³ Subsequently, the vehicle is to be sent for the testing annually. | S1.6 | ELABORATION - regular checks |

(58)

| Turn | Participant | Utterance |
|------|-------------|---|
| 226 | JL: | You must have ah .. yearly, yearly checks by..by which one <i>ha?</i> |
| 283 | WC: | Solution. Ah.. Laws. Implementation of ah.. legislative ah.. laws.. ah.. Laws |

[Pilot study, face-to-face]

As in the case of the pilot study, the genre of the writing task was problem-solution. Therefore, turns coded INITIATION are contributions of ideas concerned with either problems or key solutions. The first suggestion of a probable problem for the writing task was assigned idea code “P1” to mean “Problem1”, the second “P2” and so forth. Similarly, the first initiation of a key solution to a problem was given an idea code “S1” to represent “Solution1”, “S2” to mean “Solution2” and so on.

If there was any elaboration or further expansion of “P1”, the turn would have been coded ELABORATION and the idea received a code “P1.1”. The decimal point of “.1” signifies that the idea is both related to “P1” and in terms of rhetorical relation, it is an

elaboration of “P1”. The same method of assigning idea codes was used for turns coded EXAMPLE, and NEGOTIATION. Therefore, if there was evidence or example given to “P1.1”, the idea code would be “P1.1.1”.

This type of numbering system and the logical connection among turns of a discussion are similar to the concept of the macrostructure of a problem-solution essay, as discussed in Section 3.1.2. The thesis or main idea of a problem-solution essay is the problem “P1” and further elaboration on the problem “P1.1”, “P1.2”, “P1.1.1” and so forth. In subsequent body paragraphs where solutions were introduced, the key solutions would have been tagged “S1”, “S2”, “S3” and explanation of each solution “S1.1.”, “S2.1”, “S3.1” respectively.

Figure 3.4 is a graphical representation of how ideas are related to one another hierarchically and rhetorically. In this example taken from the face-to-face discussion, “pollution caused by vehicles on the road” was one of the issues the group brought up during their discussion. Because it was the first problem mentioned among the rest, the idea code given was “P1”. The same principle applied to solutions “S1”, “S2”, “S3” and their respective elaboration.

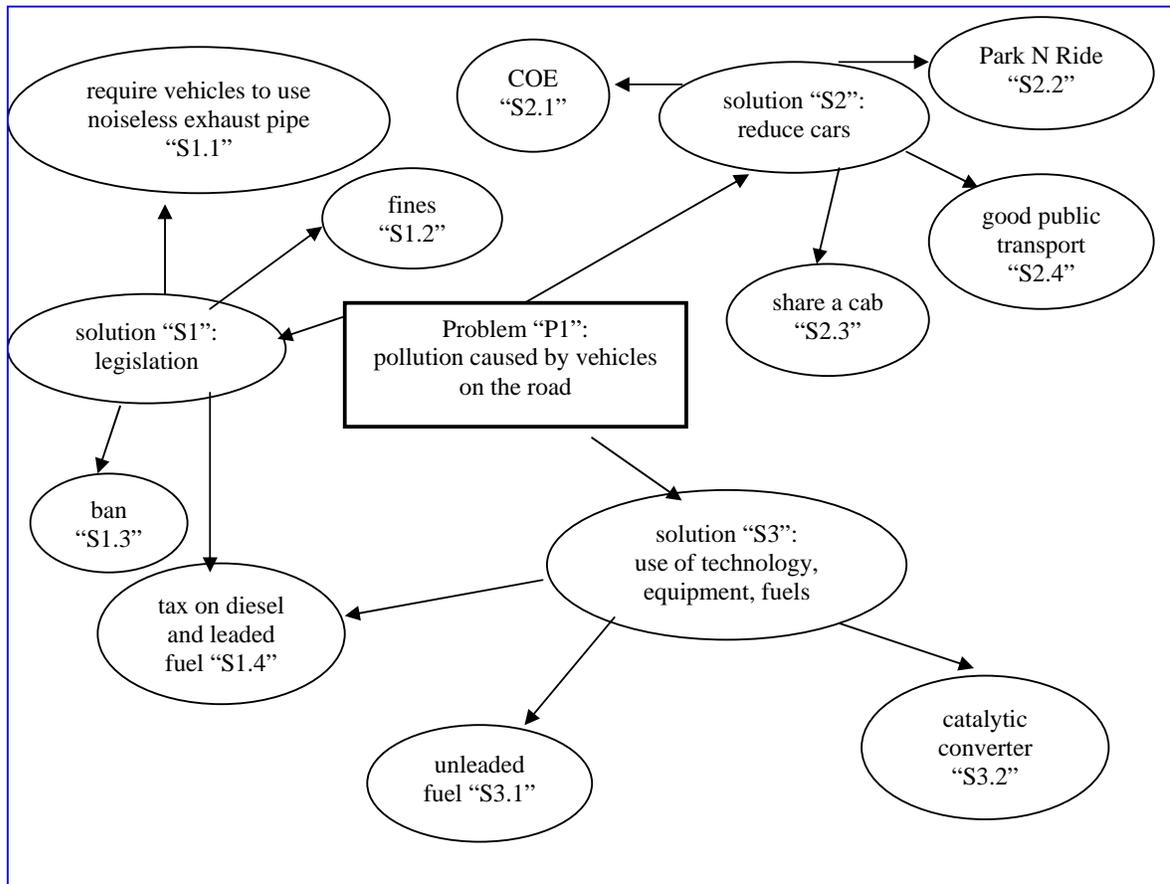


Figure 3.4 Hierarchical and rhetorical relations of ideas

The identification and tagging of turns in terms of idea codes according to their hierarchical and rhetorical relations have made it possible for an analysis of the number of main ideas initiated and the depth each main idea was discussed, and for the tracking of corresponding ideas in students' respective written drafts.

In order to determine the number of ideas generated in face-to-face and chat discussions, all ideas that had been assigned codes were tabulated and presented in percentages (of the total number of ideas). In addition, for analysis they were further divided based on the numbering system that shows their hierarchical relations. This was done to ascertain key ideas and to see how much development each received.

Table 3.22 presents statistics of coded ideas in three hierarchical levels: key ideas (L1), supporting details to key ideas (L2), and further evidence or examples to supporting details of key ideas (L3).

Table 3.22 Key and supporting ideas in discussion

| Group | | Hierarchy of Ideas | | | |
|-----------------------|-----------|------------------------|---------------------------------|--------------------------------|-------|
| | | Level 1 (Key Ideas) | Level 2 (Supporting Details) | Level 3 (Evidence/Examples) | Total |
| Face-to-face | frequency | 8 | 24 | 2 | 34 |
| | per cent | 23.5 | 70.6 | 5.9 | |
| Chat 1 | frequency | 12 | 4 | 0 | 16 |
| | per cent | 75.0 | 25.0 | 0 | |
| Chat 2 | frequency | 9 | 5 | 3 | 17 |
| | per cent | 52.9 | 29.4 | 17.6 | |
| Chat 3 | frequency | 6 | 2 | 0 | 8 |
| | per cent | 75.0 | 25.0 | 0 | |
| Chat 4 | frequency | 5 | 0 | 0 | 5 |
| | per cent | 100.0 | 0 | 0 | |
| Grand Total (chat) | frequency | 32 | 11 | 3 | 46 |
| | per cent | 69.6 | 23.9 | 6.5 | |

As observed from findings in Table 3.22, there were more ideas generated and developed in the face-to-face group than in the chat environment. This could be substantiated with the statistics of time on task. In other words, since the face-to-face team spent 98% of the brainstorming session discussing their task, it is not surprising that the number of ideas generated is high (see Table 3.19, p. 147).

However, a similar deduction could not be made for the chat teams. Chat 1 and chat 4 were teams that had the lowest percentage of time on task (i.e. 41%) while chat 3 was the most focused team among all four chat teams. Instead of fewer number of ideas generated and developed as compared to chat 3, the number of chat 1's ideas doubled

that of chat 3 namely 16 key and supporting ideas for chat 1 and eight for chat 3. One possible explanation could be because there were more instances of CLARIFICATION in chat 3 than in the other chat teams (see Figure 3.5). Findings in Figure 3.5 show that 33% of total turns coded under KNOWLEDGE CONSTRUCTION in chat 3 were CLARIFICATION and 14% in chat 1.

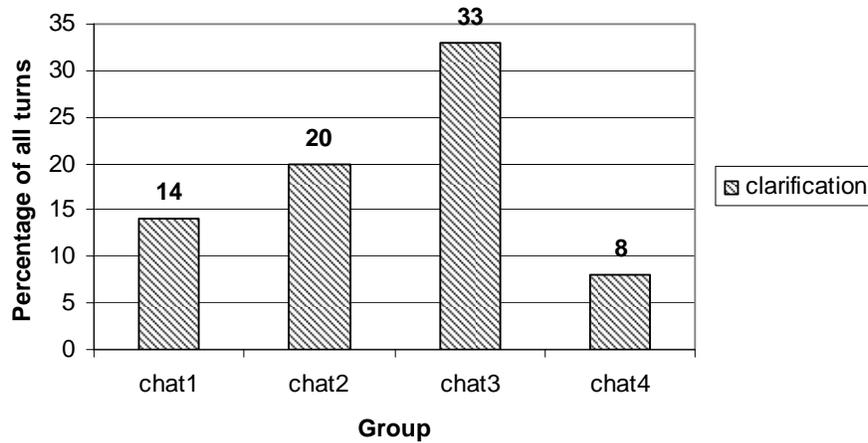


Figure 3.5 Frequency of occurrence of CLARIFICATION in all four chat teams

Another discrepancy in terms of number of ideas generated can be found between chat 1 and chat 4, both of which had 41% of time on task. It can be seen in Table 3.22 that chat 4 generated and developed considerably fewer ideas as compared with chat 1. When further analysis was done, it was found that while on task both chat teams differed in what they were discussing. Figure 3.6 displays the percentage of turns in three dimensions: TASK CONCEPT, MANAGEMENT OF DISCUSSION and KNOWLEDGE CONSTRUCTION. For chat 1, KNOWLEDGE CONSTRUCTION had the highest percentage followed by TASK CONCEPTION and MANAGEMENT OF DISCUSSION. In contrast, for chat 4, it was MANAGEMENT OF DISCUSSION followed by KNOWLEDGE CONSTRUCTION and TASK CONCEPTION.

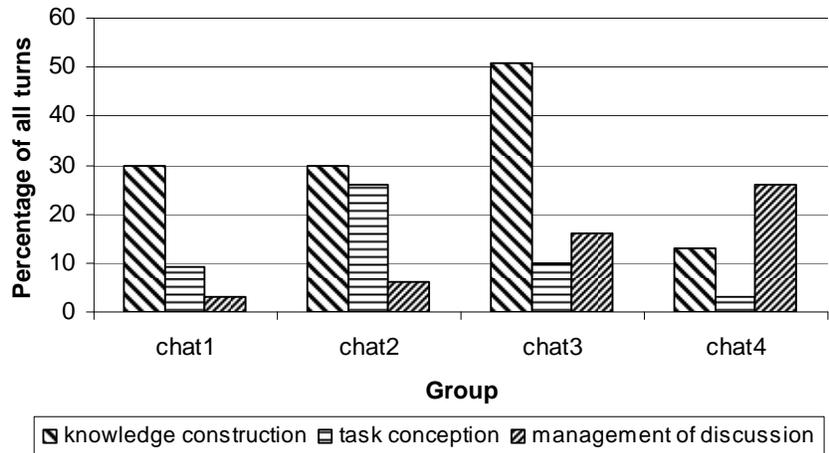


Figure 3.6 Frequency of occurrence of KNOWLEDGE CONSTRUCTION, TASK CONCEPTION and MANAGEMENT OF DISCUSSION in all four chat teams

Besides the difference in the number of ideas generated and expanded, the face-to-face team and chat teams also differed in richness and depth of discussion. As displayed in Table 3.22, 76.5% of ideas (Level 2 and Level 3) discussed in the face-to-face group were elaboration or expansion of key issues related to problems and solutions. However, for all four chat teams, the focus was on generating key ideas and there was not much attempt at expanding each problem and solution brought up. This was evident especially in Level 3 hierarchy where there was an absence of representation for chat 1, chat 3 and chat 4.

While results of this small sample size are not strong enough to make conclusive statements, patterns and trends observed in the face-to-face team and chat teams indicate that the quality of discussion in the face-to-face environment is richer than the chat environment. In addition, findings in the chat teams reveal that various combinations of three dimensions of a discussion: KNOWLEDGE CONSTRUCTION, TASK CONCEPTION and MANAGEMENT OF DISCUSSION have different impact on the quantity and quality of content.

Findings of the face-to-face team

Findings of the face-to-face, as displayed in Table 3.23, reveal that the average number of ideas in writing drafts of all four students was 19, 18.4% of which were key ideas traced from discussion, and 43.4% supporting details. In addition, these students included an average of 38.2% of new ideas in their drafts.

Table 3.23 Key ideas and supporting ideas in draft essays originating in face-to-face

| Student | | Ideas in draft essays | | | |
|---------|-----------|----------------------------------|--|--------------------------------------|-------|
| | | Key ideas (from face-to-face) | Support details (from face-to-face) | New ideas (not from face-to-face) | Total |
| JL | frequency | 4 | 10 | 1 | 15 |
| | per cent | 26.7 | 66.7 | 6.7 | |
| WC | frequency | 4 | 8 | 9 | 21 |
| | per cent | 19.0 | 38.1 | 42.9 | |
| JM | frequency | 4 | 9 | 10 | 23 |
| | per cent | 17.4 | 39.1 | 43.5 | |
| MJ | frequency | 2 | 6 | 9 | 17 |
| | per cent | 11.8 | 35.3 | 52.9 | |
| Total | frequency | 14 | 33 | 29 | 76 |
| | percent | 18.4 | 43.4 | 38.2 | |

A comparison between the face-to-face transcript and students' individual essays shows all four students wrote on the same topic, namely air pollution caused by vehicles. However, they differed in their elaboration of solutions and use of examples and supporting evidence.

It was also found that when students arranged ideas in their respective essays, the hierarchical and rhetorical relations established during discussion remained the same in text. If one takes the idea web in Figure 3.4 (p. 156) as an example, in the face-to-face discussion, solution "S3" to the problem of pollution caused by vehicles on the road was "use of technology, equipment, and fuels". Elaboration and examples of

this solution were “use of unleaded petrol” coded as “S3.1” and “use of catalytic converter” as “S3.2”. JM and JL, two members of the face-to-face group made use of this solution in their essay.

Table 3.24 and Table 3.25 are illustrations of how JM and JL made use of solution “S3” and its corresponding elaboration in their essays. Both examples are excerpts of sentences, in continuous text, in JM’s and JL’s respective paragraphs. As observed, both JM and JL retained the hierarchical structure and rhetorical relations between “S3” and “S3.1” and “S3.2” in the written text.

However, JL made use of “S1.4” namely “tax on diesel and leaded petrol” to support his argument to encourage the use of fuels that could help to reduce air pollution instead of support for “legislation” as brainstormed in the face-to-face discussion (Figure 3.4, p. 156). This can be observed in sentence 6 of JL’s paragraph in Table 3.24. The use of supporting details not in the same embedded key ideas (in text) as they were discussed was apparent not only in JL’s essay but could also be traced in other students’ essays. Nonetheless, there were only a few of such occurrences in the face-to-face students’ essay. In addition, in all four essays, there was no evidence that the supporting ideas mentioned in face-to-face discussion were used as key ideas in text and vice versa.

Table 3.24 Transfer of ideas from face-to-face discussion to text – JM

| Sentence | Idea code | Ideas in discussion |
|--|-----------|-------------------------------------|
| ¹ Besides reducing vehicles to curb the problem, the government also encourages drivers to use improved fuels and equipment to reduce the amount of pollution produced. | S3 | Use of technology, equipment, fuels |

| | | |
|--|-----------|----------------------------|
| ² During combustion of the fuel, especially leaded petrol, harmful gases such as carbon monoxide and sulphur dioxide may be produced. | newS3.1.1 | |
| ³ When a person inhales too much of such gases, it may cause death. | newS3.1.2 | |
| ⁴ Hence, the government make it necessary that for all the vehicles to use unleaded petrol. | S3.1 | Use of unleaded fuel |
| ⁵ In fact, from 1998, the use of leaded petrol is being phased out. | newS3.1.3 | |
| ⁶ Next, the government also encourages drivers to use a catalytic converter. | S3.2 | Use of catalytic converter |
| ⁷ This converter will change the carbon monoxide produced, due to incomplete combustion, into carbon dioxide. | newS3.2.1 | |
| ⁸ In this way, the gas emitted will be less harmful to the environment. Hence, the problem of pollution will also be solved. | S3 | |

Table 3.25 Transfer of ideas from face-to-face discussion to text – JL

| Sentence | Idea code | Ideas in discussion |
|--|-----------|-------------------------------------|
| ¹ Lastly, the Land Transport Authority recommends certain equipments and fuel types to the public to reduce the pollution produced by the cars. | S3 | Use of technology, equipment, fuels |
| ² The road users are encouraged to install a catalytic converter in each of their vehicle. | S3.2 | |
| ³ This catalytic converter converts the harmful gases, which are given off together with the exhaust fumes, into gases which are friendly to the environment. | newS3.2.1 | |
| ⁴ Unleaded petrol is the only type of petrol which you can find in Singapore. | S3.1 | Use of unleaded fuel |
| ⁵ As compared to leaded petrol, unleaded petrol is more environmentally friendly. | newS3.1.1 | |
| ⁶ Vehicles using diesel to run have to pay a certain amount of tax every year. | S1.4 | Tax on diesel and leaded fuel |
| ⁷ Hence, exhaust fumes produced from the vehicles would be cleaner with the usage of the catalytic converter and unleaded petrol. | S3 | |

In terms of transfer of ideas from discussion to written text, findings as shown in

Table 3.26 demonstrate that on average, 15.8% of ideas traced to the essays were self-

initiated and 46.1% other-initiated. This demonstrates that students in the face-to-face team made good use of what was discussed especially ideas brought up by others.

Table 3.26 Ideas in draft essays which are self-initiated and other-initiated in face-to-face

| Student | | Ideas in draft essays | | | |
|---------|-----------|---|--|--------------------------------------|-------|
| | | Self-initiated ideas (from face-to-face) | Other-initiated ideas (from face-to-face) | New ideas (not from face-to-face) | Total |
| JL | frequency | 4 | 10 | 1 | 15 |
| | per cent | 26.7 | 66.7 | 6.7 | |
| WC | frequency | 5 | 7 | 9 | 21 |
| | per cent | 23.8 | 33.3 | 42.9 | |
| JM | frequency | 3 | 10 | 10 | 23 |
| | per cent | 13.0 | 43.5 | 43.5 | |
| MJ | frequency | 0 | 8 | 9 | 17 |
| | per cent | 0 | 47.1 | 52.9 | |
| Total | frequency | 12 | 35 | 29 | 76 |
| | percent | 15.8 | 46.1 | 38.2 | |

Findings of the chat teams

When the same analysis was done on data of the chat teams, findings (see Table 3.27) were more varied and different from what was found in the face-to-face group.

Instead of presenting data of individual students, Table 3.28 lists the average percentages of each chat team. On average, the number of ideas in written drafts was 30.5, approximately 9.1% of which could be traced to key ideas discussed in chat and 3.1% supporting details.

Table 3.27 Key ideas and supporting ideas in draft essays originating in chat

| Chat team | | Ideas in draft essays (Average) | | | |
|-----------|-----------|---------------------------------|-----------------------------------|------------------------------|-------|
| | | Key ideas (from chat) | Supporting details (from chat) | New ideas (not from chat) | Total |
| Chat 1 | frequency | 6.7 | 0.3 | 28 | 35 |
| | per cent | 19.1 | 0.9 | 80 | |

| | | | | | |
|--------|-----------|------|-----|-------|-------|
| Chat 2 | frequency | 2.5 | 3.5 | 30.5 | 36.5 |
| | per cent | 6.8 | 9.6 | 83.6 | |
| Chat 3 | frequency | 1 | 0 | 22 | 23 |
| | per cent | 4.3 | 0 | 95.7 | |
| Chat 4 | frequency | 1 | 0 | 27 | 28 |
| | per cent | 3.6 | 0 | 96.4 | |
| Total | frequency | 11.2 | 3.8 | 107.5 | 122.5 |
| | percent | 9.1 | 3.1 | 87.8 | |

On whether students made use of ideas they themselves brought up in discussion, it was found that only 4.5% could be traced whereas 7.8% identified as ideas taken from what others said (see Table 3.28). In addition, since the average percentage of time on task for the chat teams was low, it was not surprising that students added many new ideas in their respective drafts. Findings reveal that 87.8% of what students wrote were new ideas that they added and could not be traced to chat discussions.

Table 3.28 Ideas in draft essays which are self-initiated and other-initiated in chat

| Chat team | | Ideas in draft essays (Average) | | | |
|-----------|-----------|-------------------------------------|--------------------------------------|------------------------------|-------|
| | | Self-initiated ideas (from chat) | Other-initiated ideas (from chat) | New ideas (not from chat) | Total |
| Chat1 | frequency | 3 | 4 | 28 | 35 |
| | per cent | 8.6 | 11.4 | 80 | |
| Chat2 | frequency | 2 | 4 | 30.5 | 36.5 |
| | per cent | 5.5 | 11 | 83.6 | |
| Chat3 | frequency | 0.5 | 0.5 | 22 | 23 |
| | per cent | 2.2 | 2.2 | 95.7 | |
| Chat4 | frequency | 0 | 1 | 27 | 28 |
| | per cent | 0 | 3.6 | 96.4 | |
| Total | frequency | 5.5 | 9.5 | 107.5 | 122.5 |
| | percent | 4.5 | 7.8 | 87.8 | |

Although results show that only a low percentage of key and supporting details in essays could be traced back to chat discussions, a check on students' essay topics

(such as air pollution, global warming) revealed that 77% were topics discussed in chat. For example in chat 1, students talked about air pollution and all three members in chat 1 wrote on air pollution; in chat 2, members discussed global warming and two out of three of the students wrote on the same topic. However, three students (i.e. 25%) - one from chat 2 and two from chat 4 - decided to write on completely different topics. A probable explanation for two of chat 4 participants not making use of the topic nor ideas discussed in the brainstorming session could be that there was little that they could gain from the discussion since they were not on task most of the time (i.e. 58.8% of the chat discussion). Nonetheless, the same interpretation could not be used for SL, the student in chat 2 who did not write on the topic of discussion although she contributed much to the discussion. In short, most students wrote on the topic of discussion but did not use many of the key ideas and supporting details discussed for the topic.

As for organisation of ideas in students' essay, the finding was consistent with what was found in face-to-face data; that is, students who made use of ideas in the discussion placed these ideas in the same hierarchical structure in their respective essays. Again, there were no instances where students used key ideas of discussion as supporting details in text or the reverse.

Although no firm or definite conclusions should be made of a sample size of only four face-to-face and 12 chat students, these findings seem to suggest that there is a higher possibility of knowledge being transferred from a collaborative face-to-face discussion to an individual's writing draft, as compared to a chat environment.

Results also imply, in both face-to-face and chat environments, students made use of

ideas mentioned by others in their essays more than ideas that they contributed. There were 46.1% of face-to-face students who made use of others' ideas in their essays compared with 15.8% who made use of their own ideas. In the chat environment, 7.8% students made use of others' ideas as opposed to 4.5% who made use of their own ideas for their essays.

3.1.9.3 Intervening factors between brainstorming session and writing draft

A semi-structured interview was conducted to find out if content in students' draft had been influenced by other factors besides the brainstorming session. The interview was conducted by the researcher an hour before Tutorial 2 when students were supposed to have written their first draft of essay. There was a two-day lapse between Tutorial 1 where students brainstormed ideas and Tutorial 2. The students' task between the first and second tutorial sessions was to complete the first draft of essay as homework and to bring it to class for a peer review exercise. In the interview, students were asked three questions: first, if in completing their draft, they had done further reading or research on the topic; second, if they had further discussed the topic with their group members; and third, if they had talked about the topic with anyone else. Students gave "Yes/No" responses to these questions and their responses were collated and tabulated for analysis. Results indicate that 25% of face-to-face and 7% of chat students (who wrote on topics discussed during brainstorming session) mentioned that they did further research while writing their essay. WC, a student in the face-to-face team, did some Internet search on the topic while drafting. However, he indicated that he scanned the articles but did not read the information in detail. QM of chat 2 referred to an article in *Time Magazine* about global warming (the topic chat 2 brainstormed) when she wrote her draft. Besides these two students, the rest

indicated that the newly added ideas in their essays were those that they thought of in the drafting process.

As for the three students (one in chat 2 and two in chat 4) who decided to write on topics not discussed during the brainstorming session, all three stated that they did Internet search and some reading before and while drafting their essay. However, they stated that most ideas in their draft were based on their own experience and observation.

Although the interview findings reveal that most students did little beyond their brainstorming session to search for more information on the essay topic, they demonstrated effort in trying to think of additional points (apart from those discussed in the brainstorming session) to include in their respective essays. This effort was demonstrated more prominently in chat than in face-to-face environment. One of the reasons could be the lack of number and depth in discussion of ideas as presented in Table 3.22 (p. 157) where there was not much expansion on Level 2 and Level 3 ideas.

3.1.10 Conclusion and directions for main study

Although this is a pilot study involving only one face-to-face team of four students and four chat teams of 12 students, it is rich in data and it has many potential avenues for further investigation. In fact, the pilot study findings on how ideas are generated in a collaborative effort have implications for writing teachers. They demonstrated that collaborative discussion is a fruitful exercise not only to generate ideas for students' writing, but also to consolidate and strengthen their arguments. Students

could make use of the discussion session to test their hypotheses, claims and arguments. As they discuss, they organise and consolidate their arguments which become the basis of their writing. Ideas discussed could also be viewed as tested arguments where feedback from peers would indicate the strength of the arguments and how well accepted they are. Such feedback, both positive and negative, from their peers helps students to either expand their points or to drop them.

The exercise in tracing students' ideas from a collaborative brainstorming session to the individual drafts in this pilot study has provided an opportunity for the researcher to trial procedures involved in carrying out the research and to test tools used to analyse data. The pilot study also made it possible for the proposed framework to be trialled and commented by two independent raters besides the researcher and the thesis supervisor. It has thus helped in establishing validity of the descriptors in each category of the framework. Based on the experience and lessons learned from the pilot study, appropriate changes were made for the main study. These revisions which are related to procedures and methodology, as well as modifications to the proposed framework, will be discussed in detail in Chapter Four – Methodology Two.

In addition, the pilot study has allowed for the generation of additional hypotheses which can be tested in the main study. Besides the existing research questions, the main study could investigate two additional questions: a) how reading texts assigned by the teacher as a pre-writing activity prior to brainstorming session influence discussion and subsequent draft written by students; and b) whether there is evidence of co-construction of knowledge and meaning between participants of a discussion.

In the pilot study, the focus was on tracing ideas initiated by individuals. That means

ideas coded were attributed to a particular student. In the main study, a more in-depth analysis could be done to identify if and how such ideas are developed jointly by two or more participants as a result of CLARIFICATION, ELABORATION, NEGOTIATION, and REFERENCING.

Besides the inclusion of these two additional research questions, the procedures used in the design of data collection should also be improved. First of all, in the pilot study, the two-day gap between brainstorming session and submission of the first draft of essay provided great potentials for many other intervening factors which could be difficult to determine and which could undermine the main aim of the study. Therefore, in the main study, students would be asked to write their outline and first draft immediately after the brainstorming session. The draft would also be collected before students leave the tutorial session.

Second, information about how familiar students are with the chat environment and features should be established prior to the chat discussion. Familiarity (or unfamiliarity) with both chat environment and chat features may affect students' concentration on the task at hand during their discussion, as evident in the pilot study where a number of chat participants spent a considerable amount of time trying out the emoticons and playing with the font types, sizes and colours. If necessary, a familiarisation session should be conducted prior to the brainstorming session.

Third, the requirements and specifications of the writing task should be controlled for better comparison. In the pilot study, students were told to write on any topic of their choice. This had resulted in some students spending time deciding on the main topic

to write instead of elaborating on key issues of a particular topic. In addition, some students wrote on topics that were not discussed. This made the task of tracing ideas difficult. Hence, if students were given the same topic, tracing would be much easier and the implications drawn and conclusions made would be stronger and more convincing.

Fourth, since the emphasis of the study was from the pre-writing stage to the writing stage, it would not be necessary to collect data of the peer review exercise.

Most importantly, further modifications should be made to the coding scheme so that it is able to capture content and interaction patterns of a discussion more accurately.

The first key learning point is the importance of differentiating whether participants of a discussion group are talking about ideas that can contribute to their essay or whether the talk is about TASK CONCEPTION or MANAGEMENT OF DISCUSSION (both of which are not concerned with content). The decision of assigning a specific segment as content-based (or not) is crucial in this research since it will subsequently be used to trace if it re-appears in the students' individual writing draft.

The second key learning point is the consideration of turns that occurred before and after the one that is being coded. For instance, if an idea was mentioned at the beginning of the discussion and re-surfaced again later, it should be seen as REPETITION and not as either INITIATION or ELABORATION.

The third key learning point is an extension of the previous point, regarding the importance of having a general overview of the whole discussion before coding

exercise begins. There are a number of instances where the train of thought was interrupted but was picked up again. This interruption could be an off task comment or it could be concerned with another new or existing turn. The example in Table 3.29, extracted from a chat discussion, illustrates the former phenomenon:

Table 3.29 Interruption in train of thought

| Turn | Participant | Utterance | Rater 1 (researcher) | Rater 2 | Rater 3 |
|------|-------------|--|------------------------------|------------------------------|------------------------------|
| 020 | CH: | lets discuss | mgmt | mgmt | mgmt |
| 021 | YF: | ARSENAL GOING TO WIN THE MATCH TODAY YEAH | social (off task) | social (off task) | social (off task) |
| 022 | CH: | arsenal v dortmund | social (off task) | social (off task) | social (off task) |
| 023 | YF: | OK WHAT TOPIC U SUGGEST | mgmt | mgmt | mgmt |

[Pilot study, chat 1]

In this example, utterances in turns 021 and 022 did not have any bearing on the content of the discussion at all. However, they appeared in between two turns that had some focus on the discussion. Therefore, in turn 023, YF was in fact picking up on CH's cue in turn 020. This is consistent with what Herring (1999) found in her evaluation of coherence in CMC. Due to system design where participants are unable to see if a message is addressed to them and will only know so when the message has been posted, there are frequent overlaps in communication topics. This incoherence and inconsistency in turn taking is what Herring refers to as interrupted adjacency pair, which is one of the features that sets CMC apart from face-to-face communication.

Although the occurrence of discrepancies and mismatches between raters is common, efforts to reduce such occurrences will help in achieving high inter-rater reliability thus making the coding scheme and findings resulting from coded exercise valid and duplicable. Hara, Bonk and Angeli (2000) observe that it is hard to establish high inter-rater reliability since some messages have “instances of both surface-level and deep processing” (p. 122). One way to reduce multiple interpretations is to ensure that descriptors of the coding scheme are specific, clear and they cater to observations found in transcripts. Therefore, based on the raters’ feedback while they were assigning codes to turns in the face-to-face and chat transcripts of the pilot study, amendments and additions were made to the genre-based content analysis model used to analyse data in this study to facilitate a more accurate representation and interpretation of what was discussed, the patterns of interaction, and the process in which knowledge was built and developed. Table 3.30 displays additional categories and their respective descriptors. It also highlights changes made to existing descriptors.

Table 3.30 Amendments and additions to coding scheme

| Category | Definitions | Type of revision |
|---------------------------|--|-------------------------|
| TASK CONCEPTION | | |
| PLANNING/ ORGANISATION | Statements or questions about the organisation, sequencing or categorisation of ideas in a specific genre | amendment |
| MANAGEMENT OF DISCUSSION | | |
| CONSENSUS | Seeking clarification or confirmation from others on the acceptance or non-acceptance of an idea, suggestion, proposition, problem, solution, example, evidence or explanation | amendment |
| REPLY | Giving confirmation or decision on something such as voting; | addition |
| | Making a remark or comment concerning the discussion | addition |
| KNOWLEDGE CONSTRUCTION | | |
| INITIATION | Introducing or stating an idea or proposition; Making a stand or stating a thesis; | addition |
| | Identifying a problem; Suggesting or proposing a problem to be solved; | addition |
| | Proposing a solution to a related problem; Giving background information to a situation or topic | addition |
| JUDGEMENT | Making judgement or evaluation of others' or own ideas; Making comments about accuracy of information or facts | addition |
| RESPONSE | Responding to a specific question asked but without any elaboration; Offering a reply to a specific question; Making a remark or comment | addition |
| LACK OF KNOWLEDGE | Admitting lack of knowledge or information on something | addition |

First of all, in the TASK CONCEPTION dimension, the descriptor of PLANNING/ORGANISATION should be spelt out more clearly. Although this was not a major problem in the coding exercise, the raters commented that a more succinct descriptor would help in differentiating between PLANNING/ORGANISATION and REQUIREMENT. As illustrated in the example in Table 3.31, although all three raters agreed that the discussion was related to TASK CONCEPTION, they mentioned in turn 012 where JM continued with her thought about what the group was required to do, it

should not be coded as REQUIREMENT but as PLANNING. This is because JM was attempting to categorise what would be discussed into “problem” and “solution” within the context of the problem-solution genre where one usually describes the problem then suggests solutions to the problem.

Table 3.31 Example of differentiation between PLANNING and REQUIREMENT

| Turn | Participant | Utterance | Rater 1 (researcher) | Rater 2 | Rater 3 |
|------|-------------|---|----------------------------|----------------------------|----------------------------|
| 011a | JM: | You have to come up with the solution <i>what</i> . | task (requirement) | task (requirement) | task (requirement) |
| 011b | JM: | What’s the problem then what’s the solution. | task (planning) | task (planning) | task (planning) |
| 013 | WC: | I thought we come up with 3 types of problems? | task (requirement) | task (requirement) | task (requirement) |

[Pilot study, face-to-face]

In terms of descriptors for CONSENSUS under MANAGEMENT OF DISCUSSION, the raters felt that it should be further divided to differentiate between seeking for consensus or clarification and giving confirmation. Therefore, another category REPLY was created to capture such differences. REPLY should not be confused with RESPONSE in KNOWLEDGE CONSTRUCTION. RESPONSE refers to feedback made about specific content in discussion while REPLY indicates participants’ preference or response to how a discussion is managed.

Similarly, in KNOWLEDGE CONSTRUCTION, descriptors were added to INITIATION, JUDGEMENT, and RESPONSE to allow for more accurate representation and analysis of content. In addition, LACK OF KNOWLEDGE was added to capture students’ admittance of lack of information in a particular field or subject of discussion.

The pilot study had indeed been a fruitful exercise. Besides testing research procedures and analytical tools in analysing data, it had helped in the generation of two additional research questions. It had also provided an opportunity for the researcher to validate the proposed framework with two independent raters. Furthermore, the pilot study had advised the researcher on the way forward for the main study especially in data collection design and research methodology. But most importantly, it had strengthened the researcher's belief that keen investigation into what students actually do in a brainstorming discussion and how they employ what has been discussed to their individual writing will yield insightful information on how knowledge is transferred from a collaborative environment and shaped in a solitary act of writing. Findings of such a study will have practical implications for writing teachers specifically in the design and requirements of the writing task and the discussion.

CHAPTER FOUR METHODOLOGY TWO – MAIN STUDY

4.1 Background

Based on the experience and lessons learned from the pilot study, the data collection method of the main study was revised. First of all, since the emphasis of the study was to trace the development of content from pre-writing stage to writing stage, data would be collected only from pre-writing to the production of the first draft. Data of the peer review exercise would also not be collected. In the main study, the data collection process therefore involved collection of articles assigned to students to read prior to writing, administration of a questionnaire to find out how familiar students were with chat, collection of face-to-face audio transcripts and chat logs, administration of a structured interview after drafting, and collection of essays of individual students. These will be further discussed in Section 4.5 Research Methodology.

Second, in the pilot study, the two-day gap between the brainstorming session and submission of the first draft of essay provided great potential for many other intervening factors which could be difficult to determine and trace and which could undermine the main aim of the study. For example, students could refer to other sources or talk to others about the topic that they were writing. Although this practice should be encouraged, it could make tracing of such influences complicated if records were not meticulously maintained. Therefore, for the purpose of this main study, students were required to work within a specified timeline. They were asked to write their outline and first draft immediately after the brainstorming session. Since students could word-process their draft in a computer lab that had network access, they could search for information on the Internet or further discuss ideas with their

classmates during drafting process. Students were requested to cite sources from which they had taken information and to jot down questions that they asked their peers (if they did so). These additional influences would be captured during a semi-structured interview between the researcher and individual students. In addition, students had to submit their draft by the end of the tutorial session (i.e. data collection session). One other key aspect to highlight is that both control and experimental groups used the same drafting tool (i.e. word processor). Every student had a computer terminal available and no one handwrote their draft. This was engineered so that the drafting condition was the same for both the control and experimental groups.

Third, information about how familiar students were with the chat environment and features was established prior to the chat discussion. Familiarity (or unfamiliarity) with both chat environment and chat features may affect students' concentration on the task at hand during their discussion, as evident in the pilot study where a number of chat participants spent a considerable amount of time off task trying out emoticons and playing with font types, sizes and colours. A questionnaire on students' chat experience specifically in a academic context would be administered prior to brainstorming session and if necessary, a familiarisation session with the NUS chat environment would be conducted also prior to the brainstorming session.

Fourth, requirements and specifications of the writing task should be controlled for better comparison. In the pilot study, students were told to write on any topic of their choice. This had resulted in some students spending a lot of time deciding on the main topic to write instead of elaborating on key issues of a particular topic while

others zoomed in on one topic almost right from the beginning of the brainstorming session. In addition, some students wrote on topics that were not discussed. This made the task of tracing ideas difficult. Hence, if students were given the same topic, tracing will be much easier and implications drawn and conclusions made will be more conclusive and convincing.

Fifth, the sample size of the main study was enlarged to four classes of students of approximately 16 students in a class. This means eight teams of face-to-face discussion and eight teams of chat discussion as opposed to one face-to-face and four chat teams in the pilot study. The expected total number of participants in the main study was 58.

4.2 English for Academic Purposes (EAP) module and teaching methodology

While the pilot study was conducted on two classes of undergraduate Engineering students who were enrolled in an English for Academic Purposes module, EG1471, the participants of the main study were undergraduate Science students registered also in an English for Academic Purposes module (module code ES1301). The main study could not be conducted again on EG1471 students because of the Centre's decision on deployment of staff. The researcher was assigned ES1301 classes instead of EG1471 classes. It was an administrative decision which was beyond the control of the researcher. Nonetheless, both EG1471 and ES1301 are English for Academic Purposes courses which have academic writing as their key focus and which share similar objectives and approach.

As explained in Chapter Three – Methodology One, in both EG1471 and ES1301, the main objective of their writing skills component is to help students to write different genres of essays for an academic setting. The four main types of genres are problem-solution, comparison-contrast, cause-effect and argumentative. In both modules, students are encouraged to source for appropriate reading materials either as stimulus and background research on the writing task or as support and evidence to the students' arguments. Therefore, the modules also touch briefly on citation and referencing conventions commonly used in an academic setting in addition to analysing and determining viewpoints of other writers. Though not a compulsory requirement, students are highly encouraged to practise referencing and citation skills wherever applicable, which involve not only the technicality of doing so but also the ability to summarise and synthesise materials that they read.

Similar to EG1471, the same genre-based process writing approach is adopted in ES1301 as the teaching methodology. Students in ES1301 go through the same writing process stages as those in EG1471 namely, discussion on features of genre, brainstorming, drafting, peer reviewing and re-drafting. Throughout the 48-hour module, students are graded based on the comparison-contrast, cause-effect, problem-solution and argumentative essays that they write. Although only four types of essay are graded, students are taught other genres as well, such as process and definition/classification. The length required of each essay is between 500 and 650 words.

The grading system of ES1301 consists of 60% continuous assessment and 40% final exam. Every semester, the average number of students who take the module is

approximately 370. The size of each tutorial class is approximately 16. Therefore, as a measure to standardise materials that are used, during the collection of data for the main study, a main textbook (Langan, 2001) was adopted for the course. It was further supplemented by materials prepared by a team of teachers. These supplemented materials included reading articles, writing tasks, grammar related exercises and writing related activities.

Prior to the tutorial session where data collection was done, students had had instructions and practice on how to write a clear thesis statement and a topic sentence, in addition to how to build their case, elaborate and support their arguments (see Appendix 1 for essay development model). They had also been introduced to the genre and had done some activities related to the genre.

4.3 Profile of participants

Like their Engineering counterparts, in terms of academic performance and achievements, students accepted into the Faculty of Science must have good pre-university results. In other words, these are students who have done well in their academic subjects but they require help in enhancing their writing skills.

As discussed in Chapter One, one of the admission criteria for undergraduates set by the National University of Singapore is that students must fulfil the English language requirement. For local students and those who have sat for the GCE 'A' level General Paper, students who obtained a grade of B4 and above are considered to have fulfilled the English language requirement. Those who obtain a C5 grade and below are required to take an English placement test administered by the Centre for English

Language Communication (CELC). As for foreign students, unless they satisfy a specific score in international standardised proficiency tests like the IELTS and TOEFL or they come from an educational system that uses English as its medium of instruction, all are required to sit for the English placement test, the Qualifying English Test (QET). Students placed in Bands 3 and 4 in the Qualifying English Test are required to read an English for Academic Purposes course, in the case of the main study the course that is offered to the students of the Faculty of Science.

Subjects in this study were 58 first-year undergraduate students among approximately 370 who enrolled in four different time slots in Semesters One and Two of ES1301 at the time of data collection. These students came from different English learning backgrounds: 20.7% of them were non-Singaporeans who learned English either as a second or foreign language; the rest were Singaporeans who used English as a medium of instruction since they were in pre-school. The non-Singaporeans were from China, Malaysia, India and Indonesia (see Table 4.1). The number of females in both the face-to-face and synchronous chat groups outnumbered the males. Approximately 75.9% of the students were females and 24.1% males (see Table 4.1). These students were selected to participate in this study because they registered for classes in which the researcher was assigned to teach. Grouping within each class was done randomly with only one criterion specified, namely the group size should not exceed four.

Table 4.1 Gender and national origin of control (face-to-face) and experimental (chat) groups in the main study

| | | Group | | Total |
|------------------------|-----------------|------------------------|---------------------|-------|
| | | Control (face-to-face) | Experimental (Chat) | |
| Gender | Male | 8 | 6 | 14 |
| | Female | 23 | 21 | 44 |
| | Total | 31 | 27 | 58 |
| National origin | Singaporean | 24 | 22 | 46 |
| | Non-Singaporean | 7 | 5 | 12 |
| | Total | 31 | 27 | 58 |

4.4 Procedure

Prior to the tutorial session where data collection was done, students were given related articles to read but the writing task was not given to them. The theme of the articles (see Appendix 11 and Appendix 12 for Semester One) was relevant to the writing topic. The rationale for doing so was to stimulate students' interest in the topic and to have them start thinking about the topic so that their brainstorming session would be a fruitful and meaningful exercise. Both groups received the following prompt:

In June 2003, the Ministry of Community Development and Sports (MCDS) launched the National Family Week to promote family life among the local population. Among the week's programme was 'Eat with Your Family Day' initiated by the Centre for Fathering. However, some people see these moves by the government and the NGOs in an ambivalent light. On the one hand, these efforts are seen as laudable. On the other hand, they sadly reflect the apathy or lack of initiative on the part of families, thus highlighting the erosion of family life among Singaporeans. What are your views on family life in Singapore or your country?

This assignment allows you to explore the issues relating to family life and reflect on them. As a point of departure, you are given the following two articles to read as homework before the next tutorial lesson:

- 1. Traits of A Functional Family*

which gives an overview on the do's of building up family relationships

- 2. The Importance of Father's Time*

which gives a personal view of fathering supported by current research

In the next tutorial session, you will be given two writing topics where you choose one of them to write. At the beginning of the next tutorial session, you will be given about 25 minutes to discuss ideas for your writing task.

At the beginning of the tutorial session in which students brainstormed ideas, both the control and experimental groups got into teams consisting of a maximum of four members each. Students decided with whom they wanted to work. They were then given two writing topics related to the theme of both articles, namely importance of family relationships. For about 20 to 25 minutes, students brainstormed key and supporting ideas that they could use for their individual essay. The essay topics and their corresponding instructions are as indicated below:

Choose either ONE of the following writing tasks and write about 500 to 650 words.

You may draw on your own knowledge and views as well as ideas from the articles you have read. Be sure to acknowledge your sources.

Include an outline of your main ideas at the beginning of your answer.

- 1. Write an article for the NUS publication, The Ridge, to give your views on the factors that have shaped family relationships in Singapore (or your country)*

in the last decade.

2. *Write a feature article for the magazine, Today's Parents, on how to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore (or your country).*

While the writing prompt was the same, instructions for discussion were slightly different between the control and experimental groups. The face-to-face control group received the following instructions:

Get into groups of four. In the next 20 to 25 minutes, brainstorm ideas for either one of the essay topics or both of them. In your brainstorming session, you should discuss

- a. *the situation or background of the writing topic(s);*
- b. *the key points that could answer the requirement of the question; and*
- c. *some examples or evidence to support the key points.*

After the discussion, individually, you should decide on one writing topic. Work out an outline. Using the outline, write an essay of between 500 and 650 words. You could make use of information in "Traits of a functional family", "The importance of father's time" and what was discussed in the brainstorming session. You could also search for more information on the Internet while drafting. Please remember to cite your sources.

Word-process your essay and submit it by the end of the tutorial session. You should upload the file onto the IVLE workbin which has been created for your class.

The chat experimental group received the following instructions:

In the last tutorial, you indicated members you would like to work with in this tutorial. I have therefore set up the chat teams according to your preference. Please go to the IVLE chat now and confirm if you are able to enter a chatroom. You may start your discussion as soon as you enter the chatroom. Please raise your hand if you encounter any problem with the chat software. As I am also one of your chat group members, if you have any questions to ask me, you could do so in the chat.

In the next 20 to 25 minutes, brainstorm for ideas for either one of the essay topics or both of them. In your brainstorming session, you should discuss

- a. the situation or background of the writing topic(s);*
- b. the key points that could answer the requirement of the question; and*
- c. some examples or evidence to support the key points.*

After the discussion, individually, you should decide on one writing topic. Work out an outline. Using the outline, write an essay of between 500 and 650 words. You could make use of information in “Traits of a functional family”, “The importance of father’s time” and what was discussed in the brainstorming session. You could also search for more information on the Internet while drafting. Please remember to cite your sources.

Word-process your essay and submit it by the end of the tutorial session. You should upload the file onto the IVLE workbin which has been created for your class.

At the beginning of the semester, a survey questionnaire (see Appendix 9) was administered to find out the background of the students. Two of the questions in the

questionnaire asked students about their experience in using chat. They were asked to indicate if they had used chat in English and if they had used the University chat available in the IVLE. Findings show that all the students in the experimental chat groups said that they had used chat in English in social context. However, only 48% of them had been exposed to the IVLE chat which is situated in an academic context. This indicates that there was a sizeable number of the students who were not familiar with the University's IVLE chat.

Based on this finding, a familiarisation session with the chat feature in IVLE was conducted two weeks prior to the tutorial session where students used the chat to brainstorm ideas. Students in the experimental chat groups met in the computer lab and did a similar brainstorming session but on a different writing topic. Because these students were already chat users and needed only familiarisation with the IVLE chat, one familiarisation session was deemed sufficient. Therefore, no other scheduled chat session was arranged subsequently. Nonetheless, students could make use of the chat facility outside of classroom if they wished to do so.

Between the two writing prompts, students chose to write on only one of the topics. In both prompts, the purpose, context and intended audience of the writing task were specified. For example, in the first prompt, "*Write an article for the NUS publication, The Ridge, to give your views on the factors that have shaped family relationships in Singapore (or your country) in the last decade.*" the intended audience was readers of *The Ridge*, a magazine published by undergraduates of NUS for undergraduates. The writing purpose was to contribute an article to the *The Ridge*; and the essay should discuss some key factors that have influenced how family relationships were shaped

or formed in the past ten decades.

As for the second prompt, “*Write a feature article for the magazine, Today’s Parents, on how to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore (or your country).*” the intended audience was subscribers and readers of *Today’s Parents*, a commercial magazine that discusses issues on parent-children and family relationships. The writing purpose was similar to the one of the first prompt, namely to send an article to the magazine as a contributor. While the first writing prompt asked students for factors that have shaped relationships, the second prompt required students to discuss ways to build a strong and resilient family.

At the time the writing assignment and theme were designed, Singapore was experiencing an economic downturn. Many lost their jobs which had caused strains on relationships in families. As a result, the government of Singapore did a nation-wide campaign to motivate people to strengthen family ties. This was done with the aim of assisting jobless and retrenched workers handle their current situation psychologically and emotionally. Students regardless of Singaporeans or foreigners were aware of the situation as there was a lot of media coverage on the issue. In addition, some cost cutting measures employed in the University could be felt by them. In other words, the theme was one that touched on current affairs and a subject known to all students. No technical or specialised knowledge was required of students.

Similar to the pilot study, prior to the data collection tutorial session, the students had gone through lessons on paragraph writing and essay writing. In addition, since this

writing assignment was given near the end of the semester, students had had practice in four types of essay – comparison-contrast, cause-effect, problem-solution and argumentative. In other words, they should have been familiar with the structure of a piece of expository essay as illustrated in Figure 4.1. This macrostructure of an expository essay is in line with the essay development structure (see Appendix 1) presented in Langan’s (2001) book, which was used as the main writing text for this module.

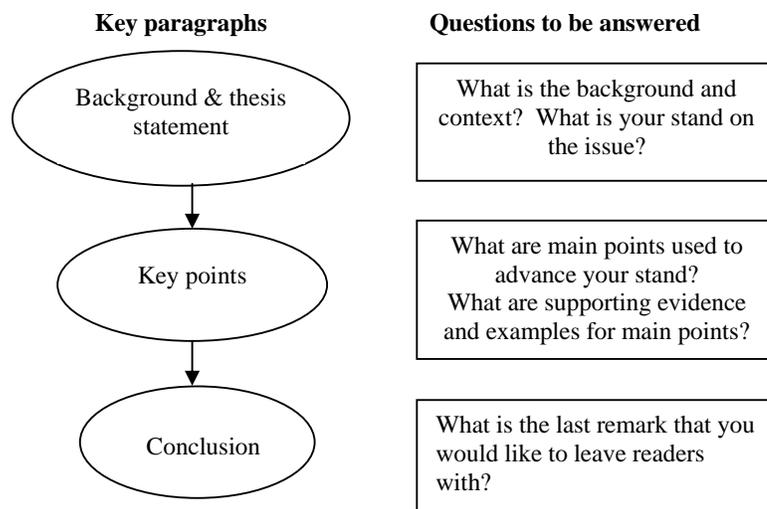


Figure 4.1 Macrostructure of an expository essay

For Semester Two, a different theme and reading article (see Appendix 13) were assigned. Nonetheless, the instructions and procedures were the same as those in Semester One.

4.5 Research methodology

The same research tools used for the pilot study were employed in carrying out the pilot study: audio-recording of and chat facility for the brainstorming session, collection of students’ drafts, a survey questionnaire and a semi-structured interview in the form of a survey questionnaire. Collection of main data was done within one

tutorial session (labelled as Tutorial 1). Figure 4.2 illustrates chronologically the pre-writing, writing, post-writing activities and data collected at each level of the data collection process. Activities done in class were framed in solid ovals while activities out of class were in dotted ovals. The type of data collected was indicated in boxes.

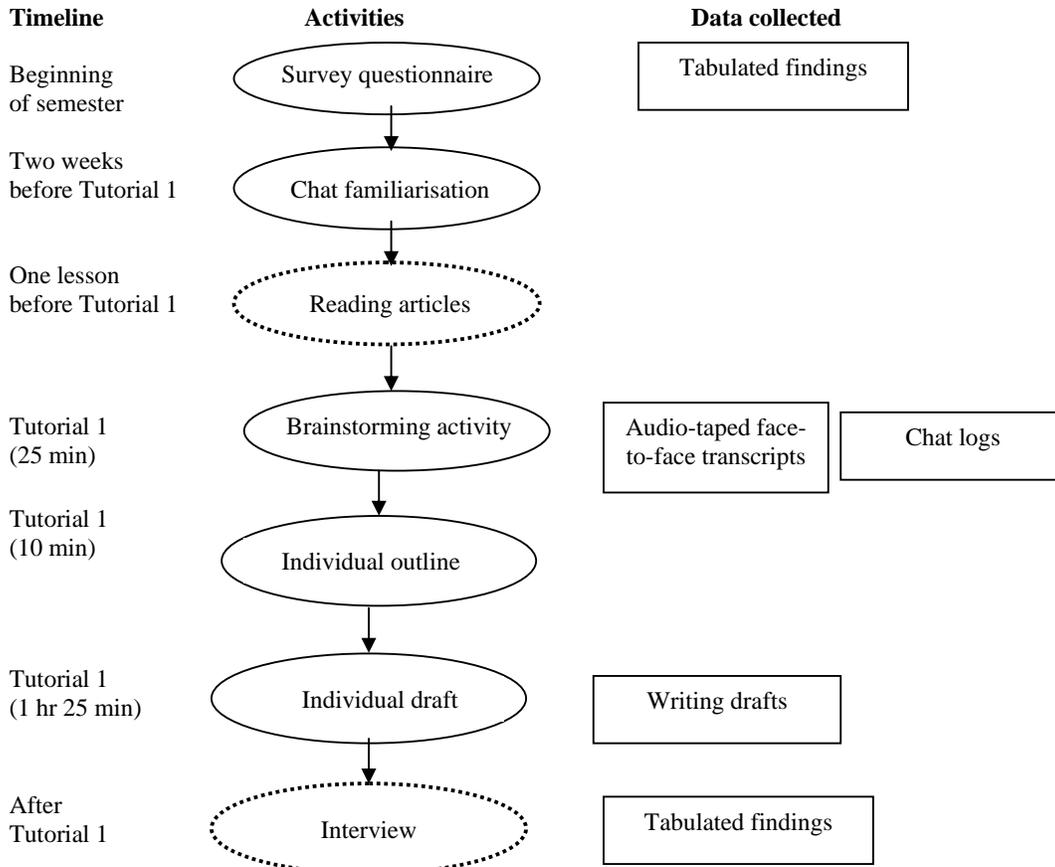


Figure 4.2 Data collection process

As illustrated in Figure 4.2, at the beginning of the semester, a survey questionnaire was administered to find out students' background including their experience with chat. This was followed by a familiarisation session for the chat experimental group two weeks before Tutorial 1. Also one lesson prior to Tutorial 1, students were assigned respective articles (Appendix 11, Appendix 12 and Appendix 13) to read as

homework. They were informed that the theme of these articles was the same as the theme of their writing assignment.

In Tutorial 1, lesson for both the control and experimental groups was conducted in a computer lab. At the start of the lesson, a handout on the writing topics was distributed to students. They then spent the next 20 to 25 minutes brainstorming ideas; the face-to-face control group discussed orally and the chat experimental group discussed using the IVLE chat.

While the face-to-face control group students were discussing and brainstorming, the teacher (also the researcher) moved around the room, answering any questions students might have and keeping time. Similar to the pilot study, the brainstorming discussion of each face-to-face team was recorded using an audio recording device. As for the chat experimental groups, the teacher logged onto chat discussions of all chat teams. Any questions regarding the writing task were answered online via chat. However, if students raised their hands which implied that there was a technical problem, the teacher would talk to the students face-to-face. On all occasions where data were collected, there were no technical difficulties experienced by both students and teacher.

When the discussion ended, students of both the face-to-face control groups and chat experimental groups spent about 10 minutes working on their individual outlines. Some did the outline on the computer while some handwrote their mind maps. Once they had finished the outline, they began drafting the essay. Students had the remaining tutorial class time to do so which was approximately one and a half hours.

Immediately after Tutorial 1 which was after students submitted their draft, the teacher conducted a brief interview with every student. The semi-structured interview (see Appendix 4) was an attempt to ascertain if there were variables that might have influenced the content of the students' essays besides what was discussed at the brainstorming discussion and reading texts. Students were asked three questions: whether they searched for more information on the topic on the Internet while drafting their essay, whether they talked to their group members about the topic, and whether they talked to anyone else in the class besides their group members.

Results reveal that 58% of the students did do Internet search while drafting, 1.4% further discussed the writing topic with their group members, 11% talked to students other than their group members and the remaining 29.6% did not do anything beyond class discussion. This implies that most students did take the initiative to search for more information for their writing task. Any information students included from their additional search would be reflected as citation in their draft. As for discussing with peers and other friends, most of them clarified that they were confirming some points discussed in the brainstorming session.

4.6 Research questions

All the research questions asked in the pilot study were similarly investigated in the main study. These questions are as listed from (a) to (f) below. On top of these six questions, two additional questions were included (see (g) and (h)).

- a) What was the time on task during the discussion? Did students deviate from the topic of discussion? If so, what was the proportion of time that students were on task as opposed to time off task?
- b) What were the main ideas mentioned in the brainstorming session?
- c) How in-depth did students discuss the main ideas? Did they provide support, evidence or argument for the main ideas?
- d) Did ideas discussed in the brainstorming session appear in students' individual draft? Did initiation of an idea have an impact on whether it was used in the students' own draft?
- e) Were there any intervening factors (besides ideas initiated in the brainstorming session) that influenced the ideas in the draft? If yes, what were they?
- f) What are some observable similarities and significant differences that can be found between face-to-face and synchronous chat mode of discussion?
- g) How would reading texts assigned by tutors as a pre-writing activity prior to brainstorming session influence discussion and subsequent draft written by students?
- h) Was there evidence of co-construction of knowledge and meaning between participants of a discussion?

The first additional question (g) relates to the effects reading texts used as pre-writing stimulus had on students' brainstorming discussion and draft. This is a necessary addition in view of the pre-writing activity, namely the assignment of articles as reading homework. The next additional research question (h) attempted to find out to what extent co-construction of knowledge existed and assisted in the shaping of meaning.

4.7 Analytical framework

The revised genre-based content analysis model (as displayed in Tables 4.2a to 4.2d) was used to identify and categorise face-to-face transcripts and chat logs into four distinctive dimensions: TASK CONCEPTION, MANAGEMENT OF DISCUSSION, KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE.

Table 4.2a Genre-based content analysis model: TASK CONCEPTION

| Category | Definitions |
|---------------------------|---|
| STRUCTURE | Statements or questions concerned with the structure or format of the essay |
| PLANNING/ ORGANISATION | Statements or questions about the organisation, sequencing or categorisation of ideas in a specific genre |
| REQUIREMENT | Statements or questions concerned with the requirement of the task |
| LANGUAGE | Statements or questions concerned with the use of language or expressions |

Table 4.2b Genre-based content analysis model: MANAGEMENT OF DISCUSSION

| Category | Definitions |
|----------------------------|--|
| CONTACT | Establishing contact or rapport, usually at the beginning of the session, as a form of greeting; Checking connection or checking if members are still in the discussion |
| ELICITATION | Eliciting or seeking contributions for content; Inviting or prompting certain members to participate or explain or elaborate |
| FOCUS | Focusing or refocusing of group to the task or knowledge construction; Providing direction of discussion; Seeking or asking for direction of discussion; Managing discussion so that it's focused on the intended topic |
| INSTRUCTION/ SUGGESTION | Instructing certain members to do something (either in a serious or playful manner); Suggesting a plan of action |
| CONSENSUS | Seeking clarification or confirmation from others on the acceptance or non-acceptance of an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| REPLY | Giving confirmation or decision on something such as voting; Making a remark or comment concerning the discussion |

Table 4.2c Genre-based content analysis model: KNOWLEDGE CONSTRUCTION

| Category | Definitions |
|-------------|---|
| INITIATION | Introducing or stating an idea or proposition; Making a stand or stating a thesis; Identifying a problem; Suggesting or proposing a problem to be solved; Proposing a solution to a related problem; Giving background information to a situation or topic |
| ELABORATION | Elaborating or explaining an idea, proposition, problem or solution; Scaffolding of own or others' idea, proposition, problem or solution |
| EXAMPLE | Giving specific examples or evidence to an idea, proposition, problem or solution |

| | |
|----------------------------------|--|
| REPETITION | Repeating or reaffirming acceptance of or agreement to an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Seeking confirmation of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Re-phrasing an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| AGREEMENT | Concurring, agreeing, confirming or accepting an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| DISAGREEMENT | In a direct manner, not accepting an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Expressing doubts or dubious about ideas brought up |
| ACKNOWLEDGEMENT | Verbally indicating understanding or comprehension of what another speaker(s) said which does not necessarily mean Agreement; Praising or giving positive encouragement; Claiming ownership of an idea, suggestion, proposition, problem, solution, example, evidence or explanation |
| CLARIFICATION | Asking question, raising doubt or raising concern (for understanding) about any aspect of an idea, suggestion, proposition, problem, solution, example, evidence or explanation; Seeking for specific term or information; Checking for accuracy of factual information; Prompting for more explanation or elaboration |
| SEARCH | Asking question, raising doubt or raising concern about any aspect of an idea, suggestion, proposition, problem, solution, example, evidence or explanation that prompts others or self to re-examine what's been said |
| REFERENCE (EXTERNAL LINKS) | Making reference to course material, textbook, article, Internal sources, authority, family, friends, own experience or knowledge etc. |
| REFERENCE (INTERNAL LINKS) | Making links between ideas mentioned within the discussion; Making reference to contributions made by group participants |
| NEGOTIATION - ARGUE/CHALLENGE | Arguing or challenging an idea, proposition, problem or solution put forth |
| - COUNTER ARGUE/ DEFEND | Counter arguing or defending challenged idea, proposition, problem or solution |
| - CONTRAST | Providing a contrasting view (not necessarily challenging) to an idea, proposition, problem or solution |
| - COUNTER-PROPOSE | Counter proposing another idea, proposition, problem or solution |
| SUMMATION | Summarizing or synthesising ideas put forth in the discussion; Refining, reformulating or re-organising ideas |
| JUDGEMENT | Making judgement or evaluation of others' or own ideas; Making comments about accuracy of information or facts |
| RESPONSE | Responding to a specific question asked but without any elaboration; Offering a reply to a specific question; Making a remark or comment |
| LACK OF KNOWLEDGE | Admitting lack of knowledge or information on something |

Table 4.2d Genre-based content analysis model: SOCIAL AND METACOGNITIVE

| Category | Definitions |
|------------------------------|---|
| OFF TASK | Stating or bringing up topics or issues that are beyond the scope of the discussion |
| PROCESS/INTERRUPTED START | Starting to say or contribute something but was interrupted by another person; Starting a line of thought but then abandoning it |

4.8 Analyses

Similar to analyses of the pilot study data, the analyses of the main study data were done in a few stages. The face-to-face and chat scripts were first segmented according to turns as displayed in example (59) based on function and propositional content:

(59)

| Turn | Participant | Utterance |
|------|-------------|---|
| 138 | G: | alright.. i think one of the factors is the whether the parents work or not |
| 139 | Jan: | ok..interaction time wif e children matters |
| 140 | Char: | hmmm |
| 141 | G: | yar... |
| 142 | Char: | ya |
| 143 | G: | some children nowadays bond better with maids lor |
| 144 | Jan: | so r u one of dem/? |
| 145 | G: | erm.. no |

[Main study, chat 4]

Tabulation was done after the face-to-face and chat transcripts were segmented to ascertain frequency and percentage of occurrences. Results show that the total number of turns in all the transcripts was 3167 which consisted of 1037 turns for face-to-face and 2130 turns for chat (see Table 4.3).

Table 4.3 Number of turns in face-to-face and chat discussions

| Group | Number of turns | Group | Number of turns |
|-----------------------------------|-----------------|--------------|-----------------|
| F2F 1 | 196 | Chat 1 | 132 |
| F2F 2 | 177 | Chat 2 | 402 |
| F2F 3 | 185 | Chat 3 | 325 |
| F2F 4 | 81 | Chat 4 | 445 |
| F2F 5 | 95 | Chat 5 | 202 |
| F2F 6 | 139 | Chat 6 | 190 |
| F2F 7 | 30 | Chat 7 | 96 |
| F2F 8 | 134 | Chat 8 | 338 |
| Total (face-to-face) | | Total (chat) | 2130 |
| Grand Total (face-to-face + chat) | | 3167 | |

Although both the face-to-face control groups and chat experimental groups were given the same duration for their discussion, as noted in Table 4.3, there were twice as many turns in the chat environment than the face-to-face environment. This was expected and could be attributed to a couple of reasons: the first reason concerns chat behaviours. It is common for chat participants to break a long thought into different entries or to write short entries. This is one way to keep the other chat participants engaged in the conversation or discussion in this case. In addition, it is also easier and faster to read short and concise messages on screen. Neilsen and Morke (1997) who did a study on web users' behaviours found that when users read online, they scanned instead of reading word by word. In addition, web users preferred concise writing with highlighted keywords, subheadings and bulleted lists. Their findings were consistent with a similar study done by Sun Microsystems (2002). Sun Microsystems found that 79% of web users scanned when they read online. Their study also revealed that reading from the computer screen is 25% slower than reading from printed text. This may explain why messages in chat are usually brief. In short, the chat participants' behaviours of writing short and multiple entries could have affected the number of turns found in the chat transcripts.

Examples (60) and (61) of Char's and G's chat entries are illustrations of chat participants' tendency to break a similar line of thought into different entries. Should this be captured in a face-to-face situation, both Char's and G's respective exchanges could have been realised as a single turn.

(60)

| Turn | Participant | Utterance |
|-------------|--------------------|------------------------------------|
| 178 | Char: | whahaha |
| 179 | Char: | he's sitting at ur role <i>lor</i> |
| 180 | Char: | haha |

[Main study, chat 4]

(61)

| Turn | Participant | Utterance |
|-------------|--------------------|--------------------------------|
| 217 | G: | haha... |
| 218 | G: | u r getting excited ar... char |
| 219 | G: | i can hear u know |

[Main study, chat 4]

The second reason why there were twice as many turns in chat than in face-to-face environment could be because in the chat mode, participants usually express nonverbal cues and feelings using text or graphics. In contrast, facial expressions, gestures, and other nonverbal cues could be conveyed in a face-to-face communication mode without the assistance of words and graphic aids. For example, to express that something is funny, chat participants either type in “ha...ha...”, “lol” (which stands for laugh out loud), or substitute the message with emoticons.

After turns were segmented, the next stage of data analyses involved coding the segmented turns using the genre-based content analysis model. The same two raters who coded the pilot study data did the same for the main study data. However, this time, the revised model (see Tables 4.2a to 4.2d) was used. For the pilot study, about 10% of turns in each of the face-to-face group and two chat teams were identified and coded by the raters. One of the key lessons learned in using discrete turns from different discussion transcripts was that the raters did not get a global and comprehensive understanding of the entire discussion when they were coding. This caused unintentional miscoding especially for turns that had references and

connection with prior or subsequent exchanges. A good illustration is REPETITION. Without looking at the entire transcript, the raters could assign INITIATION to a turn without realising that this particular idea had been mentioned earlier. Therefore, in order to avoid similar difficulties, a chat discussion consisting of 445 turns, which is approximately 14.1% of the total number of turns in all face-to-face and chat transcripts in the main study, was given to raters for coding in order to establish the degree of agreement between raters and between the researcher and raters. Both the raters were provided with the same set of notes (see Appendix 6) that were given to them when they coded the pilot study data. Because they already knew what to do and the procedure, a familiarisation session was not conducted except for a short briefing to highlight to the raters changes done to the revised genre-based content analysis model.

Table 4.4 lists the percentages of agreement established for major dimensions and specific categories between both raters (R2 and R3), and between each rater and the researcher (R1).

Table 4.4 Percentage of agreement (2)

| Raters | | Degree of Agreement | | |
|-------------|-----------|---------------------|--------------------|-------------------|
| | | Level 1 dimensions | Level 2 categories | Total no of turns |
| R1 & R2 | frequency | 442 | 439 | 445 |
| | per cent | 99.3 | 98.7 | |
| R1 & R3 | frequency | 440 | 434 | 445 |
| | per cent | 98.9 | 97.5 | |
| R2 & R3 | frequency | 440 | 432 | 445 |
| | per cent | 98.9 | 97.1 | |
| R1, R2 & R3 | frequency | 440 | 432 | 445 |
| | per cent | 98.9 | 97.1 | |

The findings displayed in Table 4.4 show that there was a high percentage of agreement among all raters in both the coding of major categories and specific categories, namely more than 95%. Although the high percentages may suggest flaws in methodology and procedure, it must be highlighted that both raters had done a similar exercise when coding the pilot study data. Furthermore, they were involved in the feedback exercise of the genre-based content analysis model which resulted in the revised version. In other words, both raters could be regarded as familiar with the coding scheme as the researcher (R1) which may explain the high percentages of agreement.

Once all the face-to-face and chat discussions were coded, a summary of frequency of occurrences of all coded turns was established. This summary would reveal and highlight codes most frequently or least frequently appeared in the discussions and a general overview of patterns of interaction and construction of meaning in face-to-face and chat environments. These findings attempt to answer mainly research questions (a) to (c) and part of research questions (f) and (h) as listed on pages 191 and 192.

The next key stage in data analyses was tracing and linking what was discussed in the brainstorming session to students' individual drafts. Similar to the technique used in analysing the pilot study data, the reverse engineering method was employed for the main study. However, unlike the pilot study which involved only face-to-face and chat transcripts and students' essays, there was one more source added to the tracing process of the main study data, namely the articles that students read as pre-writing activity. In short, students' essays, which were the last set of data in the data

collection process, were used as the starting point of analysis and ideas were traced and tracked back to the pre-writing reading articles and brainstorming session respectively.

In order to facilitate this tracing, the students’ essays were divided into sentences. Although this procedure had been discussed in detail in Section 3.1.9.2 (p. 153), a short explanation will be provided in this section as the type of essay written by the students was different and a slightly different tagging code was used. Nonetheless, the basic and main principles of how ideas were tagged remained unchanged. For every essay, each sentence was assigned an idea code. If it was background information on the topic, its code started with a “B”; main message or thesis of the essay a “T”; key points substantiating the thesis a “P”; and supporting evidence or examples a “P” plus the use of a decimal point system. An example of a student’s (i.e. Char’s) draft on writing topic 2 “*Write a feature article for the magazine, Today’s Parents, on how to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore (or your country).*” is used to illustrate how tagging of idea codes was done (see Table 4.5).

Table 4.5 Tagging of idea codes in Char’s essay

| Sentence | Idea code | Idea source |
|--|-----------|----------------|
| Introduction | | |
| ¹ A family is more than just a collection of individuals. | newB1 | |
| ² Family members are uniquely related to one another through ties of kinship. | newB1.1 | |
| ³ Family not only provides love, food and shelter but also security and a sense of belonging. | newB1.2 | |
| ⁴ In the midst of prevailing social and economic climate in Singapore, however, the definition of family is no longer the same. | B2 | writing prompt |
| ⁵ There are so many factors that have caused the failures of my functional families. | T | |
| ⁶ We shall talk about the different aspects to build a strong resilient family in this contemporary society. | T | |
| Body Paragraph 1 | | |

| | | |
|---|-------------|-------------------|
| ⁷ Over the years, Singapore has become a highly competitive and modern society. | newP1 | |
| ⁸ Economy and advancement in different areas are picking up at a fast pace. | newP1.1 | |
| ⁹ These have lead to a high standard of living quality. | newP1.2 | |
| ¹⁰ As a result, there has been an increasing phenomenon of working mums in society. | newP1.3 | |
| ¹¹ With the parents, father and mother working, there is a high possibility of neglecting or overlooked the needs of the children at home. | P1.3.1 | G S1, Jan S1.1 |
| ¹² Thus parents should balance family and work in order to achieve a functional family in this prevailing social and economic climate. | newP1.3.2 | |
| ¹³ Work isn't everything. | newP1.4 | |
| ¹⁴ When work and family commitments clash, it can strain family relationship and at the same time, can lead to lost of work. | newP1.4.1 | |
| ¹⁵ Time should be sacrifices for the family. | newP1.4.2 | |
| ¹⁶ Thus it is essential that both parties know how to juggle time between work and family by ruling out the priorities. | newP1.4.3 | |
| Body Paragraph 2 | | |
| ¹⁷ Effective communication between parents and children is also one of the factors that can build a functional family. | P2 | Jan S2 |
| ¹⁸ “Conversation among family members’ natures caring, empathic, open and trusting relationship” (Family today, Issues No 2/96) | P2.1 | Art 1 |
| ¹⁹ This is true and important. | P2.1.1 | |
| ²⁰ Time should be spend to ensure sufficient communication within the family. | P2.1.2 | Jan S1.1 |
| ²¹ Open and honest conversations or discussions help to understand each other feelings, ideas and view well. | newP2.1.3 | |
| ²² This is one way to build trust with each other. | P2.1.3.1 | |
| ²³ During the conversation, it is essential that parents give full attention and concentration on children. | newP2.1.3.2 | |
| ²⁴ Through such conversation, family members will be able to know other well and show understanding and concern for one another. | P2.1.3.3 | G S5.3 |
| ²⁵ Effective communication is thus able to create a trusting bond within family. | P2.2 | Art 1 |
| Body Paragraph 3 | | |
| ²⁶ Thirdly, certain control should be emphasize within the family. | newP3 | |
| ²⁷ Children should be given certain amount of control and freedom over their lives instills in them responsibilities and maturity. | newP3.1 | |
| ²⁸ Through this, children will be able to learn about the world and the results of their decision. | newP3.1.1 | |
| ²⁹ This control is equivalent of setting appropriate limits and rules within the families. | P3.1.2 | Jan S5 |
| ³⁰ Clear rules and regulations are ruled out, consequences are imposed if rules are offended. | newP3.1.3 | |
| ³¹ In this way, children are able to learn mistakes and not offend it again and at the same time, they are able to know the limit of doing certain things. | newP3.1.4 | |
| Body Paragraph 4 | | |
| ³² Lastly, quality of time should be spent. | P4 | Char S4 |
| ³³ It is not the amount of time spend that matter but is the quality. | P4.1 | Art 2 |

| | | |
|---|-----------|--|
| ³⁴ Parents should identify the things and activities that the family members like to do. | newP4.2 | |
| ³⁵ Once the parents know the child interest, they can then use these areas as the entry point to interact and strike conversation with them. | newP4.2.1 | |
| ³⁶ Quality time should be spend to cultivate more understanding and deeper bond through activities that are carried out together. | newP4.2.2 | |
| ³⁷ This is highly important in Singapore family. | P4.2.3 | |
| ³⁸ This is because, as most parents are working, the time spend with children are very little and interactions are at times, almost impossible. | newP4.2.4 | |
| ³⁹ Activities should include playing games, outing, shopping, sports and many more. | newP4.2.5 | |
| ⁴⁰ These activities not only pull the family’s bond closer, it also helps the working parents to de-stress and children to have a break from tons of schoolwork. | newP4.2.6 | |
| Conclusion | | |
| ⁴¹ These factors indeed will help to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore. | C1 | |
| ⁴² Keeping family healthy and happy will therefore require efforts and commitments of every member. | C2 | |

There are three columns in Table 4.5. The first column consists of sentences in Char’s essay arranged in sequence according to paragraphs in Introduction, Body, and Conclusion. The middle column lists idea codes assigned to each sentence. Similar to the tagging of idea codes in the pilot study data, the decimal point depicts the hierarchy of particular content in relation to the context of the essay and the key ideas. For example, sentence 2 in Introduction “Family members are uniquely related to one another through ties of kinship.” was deemed as an elaboration of sentence 1 “A family is more than just a collection of individuals.” Therefore, sentence 1 was coded “B1”, “B” meaning background and number “1” the first point in background; whereas sentence 2 was coded “B1.1” where the decimal point “.1” reflected its hierarchical structure and rhetorical relation to sentence 1. Tagging of idea codes was done for the rest of the essay, as reflected in Table 4.5.

The last column recognises sources where ideas originated: brainstorming session, assigned articles, and if any other acknowledged sources. If content of a sentence could be traced to a particular source, it would be indicated in this column. Ideas

taken from the brainstorming session have two identifiable components: the person who initiated it and the code that was assigned to it in the transcript. For instance, sentence 11 in Body Paragraph 1 “With the parents, father and mother working, there is a high possibility of neglecting or overlooked the needs of the children at home.” could be traced to G’s and Jan’s contribution in the brainstorming discussion (see example 62).

(62)

| Turn | Participant | Utterance | Idea Code |
|------|-------------|---|-----------|
| 138 | G: | alright.. i think one of the factors is the whether the parents work or not | S1 |
| 139 | Jan: | ok..interaction time wif e children matters | S1.1 |

[Main study, chat 4]

Hence, the sentence was coded “G S1” to mean G was the person who initiated the idea and “Jan S1.1” to indicate that she built on the idea in the discussion. It could be noted that although Char (the writer) did not follow the exact phrasing of thoughts in example (62), she started her sentence with reference to the idea proposed by G in turn 138, namely whether parents work. She then continued with her argument of the possibility of neglect caused (and this was suggested implicitly) by time spent with children, as stated by Jan in turn 139.

As observed in example (62), more than one idea thread could be traced to sentence 11. This prompted the question of whether the sentences in the essay should be further parsed down to clauses or phrases. However, it was found that such an occurrence was rare and infrequent. It was therefore deemed sufficient for the analysis of this study to maintain sentence-level segmentation and to take note of occurrences presented in example (62).

As for ideas cited from the assigned articles, they were coded either “Art 1” to refer to Article 1 *Traits of A Functional Family* written by Karen Quek (see Appendix 10) or “Art 2” to refer to Article 2 *The Importance of Father's Time* written by Seth Metcalf (see Appendix 11). An example of an idea thread in Char’s essay that could be traced to Article 2 is sentence 33 “It is not the amount of time spend that matter but is the quality”, which she could have cited. In Metcalf’s (2003) article, he mentioned that “as a general finding, researchers note that although time with children is important, it isn't necessarily the amount, but the quality of that time that matters.”

Another idea tagging procedure that was done was the use of prefix “new” attached to ideas that could not be traced to any sources. These were deemed new ideas Char thought of while drafting her essay. However, not all sentences that could not be traced to a particular source were given a prefix “new”. For example, sentence 19 in Body Paragraph 2 “This is true and important.” and sentence 22 in the same paragraph “This is one way to build trust with each other.” These sentences did not receive prefix “new” because they were remarks or comments that served either as a link between two related sets of ideas or as reinforcement of a particular idea. Take sentence 19 “This is true and important.” as an illustration. It is a remark that follows sentence 18 of the same paragraph “Conversation among family members’ natures caring, empathic, open and trusting relationship” (Family today, Issues No 2/96) and it provides a link to further elaboration on communication among family members in this particular case. In other words, idea threads that were traced were content points that contributed to the development of the main message of the essay or to the elaboration of key points.

Similar to what was done with the pilot study data, once tracing of ideas was completed, a summary of the number of transferred ideas was created to answer research questions concerned with how much students made use of ideas they mentioned in the discussion, how much they made use of others' ideas, how much they referred to articles assigned to them as a pre-writing activity, how much they cited from other sources, and what the proportion of new ideas in their draft was (see p. 192, research questions (d) to (h)).

CHAPTER FIVE FINDINGS AND INTERPRETATION

This chapter presents findings of the main study and is organised according to the sequence of the research questions. This sequence starts with a presentation and discussion of quantitative data and proceeds to a discussion of qualitative data. It concludes with a comparison and contrast of significant points between face-to-face and chat modes.

5.1 Time on task

Time on task refers to the extent to which members of a discussion group focused on the task and discussion topic. In the main study, students were told to brainstorm ideas for either one of the essay topics or both of them. In their brainstorming session, students were asked to discuss

- a. the situation or background of the writing topic(s);
- b. the key points that could answer the requirement of the question; and
- c. some examples or evidence to support the key points.

Therefore, discussion that did not touch on any of the aspects mentioned was categorised as OFF TASK. OFF TASK discussion was established through the identification of turns in transcripts coded SOCIAL AND METACOGNITIVE – OFF TASK. Table 5.1 compares the average percentage of time students of face-to-face and chat environments spent on task and off task.

Table 5.1 Distribution of two types of turn (on-task and off-task) in two conditions: face-to-face and chat

| Group (size) | OFF-TASK turns (frequencies) | OFF-TASK turns (percentages) | ON-TASK turns (frequencies) | ON-TASK turns (percentages) | All turns (frequencies) |
|------------------------------|---|---|--|--|------------------------------------|
| F2F1 (N = 3) | 0 | 0 | 196 | 100.0 | 196 |
| F2F2 (N = 4) | 4 | 2.3 | 173 | 97.7 | 177 |
| F2F3 (N = 3) | 66 | 35.7 | 119 | 64.3 | 185 |
| F2F4 (N = 4) | 0 | 0 | 81 | 100.0 | 81 |
| F2F5 (N = 3) | 0 | 0 | 95 | 100.0 | 95 |
| F2F6 (N = 4) | 3 | 2.2 | 136 | 97.8 | 139 |
| F2F7 (N = 4) | 0 | 0 | 30 | 100.0 | 30 |
| F2F8 (N = 3) | 0 | 0 | 134 | 100.0 | 134 |
| Total no of turns | 73 | (Ave) 7.0 | 964 | (Ave) 93.0 | 1037 |
| Chat1 (N= 1) | 43 | 32.6 | 89 | 67.4 | 132 |
| Chat2 (N= 4) | 195 | 48.5 | 207 | 41.5 | 402 |
| Chat3 (N= 3) | 82 | 25.2 | 243 | 74.8 | 325 |
| Chat4 (N= 3) | 352 | 79.1 | 93 | 20.9 | 445 |
| Chat5 (N= 3) | 72 | 35.6 | 130 | 64.4 | 202 |
| Chat6 (N= 4) | 37 | 19.5 | 153 | 80.5 | 190 |
| Chat7 (N= 3) | 4 | 4.2 | 92 | 95.8 | 96 |
| Chat8 (N= 3) | 117 | 34.6 | 221 | 65.4 | 338 |
| Total no of turns | 902 | (Ave) 42.3 | 1228 | (Ave) 57.7 | 2130 |

Findings concerning time on task in the main study seem to be consistent with those of the pilot study. In the pilot study, it was observed that only 2% of the face-to-face discussion was spent off task while the chat teams spent approximately 46.3% of the time off task. Similarly, in the main study, the disparity in the average percentage of time spent off task between the face-to-face and chat teams was large: the face-to-face teams spent only 7% off task and the chat teams about 42.3%.

It was noted that the main bulk of the 7% off task time in the face-to-face group came from one particular group, namely F2F 3, which is atypical. A closer analysis of the face-to-face off task discussion revealed that turns coded as OFF TASK in F2F 3 consist primarily of sharing among group members about communication and

interaction in their respective families. Because such sharing, as depicted in example (63), did not contribute directly to the content of the essay and concentrated on individuals' personal lives, it was therefore considered off task.

(63)

| Turn | Participant | Utterance |
|------|-------------|---|
| 110 | S | Yeah. Do you guys tell your mum about stuffs? |
| 111 | XW | Sometimes. |
| 112 | SHU | Sometimes only. Both parents working then you go home then after dinner then I go do my work and they go and do their things. |
| 113 | S | So, like, do you tell everything? |
| 114 | XW | No. selective telling, selective telling. Not everything, <i>lah</i> , but we try to tell them some of our problems. |
| 115 | SHU | But they know that ... |
| 116 | M | It's really interesting. If they don't pick up that kind of ... it's, like, you are dating with this guy and they pick up and repeat. |
| 117 | S | What do you think, like, the American system? |
| 118 | M | They share whatever with their parents. |
| 119 | XW | They share things. Eh ... they'd ... in this way, they are closer to their parents. |
| 120 | M | Not really, <i>lah</i> . I feel that sometime, I mean, for American family, they don't draw the boundary. They don't define like us; they call parents by names, that kind, which I don't think is quite appropriate. I feel that ... |
| 121 | S | But we are moving towards that side, that, you know, Americanized system. |
| 122 | M | Okay. But there are certain things we adopt which shouldn't ... I still think, I still think we should keep some of the Asian values. It really limits, like, how much you can accept, like you know, ... |
| 123 | S | My mum's like |
| 124 | M | My mum's also like that. That's when she'll put down her foot, like, that's a no for me. |
| 125 | S | My mum's, like, quite funny. She's like modern yet not modern |

[Main study, F2F 3]

Although it may be argued that the discussion was related to the topic of discussion, the content of the sharing session would not have contributed to a response to the writing prompt requiring students to write about ways “to build a strong resilient family in the midst of the prevailing social and economic climate”. Undoubtedly, the sharing session was initiated because of the discussion topic and was an extension of a

more relevant discussion about key points for the essay. However, it did not lead to any new key points for the essay. Therefore, in keeping with the definition of OFF TASK that includes participants talking about their personal lives, turns in the sharing session were considered off task.

When further analysis was done to investigate the types of conversation threads or talk students engaged in when their discussion was off task, three main categories were identified for all the groups: fun with chat features (peculiar only to chat groups), study-related talk, personal or small talk. Such OFF TASK talk seems to imply an attempt by students to socialise among one another. An example of each category of OFF TASK talk is illustrated in examples (64), (65), and (66).

From turns 022 to 029 (except turn 028) of example (64), chat members were trying to establish how they could use nicknames in the chat. Creating nicknames is one of the features in chat. In fact, this focus on nicknames was consistent throughout all chat discussions in this study that touched on chat features. This interest in nicknames could have arisen from the novelty of the feature which had just been introduced in the chat environment. Unlike the findings in the pilot study where students were trying out emoticons, there was no such evidence in the main study. This could be due to the fact that students had had a familiarisation session prior to the brainstorming session. Students could also have been familiar with the emoticons which were similar to the ones they used in social contexts such as the MSN chat.

(64)

| Turn | Participant | Utterance |
|------|--------------|---------------------------|
| 022 | R: | How do I change the name? |
| 023 | R: | I dun want a number name |
| 024 | Peng(TatZz): | same here <i>leh</i> |
| 025 | Teck(Joker): | go to profile |
| 026 | Teck(Joker): | in your ivle |

| | | |
|-----|--------------|--|
| 027 | Peng(TatZz): | teach us <i>leh</i> , Teck ... |
| 028 | Peng(TatZz): | i think chen xiao cannot wake up again |
| 029 | Teck(Joker): | then change the nick <i>lo</i> |
| 030 | Teck(Joker): | haha |
| 031 | Teck(Joker): | <i>ZZZZzzzzz</i> |

[Main study, chat 3]

In example (65), students spent their OFF TASK time lamenting about study-related matters which were not related to the brainstorming task that was assigned. Students shared their feelings and frustrations regarding modules that they were taking. The main grouses and complaints were usually about how heavy or tough assignments were, upcoming quizzes and tests, and their reluctance in completing the essay assignment.

(65)

| Turn | Participant | Utterance |
|------|--------------|---|
| 096 | Peng(TatZz): | sian <i>leh</i> <Hokkien dialect meaning "I am so bored">, so many things to do already , english still give me more homework |
| 097 | Teck(Joker): | ya <i>lo</i> |
| 098 | Teck(Joker): | sux |
| 099 | Peng(TatZz): | jia lat <Hokkien dialect meaning "It's terribly tough."> |

[Main study, chat 3]

Example (66) is an illustration of personal or small talk that has no relevance to school or study related talk. Such small talk ranged from topics in everyday life to discussion on football matches and the teasing of a particular member.

(66)

| Turn | Participant | Utterance |
|------|--------------|---|
| 118 | Peng(TatZz): | anyone watch the manU and arsenal game yesterday >? |
| 119 | Teck(Joker): | haha |
| 120 | Teck(Joker): | nope |
| 121 | Teck(Joker): | not me |
| 122 | Peng(TatZz): | nearly go into brawl ... |
| 123 | Peng(TatZz): | haha... |

[Main study, chat 3]

In fact, the chat group (i.e. chat 4) that had the highest percentage of OFF TASK discussion spent 73% of their discussion teasing a member, Char, about her potential interest in a guy in the same class. Despite Char’s constant calls for her two friends to get back to their discussion task, the other two girls were incessant in their teasing and kept returning to the same topic.

The distribution of OFF TASK behaviours in face-to-face and chat groups (see Table 5.2) reveal that on the whole 75.8% of the OFF TASK talk was related to personal or small talk, 17.4% on fun with chat features, and the remaining 7.8% on study-related talk. Comparatively, the number of face-to-face OFF TASK turns is only 73 out of a total of 975 turns as opposed to 902 out of 975 turns in chat. Much of the OFF TASK talk in chat was related to personal or small talk followed by participants playing with the chat features and finally study related talk.

Table 5.2 Distribution of OFF TASK turns in two modalities (face-to-face and chat) – raw frequencies and percentages

| Group (size) | Fun with chat | Study-related talk | Personal/small talk | Total OFF-TASK turns (frequencies) |
|-----------------------------|---------------|--------------------|---------------------|------------------------------------|
| F2F 1 (N = 3) | 0 | 0 | 0 | 0 |
| F2F 2 (N = 4) | 0 | 4 (100%) | 0 | 4 |
| F2F 3 (N = 3) | 0 | 0 | 66 (100%) | 66 |
| F2F 4 (N = 4) | 0 | 0 | 0 | 0 |
| F2F 5 (N = 3) | 0 | 0 | 0 | 0 |
| F2F 6 (N = 4) | 0 | 3 (100%) | 0 | 3 |
| F2F 7 (N = 4) | 0 | 0 | 0 | 0 |
| F2F 8 (N = 3) | 0 | 0 | 0 | 0 |
| Total (face-to-face) | 0 | 7 (9.59%) | 66 (90.41%) | 73 |
| Chat 1 (N= 1) | 0 | 21 (48.8%) | 22 (51.2%) | 43 |
| Chat 2 (N= 4) | 23 (11.8%) | 15 (7.7%) | 157 (80.5%) | 195 |
| Chat 3 (N= 3) | 39 (47.6%) | 15 (18.3%) | 28 (34.2%) | 82 |
| Chat 4 (N= 3) | 22 (6.3%) | 11 (3.1%) | 319 (90.6%) | 352 |
| Chat 5 (N= 3) | 26 (36.1%) | 0 | 46 (63.9%) | 72 |

| | | | | |
|------------------------------------|--------------------|------------------|--------------------|------------|
| Chat 6 (N= 4) | 25 (67.6%) | 4 (10.8%) | 8 (21.6%) | 37 |
| Chat 7 (N= 3) | 0 | 2 (50.0%) | 2 (50.0%) | 4 |
| Chat 8 (N= 3) | 35 (29.9%) | 1 (0.9%) | 81 (69.2%) | 117 |
| Total (chat) | 170 (18.9%) | 69 (7.7%) | 663 (73.5%) | 902 |
| Total (face-to-face + chat) | 170 (17.4%) | 76 (7.8%) | 729 (75.8%) | 975 |

Qualitative analyses and comparison between the face-to-face and chat teams which had the highest percentage of time OFF TASK reveal that although both groups were engaged most in small or personal talk, the content of their talk differed. The face-to-face team (i.e. F2F 3) was sharing personal experiences related to the topic that they were discussing, while the chat team (i.e. chat 4) was teasing one of their members – small talk that had little or nothing to do at all with the topic of discussion. This significant difference is depicted in example (67) for the face-to-face team and example (68) for the chat team. In example (67), the face-to-face team enquired one another how each spent their weekend with their family which did have some relevance to the topic of the discussion. However, in example (68), the chat team was talking about a potential attraction between Char and a guy in the class.

(67)

| Turn | Participant | Utterance |
|------|-------------|---|
| 131 | S: | Do you do things together? What do you guys do with your family during weekend? What do you do that are family? |
| 132 | SHU: | We go out. |
| 133 | XW: | Just talk. |
| 134 | S: | Just talk? |
| 135 | M: | Not really, what. Not necessary go out. |
| 136 | SHU: | Go out for dinner or |
| 137 | XW: | Yeah. |
| 138 | SHU: | And talk |
| 139 | M: | Just go out for dinner, just |
| 140 | S: | You don't do that every night? |
| 141 | The rest: | No. |
| 142 | XW: | But you just get to go out, something like that |
| 143 | M: | Going out together for dinner. |

[Main study, F2F 3]

(68)

| Turn | Participant | Utterance |
|-------------|--------------------|--|
| 186 | G: | char: u can offer yourself |
| 187 | G: | haha |
| 188 | Char: | gosh |
| 189 | Char: | no tks |
| 190 | Jan: | crazy... |
| 191 | Char: | not my type |
| 192 | Char: | hahaha |
| 193 | G: | haha |
| 194 | Jan: | who wants him/ |
| 195 | Char: | i dun like MARCHO guys |
| 196 | Char: | haha |
| 197 | G: | i see that char has even considered... |
| 198 | Char: | oh gosh |
| 199 | Char: | pls |
| 200 | Jan: | wow |
| 201 | Char: | not ks |
| 202 | Char: | no tks |
| 203 | G: | haha... |
| 204 | Char: | k get back! |
| 205 | Char: | wad else? |
| 206 | G: | yes! |
| 207 | Jan: | type also type wrongly |
| 208 | Jan: | nervous huh |
| 209 | Jan: | we guess ur thots isit? |
| 210 | Char: | you refering to whu? |
| 211 | G: | hi! |
| 212 | Jan: | mommy char? |

[Main study, chat 4]

Another related speculation is that the occurrence of OFF TASK turns is so much more frequent in the chat rooms is that the social function of establishing identity which is necessary at the beginning of a chat session tends to engender a social mind set which sustains itself and makes it difficult for the participants to switch to a study mode. If this observation is accurate, it follows that OFF TASK turns should occur the most at the beginning of the chat discussion. An analysis was done to identify places in which episodes of OFF TASK occurred, namely at the beginning, middle and end of the chat discussion. Each chat discussion was divided into three sections and the occurrence of OFF TASK turns were tabulated in each section (see Table 5.3).

Table 5.3 Occurrence of OFF TASK turns in chat – raw frequencies and percentages

| Chat group | Beginning | | Middle | | End | | Total OFF-TASK turns (frequencies) |
|--------------|------------|-------------|------------|-------------|------------|-------------|------------------------------------|
| | Freq | % | Freq | % | Freq | % | |
| Chat 1 | 12 | 27.9 | 8 | 18.6 | 23 | 53.5 | 43 |
| Chat 2 | 56 | 28.7 | 16 | 8.2 | 123 | 63.1 | 195 |
| Chat 3 | 56 | 68.3 | 26 | 31.7 | 0 | 0 | 82 |
| Chat 4 | 97 | 27.6 | 99 | 28.1 | 156 | 44.3 | 352 |
| Chat 5 | 28 | 38.9 | 22 | 30.6 | 22 | 30.6 | 72 |
| Chat 6 | 30 | 81.1 | 2 | 5.4 | 5 | 13.5 | 37 |
| Chat 7 | 2 | 50.0 | 0 | 0 | 2 | 50.0 | 4 |
| Chat 8 | 45 | 38.5 | 14 | 12.0 | 58 | 49.6 | 117 |
| Total | 326 | 36.1 | 187 | 20.7 | 389 | 43.1 | 902 |

Contrary to the initial observation that OFF TASK turns may appear most frequently at the beginning of the chat session to establish identity, findings show that there is an almost equal distribution of OFF TASK turns at the beginning as well as at the end of the chat sessions. This is with the exception of chat 3 and chat 6 where the highest occurrence of OFF TASK turns was at the beginning of the respective discussions. The high occurrence of OFF TASK turns towards the end of the discussion indicate that participants needed distraction or a break from discussion of the assignment or they had finished their discussion and were waiting for signal from the teacher to end the brainstorming session. Therefore, as shown in the chat data, OFF TASK turns occurred most frequently not only at the beginning of a discussion, but they also appeared towards the end of the discussion.

To summarise, similar to findings in the pilot study, discussion in the face-to-face environment was more on task than in the chat mode. Specifically, as displayed in Table 5.1 on ON-TASK turns, 93% of discussion in the face-to-face environment was about the brainstorming task as compared to 57.7% in chat. Nonetheless, contrary to other studies which found a more equal or balanced participation among members in

online discussion compared to face-to-face discussion, findings in this study do not support these findings. Instead, in this study, it was found that there is a similar pattern in terms of balanced participation in both face-to-face and chat environments. In addition, it was suggested that gender ratio affects group dynamics in the participation rate of members.

5.1.1 Equal participation

The analysis of off task behaviours had prompted the question of equality in participation or how balanced or equal participation was in both face-to-face and chat environment. Findings of this study show that participation in face-to-face discussion was as equally distributed as it was in online discussion (see Table 5.4). Data show that there was no one person who dominated the entire discussion. In all cases, either two or three members of the group had an almost equal participation rate.

Table 5.4 Participation rate of members in face-to-face and chat groups

| Group | Participant | No of turns | % of turns | Total no of turns |
|--------------|--------------------|--------------------|-------------------|--------------------------|
| Chat 1 | Joy | 73 | 57.0 | 128 |
| | ML | 55 | 43.0 | |
| Chat 2 | JieJ | 120 | 29.9 | 402 |
| | T | 138 | 34.3 | |
| | CY | 107 | 26.6 | |
| | MT | 37 | 9.2 | |
| Chat 3 | Teck(Joker) | 137 | 42.0 | 326 |
| | Peng(TatZz) | 105 | 32.2 | |
| | R | 36 | 11.0 | |
| | Ting(lim) | 48 | 14.7 | |
| Chat 4 | Char | 178 | 40.0 | 445 |
| | G | 175 | 39.3 | |
| | Jan | 92 | 20.7 | |
| Chat 5 | Jul | 78 | 38.2 | 204 |
| | Mad | 70 | 34.3 | |
| | BL | 56 | 27.5 | |
| Chat 6 | SY | 67 | 35.3 | 190 |

| | | | | |
|--------|------------|-----|------|-----|
| | IM | 33 | 17.4 | |
| | PLX | 50 | 26.3 | |
| | Huey | 40 | 21.1 | |
| Chat 7 | SL | 3 | 3.1 | 96 |
| | WP | 44 | 45.8 | |
| | sWt_drEaMz | 49 | 51.0 | |
| Chat 8 | Sirin | 122 | 35.9 | 340 |
| | CL | 51 | 15.0 | |
| | Jes | 76 | 22.4 | |
| | JJ | 91 | 26.7 | |
| F2F 1 | V | 46 | 23.0 | 200 |
| | Z | 65 | 32.5 | |
| | SH | 87 | 43.5 | |
| | Teacher | 2 | 1.0 | |
| F2F 2 | LD | 4 | 2.2 | 182 |
| | J | 73 | 40.1 | |
| | SF | 15 | 8.2 | |
| | ZW | 74 | 40.7 | |
| | H | 12 | 6.6 | |
| | Teacher | 2 | 2.2 | |
| F2F 3 | M | 51 | 27.7 | 184 |
| | XW | 49 | 26.7 | |
| | S | 56 | 30.4 | |
| | SHU | 27 | 14.7 | |
| | Teacher | 1 | 0.5 | |
| F2F 4 | P | 26 | 31.7 | 82 |
| | Shirn | 3 | 3.7 | |
| | Ena | 29 | 35.4 | |
| | LX | 2 | 2.4 | |
| | NT | 17 | 20.7 | |
| | Teacher | 5 | 6.1 | |
| F2F 5 | PL | 41 | 43.2 | 95 |
| | C | 47 | 49.5 | |
| | W | 7 | 7.4 | |
| F2F 6 | A | 54 | 38.0 | 142 |
| | CS | 43 | 30.3 | |
| | E | 14 | 9.9 | |
| | FY | 24 | 16.9 | |
| | Teacher | 7 | 4.9 | |
| F2F 7 | J | 11 | 36.7 | 30 |
| | QY | 5 | 16.7 | |
| | CL | 12 | 40.0 | |
| | ZY | 2 | 6.67 | |
| F2F 8 | Rai | 42 | 31.3 | 134 |
| | SZ | 52 | 38.8 | |
| | A | 33 | 24.6 | |
| | Teacher | 7 | 5.2 | |

As discussed in Chapter 2, studies have shown that there is a more balanced participation of students in an online discussion environment compared to a face-to-face discussion (Beauvois, 1992, 1998b; Bohlke, 2003; Chun, 1994; Kelm, 1992; Kern, 1995; Sengupta, 2001; Warschauer, Turbee & Roberts, 1996). It implies that in an online environment, the possibility of a particular member dominating the entire discussion is less than that in a face-to-face situation.

In contrast, there are a few studies that have found that participation was either as equally as or more equally distributed in a face-to-face context. Fitze (2006) who investigated participation pattern of two classes of ESL students in face-to-face and online environments found that although in general participation was more balanced in the online discussion, there was one class in which the mode of discussion, either face-to-face or online, did not have much influence on the distribution of participation. He suggests that group dynamics may have influenced how equal participation is, specifically in groups where members already know one another. In addition, Fitze cited findings of a study done by Warschauer in 1996 with four groups of Japanese students. The study found that in one of the groups, participation in the face-to-face discussion was in fact more balanced than in the online discussion. Warschauer (1996) explained that this could be due to members' fluency in spoken skills, confidence and comfort level in communicating with a group of people, and the cultural backgrounds of the students.

In the case of this study, in both modalities, there were members who had little contribution during the discussion, namely less than 10% of participation rate, although the frequency of such instances is higher in face-to-face than in chat. For

example, in chat 2 and chat 7, there was one member each whose participation rate was 9.2% and 3.1% respectively. In the face-to-face groups, there were members in five of eight groups, namely F2F 2, F2F 4, F2F 5, F2F 6 and F2F 7, whose participation rate was below 10%. Although there are more face-to-face groups with members contributing less than 10%, the overall participation pattern is still arguably more equal since there were more members who participated much more than those who said very little.

The findings in terms of equality in participation rate seem to support Fitze's and Warschauer's exceptional case. Additionally, in all the eight face-to-face teams and eight chat teams of this study, it was found that the rate of participation among members in the face-to-face teams ranged from the lowest 2.2% to the highest 49.5%. In the chat teams, the range was between 3.1% and 57%. The discrepancy between the range in face-to-face and online environments is indeed similar.

Specifically, a closer look at the seven groups with members participating less than 10% reveal that five of them (i.e. 71.4%) were groups of mixed genders with a high ratio of one gender over another. In all these five groups, the member who contributed the least seemed to be the only opposite gender in the group. For example, chat 7 consisted of three members - two males (WP and sWt_drEaMz) and a female (SL). The female member was silent most of the time. The percentages of turns of both males were 45.8% and 51% respectively and the female member 3.1%. The two male members were the ones keeping the discussion going. Similar findings were observed in F2F 6 where E the only female member in the group had a participation rate of 9.9%. In the remaining three groups where there was a male in a female-

majority group, the same trend was noted. For example, in F2F 2 and F2F 4, the member who contributed the least is the only male in the respective groups.

Conversely, if one were to take a look at groups with a more equal participation rate such as chat 4, chat 5, F2F 1 and F2F 3, one would notice that these are either all-male or all-female groups. These findings imply that gender ratio may have played a role in group dynamics and the rate of participation.

5.2 Quantity and quality of idea threads - group

The discussion in this section includes an analysis of the number of ideas in face-to-face and chat discussion groups and the depth in which ideas were developed in the discussions. In addition to a detailed discussion on the methodology of the tagging and coding of turns and ideas and the hierarchical relationships among one another which was already presented in Section 3.1.9.2, page 153, for clarity a brief explanation of the procedure will be described here prior to the presentation of data and their corresponding analyses.

KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE

In order to establish ideas in discussion and their subsequent expansion and elaboration, turns coded INITIATION, ELABORATION, EXAMPLE, CLARIFICATION, NEGOTIATION, and REFERENCE in the transcripts were selected. Each of these turns was then assigned an idea code using a numbering system that represents both the hierarchy of ideas in relation to the key issue(s) discussed and the rhetorical relation ideas have with one another in the context of the task and discussion. For example, in the case of the pilot study, the genre of the writing task was problem-solution. Therefore, contributions related to either problems or key solutions were coded

INITIATION to signify Level 1 Key Ideas. The first problem mentioned was assigned an idea code “P1” to mean “Problem1”, the second “P2” and so forth. Similarly, the first initiation of a key solution to a problem was given an idea code “S1” to represent “Solution1”, “S2” to mean “Solution2” and so on.

Once Level 1 Key Ideas were established, turns coded ELABORATION, EXAMPLE, CLARIFICATION, NEGOTIATION, and REFERENCE were considered for Level 2 Supporting Details and Level 3 Evidence/Examples. If an idea was developed as a result of further expansion, elaboration, clarification, negotiation and making references either externally or internally, it would be assigned a corresponding idea code. In other words, the turn would have been coded ELABORATION, EXAMPLE, CLARIFICATION, NEGOTIATION, or REFERENCE accordingly and the supporting detail a decimal point to demonstrate its link or relationship to a particular key idea. For instance, an elaboration of key idea “P1” would be idea coded “P1.1” where the decimal point “.1” signifies that the idea is both related to “P1” and an elaboration of “P1” in terms of rhetorical relation. The same method of assigning idea codes was used to code ideas at Level 3 Evidence/Examples, namely “P1.1.1” to indicate its rhetorical and propositional relationship to Level 1 and Level 2 ideas.

In the main study, because students were given specific writing prompts, the identification and tagging of initiated ideas were determined based on the requirement of the prompts. That means for an idea to have been coded INITIATION, it had to answer the key requirement of the task. These ideas would then be considered Level 1 key ideas of the discussion. For example, for the first writing prompt, students were asked about *factors that have shaped family relationships in Singapore (or their*

country) in the last decade. Therefore, the key ideas should address *factors* that were brought up during discussions. Various factors were mentioned by students which included dynamics of a family such as number of children, three generations living together under the same roof, financial capability of family, parents' work status, relationship between parents, change of socio-economic status of women, rising cost of living, change in the way people communicate, globalisation, increased employment of maids, and educational level of family members.

For the second prompt, students were asked to suggest ways to *build a strong resilient family in the midst of the prevailing social and economic climate in Singapore (or their country)*. In this context, the key ideas would include identification of problem(s) and suggestions of solutions in relation to building a strong resilient family. Some key ideas were time spent with family, relationship and communication between couples and among family members, stress and financial management, and job security.

Once the turns and ideas were tagged and coded, they were tabulated and presented in percentages, as illustrated in Table 5.5 and Table 5.6.

Table 5.5 Key and supporting ideas in face-to-face discussion groups

| | Hierarchy of Ideas | | | | | | |
|-------------|------------------------|----------|---------------------------------|----------|--------------------------------|----------|-------|
| | Level 1 (Key Ideas) | | Level 2 (Supporting Details) | | Level 3 (Evidence/Examples) | | Total |
| Group | frequency | per cent | frequency | per cent | frequency | per cent | |
| F2F 1 | 7 | 15.2 | 22 | 47.8 | 17 | 37.0 | 46 |
| F2F 2 | 10 | 21.3 | 21 | 44.7 | 16 | 34.0 | 47 |
| F2F 3 | 4 | 16.0 | 11 | 44.0 | 10 | 40.0 | 25 |
| F2F 4 | 15 | 55.6 | 9 | 33.3 | 3 | 11.1 | 27 |
| F2F 5 | 7 | 19.4 | 14 | 38.9 | 15 | 41.7 | 36 |
| F2F 6 | 10 | 27.0 | 12 | 32.4 | 15 | 40.5 | 37 |
| F2F 7 | 6 | 33.3 | 6 | 33.3 | 6 | 33.3 | 18 |
| F2F 8 | 7 | 15.2 | 18 | 39.1 | 21 | 45.7 | 46 |
| Grand Total | 66 | 23.4 | 113 | 40.1 | 103 | 36.5 | 282 |

Table 5.6 Key and supporting ideas in chat discussion groups

| | Hierarchy of Ideas | | | | | | |
|-------------|------------------------|----------|---------------------------------|----------|--------------------------------|----------|-------|
| | Level 1 (Key Ideas) | | Level 2 (Supporting Details) | | Level 3 (Evidence/Examples) | | Total |
| Group | frequency | per cent | frequency | per cent | frequency | per cent | |
| Chat 1 | 16 | 47.1 | 14 | 41.2 | 4 | 11.8 | 34 |
| Chat 2 | 7 | 17.1 | 15 | 36.6 | 19 | 46.3 | 41 |
| Chat 3 | 12 | 16.0 | 22 | 29.3 | 41 | 54.7 | 75 |
| Chat 4 | 9 | 42.9 | 9 | 42.9 | 3 | 14.3 | 21 |
| Chat 5 | 11 | 26.8 | 21 | 51.2 | 9 | 22.0 | 41 |
| Chat 6 | 7 | 26.9 | 10 | 38.5 | 9 | 34.6 | 26 |
| Chat 7 | 8 | 25.8 | 14 | 45.2 | 9 | 29.0 | 31 |
| Chat 8 | 17 | 24.4 | 26 | 37.7 | 26 | 37.7 | 69 |
| Grand Total | 87 | 25.7 | 131 | 38.8 | 120 | 35.5 | 338 |

As observed from findings in Table 5.5 and Table 5.6, there was an almost equal average percentage of Levels 1, 2 and 3 ideas generated and developed in the face-to-face group and in the chat environment, namely 23.4% (for face-to-face groups) and 25.7% (for chat groups) of ideas that fell into Level 1 category, 40.1% (for face-to-

face groups) and 38.8% (for chat groups) for Level 2 category, and 36.5% (for face-to-face groups) and 35.5% (for chat groups) for Level 3 category.

These findings were contrary to observation found in the pilot study where the discrepancy between ideas coded in Level 1 category of face-to-face groups (i.e. 23.5%) and of chat groups (i.e. 69.6%) was big (see Table 3.22, p. 157). Since the gap was consistent with the turns coded as OFF TASK, it could thus be explained that the amount of time OFF TASK affected the discrepancy between the quantity of ideas in face-to-face and chat groups. However, the same argument does not hold for the main study data. Despite an average of 42.3% of the chat discussion which was OFF TASK as opposed to 7% for the face-to-face groups (see Table 5.1, p. 206), the small difference observed between the face-to-face and chat discussion groups for Levels 1, 2 and 3 categories suggest that in terms of quantity, both modes of discussion would yield the same result in generating and developing similar amount of ideas.

A closer and more detailed look at the breakdown of turns categorised under KNOWLEDGE CONSTRUCTION reveal that in both face-to-face and chat environments, students used ELABORATION most frequently. In face-to-face, 17.7% of the turns were on elaboration of ideas and in chat 9.8% (as displayed in Table 5.7). This accounts for 12.4% of the total number of turns in the entire data. It is not surprising that there is a high percentage of ELABORATION turns in the discussion since the initiation of any new idea should naturally be followed by some form of elaboration. Similarly, this rhetorical structure is consistent with the development of ideas in the essays that students were required to write, namely they would start with a topic sentence which would lead to further elaboration or expansion of the key idea.

Table 5.7 Frequency of codes in KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE

| | Mode of discussion | | | | | |
|--------------------------------|--------------------|----------|------------|----------|-------------|----------|
| | Face-to-face turns | | Chat turns | | Total turns | |
| Codes | frequency | per cent | frequency | per cent | frequency | per cent |
| INITIATION | 66 | 6.4 | 86 | 4.0 | 152 | 4.8 |
| ELABORATION | 183 | 17.7 | 209 | 9.8 | 392 | 12.4 |
| EXAMPLE | 36 | 3.5 | 37 | 1.7 | 73 | 2.3 |
| REPETITION | 96 | 9.3 | 59 | 2.7 | 155 | 4.9 |
| AGREEMENT | 56 | 5.4 | 78 | 3.7 | 134 | 4.2 |
| DISAGREEMENT | 12 | 1.2 | 10 | 0.5 | 22 | 0.7 |
| ACKNOWLEDGEMENT | 25 | 2.4 | 32 | 1.5 | 57 | 1.8 |
| CLARIFICATION | 111 | 10.7 | 82 | 3.8 | 193 | 6.0 |
| SEARCH | 1 | 0.1 | 1 | 0.1 | 2 | 0.1 |
| REFERENCE (EXTERNAL LINKS) | 3 | 0.3 | 10 | 0.5 | 13 | 0.4 |
| REFERENCE (INTERNAL LINKS) | 0 | 0.0 | 1 | 0.1 | 1 | 0.03 |
| NEGOTIATION - ARGUE | 10 | 1.0 | 8 | 0.4 | 18 | 0.6 |
| NEGOTIATION – COUNTER ARGUE | 5 | 0.5 | 5 | 0.2 | 10 | 0.3 |
| NEGOTIATION - CONTRAST | 20 | 1.9 | 27 | 1.3 | 47 | 1.5 |
| SUMMATION | 9 | 0.8 | 2 | 0.09 | 11 | 0.3 |
| JUDGEMENT | 6 | 0.6 | 2 | 0.1 | 8 | 0.3 |
| RESPONSE | 55 | 5.3 | 94 | 4.3 | 149 | 4.7 |
| LACK OF KNOWLEDGE | 1 | 0.1 | 5 | 0.2 | 6 | 0.2 |
| SOCIAL AND METACOGNITIVE | | | | | | |
| INTERRUPTED START | 75 | 7.2 | 10 | 0.5 | 85 | 2.7 |
| OFF TASK | 73 | 7.0 | 902 | 42.4 | 975 | 30.8 |
| Grand Total | 1037 | | 2130 | | 3167 | |

The second most frequently used code in KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE dimensions in both modes of discussion is CLARIFICATION which constituted 6% of the total number of turns in the data. CLARIFICATION is

different from ELABORATION in that it refers to participants asking questions in order to facilitate understanding. Again, it follows that with initiation of ideas, questions may be asked to ensure understanding. A comparison between the frequency in which CLARIFICATION occurred in face-to-face and chat data shows that CLARIFICATION was ranked the second most frequently occurred code in face-to-face groups and fourth in chat groups after RESPONSE (i.e. 4.3%) and INITIATION (i.e. 4.0%) as displayed in Table 5.8.

Table 5.8 Ranking of Top 5 KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE codes

| Rank | Top 5 Overall | % | Face-to-face | % | Chat | % |
|------|---------------|------|-------------------|------|---------------|-----|
| 1 | ELABORATION | 12.4 | ELABORATION | 17.7 | ELABORATION | 9.8 |
| 2 | CLARIFICATION | 6.0 | CLARIFICATION | 10.7 | RESPONSE | 4.3 |
| 3 | REPETITION | 4.8 | REPETITION | 9.3 | INITIATION | 4.0 |
| 4 | INITIATION | 4.8 | INTERRUPTED START | 7.2 | CLARIFICATION | 3.8 |
| 5 | RESPONSE | 4.7 | INITIATION | 6.4 | AGREEMENT | 3.7 |

INITIATION and REPETITION are the third most frequently observed codes under KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE dimensions with 4.8% of the total number of turns respectively and RESPONSE the fifth (i.e. 4.7%). Frequency statistics of face-to-face and chat reveal that INITIATION features as the top five most frequently coded turns in both. However, RESPONSE and REPETITION do not seem to occur frequently in face-to-face and chat respectively. Instead, there were many occurrences of INTERRUPTED START (7.2%) in face-to-face and CLARIFICATION (3.8%) and AGREEMENT (3.7%) in chat.

Among the five codes, namely ELABORATION, EXAMPLE, CLARIFICATION, NEGOTIATION, and REFERENCE, identified as expansion of an initiated idea in Level 2 Supporting Details and Level 3 Evidence/Examples, the occurrences of

ELABORATION and CLARIFICATION were more frequent than EXAMPLE, NEGOTIATION and REFERENCE. In terms of the least occurred code under KNOWLEDGE CONSTRUCTION, there was very little negotiation or reference to one another's ideas as reflected in the Table 5.9.

Table 5.9 Ranking of bottom 5 KNOWLEDGE CONSTRUCTION codes

| Rank | Bottom 5 overall | % | Bottom 5 face-to-face | % | Bottom 5 Chat | % |
|------|-----------------------------|------|-----------------------------|------|-----------------------------|------|
| 1 | REFERENCE – INTERNAL | 0.03 | REFERENCE – INTERNAL | 0.0 | REFERENCE – INTERNAL | 0.03 |
| 2 | SEARCH | 0.1 | SEARCH | 0.05 | SEARCH | 0.06 |
| 3 | LACK OF KNOWLEDGE | 0.2 | LACK OF KNOWLEDGE | 0.1 | SUMMATION | 0.09 |
| 4 | NEGOTIATION – COUNTER ARGUE | 0.3 | REFERENCE - EXTERNAL | 0.3 | LACK OF KNOWLEDGE | 0.2 |
| 5 | NEGOTIATION – ARGUE | 0.6 | NEGOTIATION – COUNTER ARGUE | 0.5 | NEGOTIATION – COUNTER ARGUE | 0.2 |

Participants in both face-to-face and chat modes did not question one another's ideas. Instead, the focus seemed to be on establishing consensus and building on one's or others' ideas. This was again observed in the low frequency of occurrence in codes such as REFERENCE - INTERNAL (0.03% of the entire data) and NEGOTIATION – COUNTER ARGUE and NEGOTIATION – ARGUE (0.3% and 0.6% respectively) as displayed in Table 5.9 in addition to DISAGREEMENT which accounted for a mere 0.7% of the overall data.

This finding prompts further discussion on some features of the nature of the brainstorming discussion task that is conducted prior to writing. Based on the pattern observed of participants trying to establish agreement in both face-to-face and chat discussions, they might have perceived the brainstorming task as exploratory talk and not an exercise requiring them to argue for or defend ideas. Furthermore, because all the students come from an Asian culture which is considered a “collectivist

classroom” (Hofstede & Hofstede, 2005, p. 98) where keeping harmony is crucial, the tendency is to concur and avoid any disagreement or conflict so that no one feels ashamed. This follows one of the main teachings of Confucius where maintaining peace and harmony is synonymous to maintaining individual’s face (Hofstede & Hofstede, 2005).

In addition, since the essay is an individual effort, the outcome of the discussion may not have significant effects on the ideas and key points that each individual is going to use for his or her essay. This is because students do not necessarily have to use ideas brought up at the brainstorming session. In fact, the brainstorming session could be seen as an idea gathering and idea testing session. Therefore, participants who do not agree with certain ideas need not use these ideas in their writing. A similar pattern of consensus seeking can also be observed from discussion tasks of collaborative group projects where the result of the discussion is a piece of co-authored text. As demonstrated in Plowman’s (1993) study, there is an implicit common goal in reaching consensus on content even though one of the participants, Pam, who assumed leadership role in scribing was controlling the content of the text.

Another feature emerging from the finding relates to the inherent nature of face-to-face and chat environments. There were many occurrences of INTERRUPTED START (i.e. 7.2% of face-to-face data) in face-to-face but it was hardly found in chat (i.e. 0.5% of chat data). This is a feature that does not seem consistent with the nature of chat where multiple, simultaneous and incomplete discussion threads are expected due to the absence of nonverbal cues. However, it is equally explainable that there may be tacit understanding among participants to wait for one to complete his or her

thread of thought thus the lack of interruption by others when one is composing his or her ideas. In fact, the absence of nonverbal cues in chat that is present in face-to-face could be a motivation for one to express his or her thoughts without being influenced by reactions of the other participants.

In terms of SUMMATION, there was hardly any effort shown in chat to summarize discussion (0.09% of chat data) while in the face-to-face context there was little but still some effort demonstrated (i.e. 0.8% of face-to-face data).

Example (69) is an illustration of participants' effort in seeking agreement instead of arguing against one another although there is some evidence between student Z and student V where the latter challenged the relevance of a television situation comedy, PCK, in turns 075 and 077. However, as seen in turn 078, SH joined the discussion and tried to mediate between Z and V in turn 080 when he said that V's view was 'in some ways correct'. Subsequently, the discussion moved to another topic which was talked about earlier. There was also no evidence that Z or V attempted to pick up the *near* argument on PCK.

(69)

| Turn | Participant | Utterance | Code |
|------|-------------|---|-------------------|
| 069 | Z: | So a better understanding of each other before they get married then you can have stronger marital relationship. | elaboration |
| 070 | Z: | I find that maybe that's what we can say, <i>lah</i> ...that ... | interrupted start |
| 071 | V: | Social, I also can think of a point that the, all the while the tv shows, all these is having a bad influence on the child all this | elaboration |
| 072 | Z: | But what tv shows would you cite? | clarification |
| 073 | V: | PCK is talking a lot of Singlish. | example |
| 074 | V: | It's not very good for ... | interrupted start |
| 075 | Z: | What has it got to do with relationships? | nego (argue) |
| 076 | V: | Relationships | repetition |
| 077 | Z: | We are talking about relationships, not | nego (argue) |

| | | | |
|-----|-----|---|---------------|
| | | talking about English | |
| 078 | SH: | No, talking about social, right? | clarification |
| 079 | V: | Relationship is also to show role model, right? | nego (defend) |
| 080 | SH: | In some ways, it's correct, <i>lah</i> , right? | agreement |
| 081 | SH: | I know one thing is, computer is about society. | elaboration |
| 082 | SH: | It's all so high tech, so engrossed in computer games and not spending enough time. | elaboration |

[Main study, F2F 1]

To summarise, in terms of quantity of ideas generated, the chat groups brainstormed more ideas, namely an average of 42.3 idea threads in each group compared with the face-to-face groups which generated an average of 35.3 idea threads per group. In terms of ideas categorised under KNOWLEDGE CONSTRUCTION dimension, findings show that participants of both face-to-face and chat brainstorming sessions focused on ELABORATION, RESPONSE, INITIATION, CLARIFICATION and AGREEMENT. Evidence points towards establishing consensus in the development of ideas and very little evidence on discussion or argument on the strength of the ideas. Participants appeared to accept one another's ideas with little or no attempt to argue against or defend them.

TASK CONCEPTION

In the following section, an analysis of interaction pattern in TASK CONCEPTION dimension will be discussed. There are four sub-categories established under TASK CONCEPTION dimension: STRUCTURE, PLANNING, REQUIREMENT and LANGUAGE. TASK CONCEPTION is concerned with discussion on the format and organisation of an essay, how students approached the task and if there was any negotiation on language use. As displayed in Table 5.10, the frequency of occurrence of TASK CONCEPTION in the brainstorming session was 5.1% of the entire face-to-face and chat data;

specifically, 6.6% of the face-to-face discussion and 4.3% of the chat discussion.

This shows that there was very minimal focus on TASK CONCEPTION in both face-to-face and chat groups.

Table 5.10 Frequency of codes in TASK CONCEPTION

| | Mode of discussion | | | | | |
|-------------|--------------------|----------|-----------|----------|-----------|----------|
| | Face-to-face | | Chat | | Total | |
| Codes | frequency | per cent | frequency | per cent | frequency | per cent |
| STRUCTURE | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| PLANNING | 43 | 63.2 | 25 | 26.6 | 68 | 42.0 |
| REQUIREMENT | 25 | 36.7 | 63 | 67.0 | 88 | 54.3 |
| LANGUAGE | 0.0 | 0.0 | 6 | 6.4 | 6 | 3.7 |
| Grand Total | 68 | 6.6 | 94 | 4.3 | 162 | 5.1 |

Of particular interest are the contradictory findings between the face-to-face and chat groups in terms of PLANNING and REQUIREMENT. Although overall percentages show that 42% and 54.3% respectively of the discussion on TASK CONCEPTION was on PLANNING and REQUIREMENT, a closer observation of data in face-to-face indicate that 63.2% of discussion in establishing the task was on PLANNING while the main discussion on TASK CONCEPTION for chat was on REQUIREMENT, namely 67%. In short, PLANNING which refers to discussion on how ideas or points could be arranged in the essay, was found more frequently in face-to-face than in chat brainstorming sessions.

In example (70) which was taken from F2F 1, there are three instances that portray examples of PLANNING. From turns 092 to 094, participants were attempting to organise and arrange in sequence ideas that they discussed in the essay. Participants revisited the organisation of points in terms of the sequence in which they should

appear in the essay in turns 117 to 123. Towards the end of the discussion, from turns 143 to 147, participants were again attempting to arrive at a consensus of the sequence of key points.

(70)

| Turn | Participant | Utterance |
|------|-------------|---|
| 092 | Z: | So the child-parent relationship will come under ... because it's under second point then you can get a stronger marital relationship. |
| 093 | SH: | Yeah. |
| 094 | Z: | But I think that after the strong marital relationship, you should try to write about family relationship because you are writing about family, not solely about two parents, the children? |
| 117 | SH: | So the first point we'll write is that to promote the three things, <i>right</i> , time management. |
| 118 | V: | Why don't we write it in a way that ... from the least important to the most important? |
| 119 | Z: | The problem is if you say according to importance, how can you have understanding without communication? |
| 120 | SH: | No, you don't have to write it in emphatic order. In this essay, all these three points are linked. |
| 121 | Z: | You must start with one point which leads on to the rest. It's following the order. |
| 122 | SH: | So, second point is <i>what</i> ? |
| 123 | V: | Communication? Because communication can leads to understanding. |
| 143 | Z: | Yeah, <i>lah</i> , but understanding that part is really really sub under it. |
| 144 | SH: | So now if you think we've enough points, then you just choose, <i>lah</i> . |
| 145 | V: | Three points so we're thinking of three ways. |
| 146 | SH: | Yeah, thinking of three ways. |
| 147 | V: | Because it's first time management, secondly, it's family outing, thirdly is? |

[Main study, F2F 1]

A similar example could be found in F2F 2 where participants discussed which key points to place in different paragraphs of the essay, as demonstrated in example (71).

(71)

| Turn | Participant | Utterance |
|------|-------------|--|
| 013 | SHU: | Yeah, in introduction ... something ... family life |
| 014 | XW: | So you can start with a heading ... just an introduction |
| 015 | SHU: | Yeah. |

| | | |
|-----|-----|--|
| 016 | S: | ... like your first paragraph. After that you'll have to have, like, all the factors about ... |
| 017 | XW: | Ah ... is that all? |

[Main study, F2F 3]

However, REQUIREMENT was more frequently observed in chat than in face-to-face. Its application could be seen from three excerpts of example (72) of chat 3. From turns 072 to 074, Teck(Joker) was checking with his chat mates if the essay needed to be type-written. This was repeated in two subsequent occasions, in turns 094 and 156. As observed, the group's interaction from turns 089 to 095 and turns 156 to 163 was related to clarification and establishment of what is required of the assigned writing activity.

(72)

| Turn | Participant | Utterance |
|------|--------------|---|
| 072 | Teck(Joker): | all muz tpye out is it |
| 073 | Peng(TatZz): | i think so |
| 074 | Teck(Joker): | type* |
| 089 | Peng(TatZz): | what abt the pre-writing questions |
| 090 | Peng(TatZz): | we must answer the 2 of them ? |
| 091 | Teck(Joker): | yes |
| 092 | Peng(TatZz): | then chose 1 more of the 2 writing task ? |
| 093 | Teck(Joker): | i think |
| 094 | Teck(Joker): | the draft is typr out the whole essay? |
| 095 | Teck(Joker): | yup |
| 154 | Peng(TatZz): | we will be doin individual essays |
| 155 | Peng(TatZz): | we need points for the out line ... |
| 156 | Teck(Joker): | the draft is type out the whole essay? |
| 157 | Teck(Joker): | si it? |
| 158 | Peng(TatZz): | i dunno leh |
| 159 | Peng(TatZz): | shld be la |
| 160 | Peng(TatZz): | somethin like tt |
| 161 | Teck(Joker): | kk |
| 162 | Teck(Joker): | but like that i type 1 actual 1 then ok liao what |
| 163 | Ting(lim): | Then we are supposed to type out the draft and the essay is it? |

[Main study, chat 3]

In fact, similar clarification on task requirement specifically on essay submission format was also present in other chat groups besides chat 3, as displayed in examples (73) to (75).

(73)

| Turn | Participant | Utterance |
|------|-------------|---|
| 344 | Char: | hey the draft rite, we type and email her or? |
| 345 | G: | if u cannot finish by oday |
| 346 | G: | today |

[Main study, chat 4]

(74)

| Turn | Participant | Utterance |
|------|-------------|---|
| 055 | BL: | finish dicussing stil mus go hm write ar? |
| 056 | Mad: | ya |
| 057 | Jul: | ya <i>loh</i> |

[Main study, chat 5]

(75)

| Turn | Participant | Utterance |
|------|-------------|------------------------------|
| 177 | PLX : | must pass up today! |
| 178 | IM : | outline is roughly right ? |
| 179 | IM : | we have come up with 3 pts ? |
| 180 | PLX : | yes |
| 181 | IM : | ok |

[Main study, chat 6]

Another difference between the face-to-face and chat groups could be seen in the discussion of LANGUAGE. As seen in Table 5.10, none of the face-to-face groups touched on LANGUAGE but 6.4% of the chat group discussion was on LANGUAGE. A closer examination reveal that students in chat 2 (see example 76) checked the meaning of a word, namely resilient and student in chat 6 (see example 77) corrected her typo (i.e. mechanics) in turn 069. There was no comment on sentence structure and grammar. The presence of mechanics in chat though little and the absence of it in face-to-face could be related to the nature of the modality – one which is oral and

another written. Unlike chat discussion which is text-based, the face-to-face discussion is verbal thus there is hardly any mechanics or typos for participants to comment on.

(76)

| Turn | Participant | Utterance |
|------|-------------|---|
| 141 | CY: | resilient meaning resistant to the bad social climate etc |
| 142 | T: | is it? |
| 143 | JieJ: | rit |
| 144 | JieJ: | rite |
| 145 | CY: | resilient meaning resistant to the bad social climate etc |

[Main study, chat 2]

(77)

| Turn | Participant | Utterance |
|------|-------------|-----------------|
| 068 | SY : | let's starts!! |
| 069 | SY : | spelled wrongly |

[Main study, chat 6]

Another observation relates to STRUCTURE. There was no occurrence of STRUCTURE in both face-to-face and chat discussions. This could imply that students were already familiar with the format of an essay thus a discussion on it was not necessary.

Alternatively, since the objective of the brainstorming session was to develop ideas for the essay, students could view this as not part of the discussion.

In short, TASK CONCEPTION did not feature prominently in both face-to-face and chat brainstorming sessions in this study. In instances where TASK CONCEPTION occurred, only PLANNING and REQUIREMENT were observed in higher frequency.

MANAGEMENT OF DISCUSSION

In MANAGEMENT OF DISCUSSION dimension, findings reveal that it constituted 17.1% of all the turns in both face-to-face and chat modes. Among all six sub-categories in

MANAGEMENT OF DISCUSSION dimension – CONTACT, ELICITATION, FOCUS, SUGGEST, CONSENSUS and REPLY – REPLY (25.7%) and FOCUS (25%) occurred the most frequently while SUGGEST and CONSENSUS occurred the least frequently (see Table 5.11).

Table 5.11 Frequency of codes in MANAGEMENT OF DISCUSSION

| | Mode of discussion | | | | | |
|-------------|--------------------|----------|-----------|----------|-----------|----------|
| | Face-to-face | | Chat | | Total | |
| Codes | frequency | per cent | frequency | per cent | frequency | per cent |
| CONTACT | 1 | 0.8 | 100 | 24.1 | 101 | 18.7 |
| ELICITATION | 31 | 24.6 | 31 | 7.5 | 62 | 11.5 |
| FOCUS | 39 | 31.0 | 96 | 23.1 | 135 | 25.0 |
| SUGGESTION | 11 | 8.7 | 34 | 8.2 | 45 | 8.3 |
| CONSENSUS | 12 | 9.5 | 47 | 11.3 | 59 | 10.9 |
| REPLY | 32 | 25.4 | 107 | 25.8 | 139 | 25.7 |
| Grand Total | 126 | 12.2 | 415 | 19.2 | 541 | 17.1 |

A closer observation of the data reveal that although REPLY occurred most frequently in MANAGEMENT OF DISCUSSION, the frequency of occurrence is higher in chat than in face-to-face. REPLY refers to a decision made (which could be done via voting) or comments made on the discussion. Examples illustrating the former could be observed in excerpts from chat groups in examples (78) to (80). Participants were deciding or taking a vote on which writing question to do. Turns in **bold** reflect participants' vote or decision and their response to what was discussed.

(78)

| Turn | Participant | Utterance |
|------------|-------------|------------------------------------|
| 120 | T: | which? 1 or 2 |
| 121 | T: | i think 2 |
| 122 | JieJ: | anyone feels which is beta? |
| 123 | MT: | i dunno |
| 124 | MT: | both of them seem difficult |

| | | |
|------------|--------------|-----------------------------------|
| 125 | CY: | 1st one will require some history |
| 126 | JieJ: | abt e same for both |
| 127 | JieJ: | ya u r rite |
| 128 | CY: | n i din take history :P |
| 129 | T: | so 2 <i>la</i> |
| 130 | JieJ: | so qn 2 any1 disagre |
| 131 | T: | i'm ok with it. MT? |
| 132 | CY: | me think 2 betta |
| 133 | MT: | ok q2 agree |

[Main study, chat 2]

(79)

| Turn | Participant | Utterance |
|------------|--------------|------------------------------|
| 099 | Char: | 1 or 2 i mean |
| 100 | G: | hmm... |
| 101 | G: | take a vote? |
| 102 | Char: | yup think 1 is easier |

[Main study, chat 4]

(80)

| Turn | Participant | Utterance |
|------------|-------------|---|
| 024 | Mad: | which qn we wan to do? |
| 025 | BL: | choose any qn <i>la</i> ...all e same to mi |
| 026 | Mad: | i would go for 2...hw abt u guys? |
| 027 | Jul: | anything <i>loh</i> |

[Main study, chat 5]

REPLY was also coded for instances where a comment or remark was made in response to the discussion (and not the content of the topic), which is a part of any discussion process. In short, it is different from RESPONSE under KNOWLEDGE CONSTRUCTION dimension in that it is concerned with non-content related remarks made as part of discussion. Examples of such instances are illustrated in highlighted utterances in examples (81) and (82).

(81)

| Turn | Participant | Utterance |
|------------|-------------|--------------------------------------|
| 018 | Joy: | so u want to discuss 1 or 2 or both? |
| 019 | ML: | hmm... |

[Main study, chat 1]

(82)

| Turn | Participant | Utterance |
|------------|-------------|---|
| 043 | Z: | Third point you think about it. |
| 044 | SH: | Don't worry, <i>can</i>. |
| 045 | V: | You must see how many points, <i>lah</i> . |
| 046 | SH: | Yeah. Because now it's only discussion, <i>what</i>. |

[Main study, F2F 1]

In example (81), ML's "hmm..." in turn 019 reflects her consideration about the question she would like to discuss. In example (82), SH was responding to his group members' suggestion of what seems like an assignment of task in turns 044 and 046.

Another most commonly seen feature of REPLY is when participants acknowledge that they are with the discussion. This can be easily done with responses like "yes", "yup", "and", "ok", "go on" and other similar expressions in a single utterance or turn to prompt the other person to continue talking and to show support listening. However, this feature of REPLY was not prominent or significant in both face-to-face and chat data. Instead, there were many instances of checking and confirmation of understanding specifically in chat, as displayed in example (83). JieJ and T were responding to CY's question about what the discussion was about.

(83)

| Turn | Participant | Utterance |
|------|-------------|--|
| 111 | CY: | we r discussing the writing task rite? or both |
| 112 | JieJ: | tt's rite |
| 113 | T: | haha. but that'll be hard for the limited time |
| 114 | JieJ: | writing task |
| 115 | T: | yeah |

[Main study, chat 2]

It is expected for the findings to reveal that REPLY has the highest percentage of occurrence in MANAGEMENT OF DISCUSSION, namely 25.7%. It somewhat follows the principle of Initiate-Response-(Feedback) in that in conversations or discussions involving two or more parties, the exchanges consist of cycles of turns where participants initiate a conversation thread, get response and most of the time provide feedback to the response. However, unlike the Initiate-Response-Feedback characteristic sequence of moves in Sinclair and Coulthard's discourse analysis (1975) where the teacher is the dominant agent in the classroom in giving evaluative comments to students, the feedback coded as REPLY in this study represents more of acknowledgement than judgement. This is reflected in the use of a bracket for feedback in Initiate-Response-(Feedback) to indicate both its similarity and difference to Sinclair and Coulthard's model.

FOCUS is the second most frequently observed feature in MANAGEMENT OF DISCUSSION for both chat and face-to-face groups. FOCUS refers to utterances that help to give or seek for focus or direction to the discussion or task. In short, these utterances assist in managing the discussion so that it is relevant to the topic.

Examples (84) to (87) illustrate different instances of FOCUS.

In examples (84) and (87), both V in turn 031 and PL in turn 035 attempted to get their respective group members to move on the second point of their discussion.

(84)

| Turn | Participant | Utterance |
|------------|-------------|--|
| 029 | Z: | Without the parents, then the family is gone. |
| 030 | Z: | Then you need to add... |
| 031 | V: | So, shall we move on to our second point? |
| 032 | V: | Anything else you would like to ... |
| 033 | Z: | Second point, okay. |
| 034 | V: | Anything to say about second point? |

[Main study, F2F 1]

(85)

| Turn | Participant | Utterance |
|------|-------------|--|
| 035 | PL: | Probably we should go on to the second question. |
| 036 | C: | Yeah. Is there any other way, ah? |

[Main study, F2F 5]

In example (86) as illustrated in turn 061, amidst a string of off task talk, BL tried to re-focus the group's attention to the discussion task. This is another instance of a member trying to draw the members' attention back to the discussion.

(86)

| Turn | Participant | Utterance |
|------|-------------|---|
| 058 | BL: | super <i>sian</i> (<i>boring</i>)!! |
| 059 | Jul: | but can do our work here then save it loh |
| 060 | Mad: | muz write esaay some more :(|
| 061 | BL: | kk..faster den.. |
| 062 | Jul: | super <i>sian</i> (<i>boring</i>) |
| 063 | Mad: | no mood to do |

[Main study, chat 5]

As for example (87), the utterances in turns 030, 031 and 032 show that all the team members seemed to be seeking some form of direction for the discussion. This in fact is another form of FOCUS.

(87)

| Turn | Participant | Utterance |
|------|-------------|---|
| 030 | SY: | i think we are going out of point. |
| 031 | IM: | ya...i very blur...what are we suppose to do? |
| 032 | PLX: | read then discuss |

[Main study, chat 6]

In fact, FOCUS is the most observed feature for face-to-face, with an occurrence rate of 31% as compared to the other features in MANAGEMENT OF DISCUSSION. For chat groups, FOCUS is ranked third with a frequency rate of 23.1%. Seen in the context of

the entire data, FOCUS occurred only 4.2% in the entire chat and face-to-face data. Although this may not seem a high percentage, almost similar to REPLY, the frequency amounts to about one quarter of the total turns in MANAGEMENT OF DISCUSSION. Therefore, it is an aspect that should not be taken too lightly.

In most of the discussion groups, there seems to be one or two members who steered the group towards the topic of discussion or task at hand. Data presented in Table 5.12 list all the members in each discussion group, show the total number of turns coded as FOCUS in each discussion group and highlight members who demonstrated the highest occurrence of FOCUS. Results in Table 49 show that it is more obvious or apparent in seven out of eight of the face-to-face group (i.e. except F2F 7) that there is one significant member (in **bold**) in each group who attempted to provide direction to the discussion or to keep the discussion focused. This observation is similar to findings in the chat groups where there is one member (in **bold**) in six out of eight groups who had the highest number of FOCUS.

Table 5.12 Frequency of codes in FOCUS

| Group | Participant | No of turns | % of turns | Total no of turns |
|--------|--------------------|-------------|--------------|-------------------|
| Chat 1 | Joy | 3 | 100 | 3 |
| | ML | 0 | 0 | |
| Chat 2 | JieJ | 6 | 24 | 25 |
| | T | 14 | 56 | |
| | CY | 5 | 20 | |
| | MT | 0 | 0 | |
| Chat 3 | Teck(Joker) | 4 | 50 | 8 |
| | Peng(TatZz) | 4 | 50 | |
| | R | 0 | 0 | |
| | Ting(lim) | 0 | 0 | |
| Chat 4 | Char | 15 | 68.18 | 22 |
| | G | 6 | 27.28 | |
| | Jan | 1 | 4.55 | |
| Chat 5 | Jul | 1 | 11.11 | 9 |
| | Mad | 3 | 33.33 | |

| | | | | |
|--------|-------------------|----------|--------------|----|
| | BL | 5 | 55.55 | |
| Chat 6 | SY | 5 | 45.45 | 11 |
| | IM | 1 | 9.09 | |
| | PLX | 2 | 18.18 | |
| | Huey | 3 | 27.27 | |
| Chat 7 | SL | 1 | 14.29 | 7 |
| | WP | 3 | 42.86 | |
| | sWt_drEaMz | 3 | 42.86 | |
| Chat 8 | Sirin | 2 | 16.67 | 12 |
| | CL | 1 | 8.33 | |
| | Jes | 4 | 33.33 | |
| | JJ | 5 | 41.67 | |
| F2F 1 | V | 3 | 75 | 4 |
| | Z | 1 | 25 | |
| | SH | 0 | 0 | |
| | HJ | 0 | 0 | |
| F2F 2 | LD | 1 | 16.67 | 6 |
| | J | 3 | 50 | |
| | SF | 1 | 16.67 | |
| | ZW | 1 | 16.67 | |
| | H | 0 | 0 | |
| F2F 3 | M | 4 | 80 | 5 |
| | XW | 1 | 20 | |
| | S | 0 | 0 | |
| | SHU | 0 | 0 | |
| F2F 4 | P | 2 | 100 | 2 |
| | Shirn | 0 | 0 | |
| | Ena | 0 | 0 | |
| | LX | 0 | 0 | |
| F2F 5 | PL | 2 | 100 | 2 |
| | C | 0 | 0 | |
| | W | 0 | 0 | |
| F2F 6 | A | 1 | 100 | 1 |
| | CS | 0 | 0 | |
| | E | 0 | 0 | |
| | FY | 0 | 0 | |
| F2F 7 | J, QY, ZY, CL | 0 | 0 | 0 |
| F2F 8 | R | 2 | 100 | 2 |
| | SZ | 0 | 0 | |
| | A | 0 | 0 | |

There are a couple of interesting observations in the data. First, on average there were more instances of FOCUS in the chat groups than in the face-to-face groups, namely an

average frequency of 12 occurrences for chat and 2.8 for face-to-face mode. Second, it could be noted that except for chat 1 and chat 3, every member in the other chat groups contributed to giving or providing focus to the discussion. This is not apparent in the face-to-face groups where in at least four out of eight of the groups, only one member had turns coded FOCUS. This finding seems to suggest more involvement of chat members than face-to-face members in directing the discussion back to the intended topic. It also leads to the question of whether individuals who take a leadership role in initiating topics are the same ones who take the lead role in managing the discussion. The results of the present study indicate that only two among the eight face-to-face groups or 25% of the face-to-face groups and only three among eight chat groups or 37.5% of the chat groups had the same member who both had the highest frequency of occurrence for FOCUS and INITIATION. This implies that participants who initiate topics may not necessarily be those providing focus during a discussion.

A third observation concerns the nature of FOCUS in face-to-face and chat. Upon analysis of the discourse that appeared before FOCUS, the data revealed that most of the time, FOCUS came after OFF TASK discussion in chat environment. This finding seems logical considering that there was such a high percentage of OFF TASK discussion in chat. However, a similar trend could not be observed in face-to-face discussion. In other words, when FOCUS occurred in face-to-face groups, it does not necessarily and immediately follow OFF TASK as illustrated in example (88) in turn 012 where J drew the attention of the group to the essay prompt.

(88)

| Turn | Participant | Utterance |
|-------------|--------------------|---|
| 011 | Z: | It's supposed to be an article written for the annual Ridge |

publication.

012 J: **Okay, let's discuss our question about the factors that have shaped the family relationship in Singapore in the last decade.**

013 Z: Family relationship.

[Main study, F2F 2]

Although the frequency of occurrence of FOCUS was low and thus any firm conclusion could not be drawn, it could be seen that FOCUS in face-to-face was situated within the discourse of MANAGEMENT OF DISCUSSION and TASK CONCEPTION dimensions. In other words, the conversation centred around a discussion on how the participants interacted in trying to carry out or in establishing the requirements of the given task. For instance, in the same example (88), while Z talked about the requirement of the task, J's response was one that attempted to give focus to the writing topic.

Similarly, in example (89) in turns 008 and 009 V was giving direction to the discussion by reiterating the topic of the writing task. Therefore, the difference is that in chat groups, FOCUS was used to get participants back on task whereas in face-to-face groups, FOCUS was used to negotiate priorities or different interpretations of the task.

(89)

| Turn | Participant | Utterance |
|------|-------------|---|
| 006 | V: | Which question? |
| 007 | SH: | Okay, question two, <i>lor</i> . |
| 008 | V: | So, we decide on question two, <i>lah</i>. |
| 009 | V: | So, now with question two, right, we need to focus on what are the factors to strengthen family relationships in the current social and economic climate in Singapore. |

[Main study, F2F 1]

Although examples (88) and (89) show that FOCUS appeared at the initial stage of the discussion, the discourse of FOCUS towards the latter part of the face-to-face discussion also indicated participants' re-focus on either the points or ideas that had been discussed or threads showing direction of discussion, as displayed in example (90) of F2F 1. In this example, similar to the early part of the discussion, V in turn 031 was guiding the discussion, namely moving from one point to the next.

(90)

| Turn | Participant | Utterance |
|------|-------------|--|
| 031 | V: | So, shall we move on to our second point? |
| 032 | V: | Anything else you would like to ... |
| 033 | Z: | Second point, okay. |

[Main study, F2F 1]

This implies that the discussion in face-to-face mode is more sustained since it refers back to issues previously discussed, whereas discussion in chat mode is more episodic namely moving from one topic to the next without referring back to previously mentioned topics. Data on the number of topics initiated in face-to-face and chat groups, as displayed in Table 5.5 and Table 5.6 on the distribution of key and supporting ideas, seem to substantiate this observation as it was found that the total number of ideas captured in all chat groups is higher than in face-to-face groups namely 338 in chat as compared to 282 in face-to-face groups. The data also coincide with the frequency of codes on INITIATION as presented in Table 5.7 which shows a higher number of chat turns (i.e. 86) as compared with face-to-face turns of 66.

Nonetheless, when further analysis was done to look at what followed the last three occurrences of FOCUS in face-to-face and chat scripts, it was found that the difference is not between face-to-face mode and chat mode of discussion. Instead, whether a

member's re-focus effort resulted in the rest returning to the discussion is related to the occurrence of OFF TASK discussion. Groups with a high frequency of OFF TASK occurrences appeared to have a less focused tendency. An example of an OFF TASK occurrence after FOCUS is as illustrated in example (91) where in turn 281, Char attempted to draw the group's attention back to the discussion but she was not successful as seen in turns 282 and 283.

(91)

| Turn | Participant | Utterance |
|------|-------------|---|
| 281 | Char | hey refer back to the qns, the factors tt shape family can be bad and gd pts rite? |
| 282 | Jan: | ask dad roy to buy u food den |
| 283 | G: | i am not mum u know |

[Main study, chat 4]

In summary, in most of the instances where FOCUS occurred more frequently in chat discussion, there was a connection with OFF TASK communication that had taken place prior to an attempt to draw the attention of the participants back to the discussion. However, in face-to-face environment, the discourse surrounding FOCUS was one that attempted to give an alternative direction to the discussion instead of one that tried to re-capture a conversation that went out of topic.

The third most frequently occurring feature under the MANAGEMENT OF DISCUSSION dimension is CONTACT. CONTACT usually occurs at the beginning of the discussion where members of the discussion group establish rapport and connection with one another. As depicted in Table 5.11 on page 235, there was only one instance of CONTACT in the face-to-face mode. However, there were 100 instances of CONTACT among the eight chat groups. Because of the nature of chat where members could not see each other physically, it would be expected that its frequency of occurrence is

higher in chat as compared with face-to-face. The key aim of the chat participants was to establish who they were communicating with especially in cases where nicknames were used. Although students already knew prior to the discussion members who were in their respective groups, many of the students changed their real names to nicknames upon entering the chat room thus the confirmation of and reference to nicknames seemed necessary.

Examples (92) and (93) illustrate both these situations. In example (92), when MT joined the discussion slightly later in turn 044, the rest were assisting her in establishing contact with one another.

(92)

| Turn | Participant | Utterance |
|------|-------------|----------------------------|
| 044 | MT: | who is this? |
| 045 | JieJ: | hi there,ur group memer,JJ |
| 046 | MT: | ooo ic |
| 047 | JieJ: | the other is T |
| 048 | MT: | ok |
| 049 | T: | hello |
| 050 | MT: | hiii |
| 051 | CY: | hello |

[Main study, chat 2]

Example (93) shows communication among participants after they attempted to set up nicknames. They therefore were attempting to find out who each nickname represented.

(93)

| Turn | Participant | Utterance |
|------|--------------|----------------------|
| 056 | Ting(lim): | And you are? |
| 057 | Peng(TatZz): | i am Peng(TatZz) |
| 058 | Teck(Joker): | I am Teck(Joker) |
| 059 | Ting(lim): | No i mean real name? |

[Main study, chat 3]

In fact, findings reveal that only chat 2 and chat 3 had the highest occurrence of CONTACT, namely 35 and 25 instances respectively. The main reason attributing to the high frequency of CONTACT in chat 2 and chat 3 is the chat members' use of nicknames thus they were trying to establish the owners of respective nicknames. In addition, in chat 2, a couple of members left the chat towards the later part of discussion. When they re-joined the chat room, there was occurrence of CONTACT. In the other chat groups, CONTACT appeared mainly at the beginning of the discussion where participants either greeted one another or tried to identify who their group members were. This suggests that unless there are special circumstances, CONTACT is a feature that seldom occurs after the initial stage of the chat communication.

The remaining three features under MANAGEMENT OF DISCUSSION - ELICITATION, SUGGESTION and CONSENSUS, though did not occur much in both chat and face-to-face discussions, played a definite role in discussion.

ELICITATION refers to an open invitation for all to participate or specific questions or prompts directed at individuals. Table 5.13 displays the frequency of occurrence of ELICITATION in each chat and face-to-face group.

Table 5.13 Frequency of codes in ELICITATION

| Group | Participant | No of turns | % of turns | Total no of turns |
|--------|---------------------|-------------|------------|-------------------|
| Chat 1 | Joy* | 3 | 100 | 3 |
| | ML | 0 | 0 | |
| Chat 2 | JieJ | 1 | 25 | 4 |
| | T* | 3 | 75 | |
| | CY | 0 | 0 | |
| | MT | 0 | 0 | |
| Chat 3 | Teck(Joker) | 2 | 40 | 5 |
| | Peng(TatZz)* | 3 | 60 | |
| | R | 0 | 0 | |
| | Ting(lim) | 0 | 0 | |

| | | | | |
|--------|--------------------|----------|--------------|-------|
| Chat 4 | Char* | 4 | 66.67 | 6 |
| | G | 1 | 16.67 | |
| | Jan | 1 | 16.67 | |
| Chat 5 | Jul | 0 | 0 | 2 |
| | Mad | 2 | 100 | |
| | BL | 0 | 0 | |
| Chat 6 | SY* | 3 | 100 | 3 |
| | IM | 0 | 0 | |
| | PLX | 0 | 0 | |
| | Huey | 0 | 0 | |
| Chat 7 | SL | 1 | 50 | 2 |
| | WP | 0 | 0 | |
| | sWt_drEaMz* | 1 | 50 | |
| Chat 8 | Sirin | 4 | 80 | 4 (5) |
| | CL | 0 | 0 | |
| | Jes | 1 | 20 | |
| | JJ | 0 | 0 | |
| F2F 1 | V | 7 | 58.33 | 12 |
| | Z | 2 | 16.67 | |
| | SH | 3 | 25 | |
| | HJ | 0 | 0 | |
| F2F 2 | LD | 0 | 0 | 1 |
| | J* | 1 | 100 | |
| | SF | 0 | 0 | |
| | ZW | 0 | 0 | |
| | H | 0 | 0 | |
| F2F 3 | M | 1 | 33.33 | 3 |
| | XW | 0 | 20 | |
| | S | 2 | 66.67 | |
| | SHU | 0 | 0 | |
| F2F 4 | P | 0 | 0 | 1 |
| | Shirn | 0 | 0 | |
| | Ena | 1 | 100 | |
| | LX | 0 | 0 | |
| F2F 5 | PL | 0 | 0 | 4 |
| | C | 4 | 100 | |
| | W | 0 | 0 | |
| F2F 6 | A* | 5 | 71.43 | 7 |
| | CS | 1 | 14.29 | |
| | E | 0 | 0 | |
| | FY | 1 | 14.29 | |
| F2F 7 | J, QY, ZY, CL | 0 | 0 | 0 |
| F2F 8 | R* | 2 | 66.67 | 3 |
| | SZ | 1 | 33.33 | |
| | A | 0 | 0 | |

* indicates members with the highest number of FOCUS and ELICITATION in respective discussions

In most groups, there was usually one participant who played the role of seeking participation of others. In fact, in more than 90% of the occurrences, the solicitation of participation was open to everyone and not directed at any particular member of the group. Additionally, participants who had the most number of turns for ELICITATION seemed to play the part of keeping the discussion on track. Interestingly, it was noted that 68.8% of the participants (highlighted in Table 5.13 through the use of an asterisk *) who had the highest percentages of turns for ELICITATION also had the highest percentage of turns for FOCUS. This seems to imply that these participants were leading the respective discussion groups in soliciting participation.

A cross-sectional comparison between frequency of occurrence of ELICITATION and FOCUS show that in ten out of 16 teams (namely 62.5%), the team member with an asterisk (*) who had the most percentage of turns in FOCUS had the highest percentage of turns in ELICITATION as well. This may not be a surprise since they were active participants of the discussion with 37.5% having the highest percentage of turns. As a result, it could thus be expected that the frequency of occurrences in these two features is high as well. Nonetheless, what is interesting to note is that there was one significant member in each group who seemed to lead the group in either focusing the group's attention on the discussion (i.e. 75% of the time) or in trying to initiate response from the rest (i.e. 94% of the time).

SUGGESTION is a proposed plan on how the discussion should proceed. It could also refer to instructions given by a member to others. Example (94) provides an

illustration of both features of SUGGESTION. In turn 090, T gave a suggestion of the duration the team should take to consider the issue; whereas in turn 092 CY asked the rest to read the passage before proceeding with the discussion.

(94)

| Turn | Participant | Utterance |
|------------|-------------|---|
| 089 | CY: | ok shall we star wif qs 1?? |
| 090 | T: | give each 1min to settle this then we discuss liao |
| 091 | CY: | ok |
| 092 | CY: | read 1st :P |

[Main study, chat 2]

When a tabulation was done to ascertain the frequency of occurrence, it was found that 88.9% of the time, group members gave suggestions on how to proceed with the discussion while 11.1% gave specific instructions as illustrated in turn 092 of example (94). Additionally, it was observed that most of the members who gave the order or instruction were those who had a higher frequency of occurrence in FOCUS and ELICITATION. A good illustration is SY of chat 6 in examples (95) and (96) turns 014 and 068 respectively. She had the highest participation rate in her group discussion with 35.3% of turns, she contributed the most in FOCUS and ELICITATION, and she seemed to be the only member in her group who gave orders or instructions, as demonstrated in examples (95) and (96).

(95)

| Turn | Participant | Utterance |
|------------|-------------|--|
| 014 | SY : | i think we chat too much!! read now |
| 015 | PLX : | yes |
| 016 | SY : | read already |

[Main study, chat 6]

(96)

| Turn | Participant | Utterance |
|------|-------------|---------------|
| 065 | SY : | i prefer qn 1 |
| 066 | Huey : | same easier |
| 067 | PLX : | me too |

068 SY : let's starts!!

[Main study, chat 6]

In the other two groups where instances of giving instructions occurred, a similar trend was observed. Among participants who were leading the discussion like SY, in all the 16 teams, 14 are Singaporeans. The exceptions are in chat 7 and chat 8 where all the members in these two groups are non-Singaporeans. In addition, there are three teams among 14 teams whose members consisted of all Singaporeans. This high percentage of members who led the discussion who are Singaporeans could be due to the fact that 46 out of 58 or 79.3% of the total number of participants are Singaporeans. It could also be speculated that among all the countries in Asia, Singapore could be seen more of an individualist rather than a collectivist society. Therefore, the Singaporeans might have display less hesitation in speaking in a group and are more used to open discussions (Hofstede & Hofstede, 2005). In short, those with confidence to give orders happened to be members who talked more in the discussion and who seemed to lead the discussion. Incidentally, all of such participants are Singaporeans in groups with a mixture of Singaporean and non-Singaporean participants.

CONSENSUS is the last feature under the MANAGEMENT OF DISCUSSION dimension. CONSENSUS refers to members' seeking or giving confirmation of the direction the discussion is going. It does not represent agreement with a content idea. In most cases similar to REPLY, CONSENSUS is recognised through the use of affirmative responses such as "agreed", "okay", "alright", "yes" and "yup". The key difference between the affirmative responses between REPLY and CONSENSUS is the function of

the utterance. For CONSENSUS, members gave confirmation whereas for REPLY the utterance acts as an acknowledgement but not necessarily a confirmation.

In other instances, CONSENSUS appears as a question seeking confirmation. As shown in example (97), all the utterances are instances of CONSENSUS. In turn 133, Ting(lim) sought confirmation from his group members regarding the choice of essay task for discussion. Turns 134 and 135 are affirmation of Ting(lim)'s question.

(97)

| Turn | Participant | Utterance |
|------|--------------|-------------------------|
| 133 | Ting(lim): | so we just do qn 2 lah? |
| 134 | Peng(TatZz): | confirmed |
| 135 | Teck(Joker): | ok |

[Main study, chat 3]

In both face-to-face and chat discussion groups, there were 59 instances of CONSENSUS, 74.6% of which occurred in chat and 25.4% in face-to-face (see Table 5.14). The low frequency of occurrences in the face-to-face mode of discussion could be attributed to the fact that there might have been use of nonverbal communication cues that were not captured in this study. On the other hand, in chat situation where features of nonverbal communication were not present, it might have necessitated the members to verbally state their views.

Table 5.14 Comparison of affirmative statements versus questions

| Mode | Affirmative statements (turns) | Questions (turns) | Total no of turns | % of turns |
|-------------------|--------------------------------|-------------------|-------------------|------------|
| Face-to-face | 5 | 10 | 15 | 25.4 |
| Chat | 26 | 18 | 44 | 74.6 |
| Total no of turns | 31 | 28 | 59 | 100% |
| % of turns | 52.5% | 47.5% | 100% | |

A comparison of frequency of occurrences in affirmative responses versus questions seeking confirmation or clarification reveal that 52.5% of CONSENSUS were replies stating agreement while the rest (i.e. 47.5%) were of the latter (see Table 5.14). The findings show that there is an almost equal distribution between affirmative statements and questions.

In summary, among the six features under the MANAGEMENT OF DISCUSSION dimension, REPLY and FOCUS were observed most frequently followed by CONTACT, ELICITATION, CONSENSUS and finally SUGGESTION. Additionally, there were some qualitative differences in the manner in which these features function specifically as discussed in REPLY, FOCUS, ELICITATION and SUGGESTION.

5.3 Transfer of ideas from brainstorming to written draft

This section discusses rhetorical relations and discourse roles of individuals at the micro-level of the face-to-face and chat discourse. Specifically, it attempts to answer research questions (d) to (h) of the study:

- d) Did ideas discussed in the brainstorming session appear in students' individual draft? Did initiation of an idea have an impact on whether it was used in the students' own draft?
- e) Were there any intervening factors (besides ideas initiated in the brainstorming session) that influence the ideas in the draft? If yes, what were they?
- f) What are some observable similarities and significant differences that can be found between face-to-face and chat mode of discussion?

- g) How would reading texts assigned by tutors as a pre-writing activity prior to brainstorming session influence discussion and subsequent draft written by students?
- h) Was there evidence of co-construction of knowledge and meaning between participants of a discussion?

5.3.1 Number of ideas initiated - individual

In order to answer the above research questions, a tabulation of the total number of ideas initiated by individual students in the discussion was done. Table 5.15 presents the number of ideas generated by participants in the brainstorming session. These ideas include key points, supporting details, examples and evidence related to the topic of discussion.

Table 5.15 Number of ideas initiated by individual students

| Group | Participant | No of ideas | % of ideas | Total no of ideas |
|--------------|--------------------|--------------------|-------------------|--------------------------|
| Chat 1 | Joy | 16 | 47.1 | 34 |
| | ML | 18 | 52.9 | |
| Chat 2 | JieJ | 11 | 26.8 | 41 |
| | T | 10 | 24.4 | |
| | CY | 18 | 43.9 | |
| | MT | 2 | 4.9 | |
| Chat 3 | Teck(Joker) | 9 | 12.0 | 75 |
| | Peng(TatZz) | 18 | 24.0 | |
| | R | 8 | 10.7 | |
| | Ting(lim) | 40 | 53.3 | |
| Chat 4 | Char | 4 | 19.1 | 21 |
| | G | 10 | 47.6 | |
| | Jan | 7 | 33.3 | |
| Chat 5 | Jul | 16 | 39.0 | 41 |
| | Mad | 13 | 31.7 | |
| | BL | 12 | 29.3 | |
| Chat 6 | SY | 6 | 23.1 | 26 |
| | IM | 10 | 38.5 | |
| | PLX | 5 | 19.2 | |
| | Huey | 5 | 19.2 | |

| | | | | |
|----------------------|------------|----|-------|-----|
| Chat 7 | SL | 0 | 0.0 | 31 |
| | WP | 16 | 51.6 | |
| | sWt_drEaMz | 15 | 48.4 | |
| Chat 8 | Sirin | 30 | 43.5 | 69 |
| | CL | 11 | 15.9 | |
| | Jes | 19 | 27.5 | |
| | JJ | 9 | 13.0 | |
| Total (chat) | | | | 338 |
| F2F 1 | V | 11 | 23.9 | 46 |
| | Z | 13 | 28.3 | |
| | SH | 22 | 47.8 | |
| F2F 2 | LD | 2 | 4.3 | 47 |
| | J | 18 | 38.3 | |
| | SF | 6 | 12.8 | |
| | ZW | 18 | 38.3 | |
| | H | 3 | 6.4 | |
| F2F 3 | M | 9 | 36.0 | 25 |
| | XW | 3 | 12.0 | |
| | S | 6 | 24.0 | |
| | SHU | 7 | 28.0 | |
| F2F 4 | P | 9 | 33.3 | 27 |
| | N | 9 | 33.3 | |
| | Shirn | 0 | 0 | |
| | Ena | 7 | 25.9 | |
| | LX | 2 | 7.4 | |
| F2F 5 | PL | 11 | 30.6 | 36 |
| | C | 24 | 66.7 | |
| | W | 1 | 2.8 | |
| F2F 6 | A | 17 | 45.95 | 37 |
| | CS | 8 | 21.6 | |
| | E | 7 | 18.9 | |
| | FY | 5 | 13.5 | |
| F2F 7 | J | 7 | 38.9 | 18 |
| | QY | 3 | 16.7 | |
| | ZY | 1 | 5.6 | |
| | CL | 7 | 38.9 | |
| F2F 8 | R | 8 | 17.4 | 46 |
| | SZ | 27 | 58.7 | |
| | A | 11 | 23.9 | |
| Total (face-to-face) | | | | 282 |

A couple of observations could be generated from this set of findings. First, as

established in Section 5.2, the chat discussion mode generates more idea threads than the face-to-face mode, 338 for chat and 282 for face-to-face. Specifically, for the highest number of idea threads generated in a group, there were a total of 75 initiated by chat 3 participants and 69 by chat 8 participants. This is 1.5 times the ideas initiated in the face-to-face team with the highest number of idea threads, namely 47 for F2F 2. Considering that the face-to-face groups were mainly on task during their discussion, the findings suggest that the face-to-face participants might have discussed the key points more in depth than the chat participants. A tabulation of the total number of turns related to expansion of ideas such as ELABORATION, EXAMPLE, CLARIFICATION, REFERENCE and NEGOTIATION show that they constituted 35.5% of the total number of turns in face-to-face group discussion and 17.8% of the total number of turns in chat group discussion (see Table 5.16).

Table 5.16 Number of expanded ideas in face-to-face and chat discussions (excluding REPETITION)

| Group | Frequency of expanded ideas in discussion (excluding REPETITION) | Percentage of expanded ideas in discussion (excluding REPETITION) | Total number of turns in discussion |
|-----------------------------|---|--|--|
| F2F 1 | 72 | 36.7 | 196 |
| F2F 2 | 72 | 40.7 | 177 |
| F2F 3 | 40 | 21.7 | 185 |
| F2F 4 | 24 | 29.6 | 81 |
| F2F 5 | 39 | 41.1 | 95 |
| F2F 6 | 42 | 30.2 | 139 |
| F2F 7 | 17 | 56.7 | 30 |
| F2F 8 | 62 | 46.3 | 134 |
| Total (face-to-face) | 368 | 35.5 | 1037 |
| Chat 1 | 27 | 20.9 | 132 |
| Chat 2 | 44 | 12.0 | 402 |
| Chat 3 | 89 | 30.1 | 325 |
| Chat 4 | 23 | 4.8 | 445 |
| Chat 5 | 42 | 20.8 | 202 |
| Chat 6 | 39 | 21.3 | 190 |
| Chat 7 | 36 | 40.0 | 96 |
| Chat 8 | 79 | 23.4 | 338 |
| Total (chat) | 379 | 17.8 | 2130 |

In particular, ELABORATION and CLARIFICATION are two codes with the highest frequency of occurrence in face-to-face (as shown in Table 5.8 on page 225) whereas in chat ELABORATION and CLARIFICATION are ranked first and fourth respectively. This implies that even though chat discussion may generate more idea threads, face-to-face discussion seems to facilitate a more in depth discussion. This is evident as presented in section 5.2 of this chapter and specifically Table 5.8 on the top five codes under KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE dimensions.

When REPETITION was taken into consideration, the respective percentages are 44.7% for the face-to-face group and 20.6% for the chat group (see Table 5.17). The increase in percentage for the addition of REPETITION is 9.3% for the face-to-face group and 2.8% for the chat group.

Table 5.17 Number of expanded ideas in face-to-face and chat discussions (including REPETITION)

| Group | Frequency of expanded ideas in discussion (including REPETITION) | Percentage of expanded ideas in discussion (including REPETITION) | Total number of turns in discussion |
|-----------------------------|---|--|--|
| F2F 1 | 95 | 48.5 | 196 |
| F2F 2 | 87 | 49.2 | 177 |
| F2F 3 | 48 | 26.1 | 185 |
| F2F 4 | 38 | 46.9 | 81 |
| F2F 5 | 47 | 49.5 | 95 |
| F2F 6 | 51 | 36.7 | 139 |
| F2F 7 | 18 | 60.0 | 30 |
| F2F 8 | 80 | 59.7 | 134 |
| Total (face-to-face) | 464 | 44.7 | 1037 |
| Chat 1 | 29 | 22.5 | 132 |
| Chat 2 | 51 | 13.9 | 402 |
| Chat 3 | 102 | 34.5 | 325 |
| Chat 4 | 23 | 4.8 | 445 |
| Chat 5 | 46 | 22.8 | 202 |
| Chat 6 | 51 | 27.9 | 190 |
| Chat 7 | 39 | 43.3 | 96 |
| Chat 8 | 97 | 28.7 | 338 |
| Total (chat) | 438 | 20.6 | 2130 |

The finding that face-to-face discussion facilitates more in-depth discussion may be due to the inherent nature of these two different modes of discussion. First, as discussed in Chapter Two, there is urgency for students in chat room to respond fast and this may discourage them from considering more before entering their responses or thoughts. Second, students are mostly used to discussing face-to-face study-related issues in a classroom setting whereas the use of the chat to function as a discussion tool for academic purpose may be something that is novel to them. This observation could be substantiated by findings of a survey administered prior to the study.

In an exercise to find out the profile of the students, a survey consisting of seven questions was administered. Among the questions asked in the questionnaire were students' gender, nationality, major in Science, whether they had used chat (in English) and whether they had used chat in an academic setting namely the Integrated Virtual Learning Environment (IVLE) set up by the University. All of the students in the chat group indicated that they had used the chat in a social setting to communicate and interact with friends but only 33.3% had used it for their studies. The results show that even though students were familiar with the chat, they used it as a social interaction tool instead of a discussion tool in an academic setting.

The friendly, relatively unfocused and somewhat messy multi-thread characteristic of the chat seems to have influenced the way in which students in the chat discussion carried out their discussion. This is reflected prominently in the ease in which the students went off task then on task again in the chat. Though interesting, the students' ability to get back to the discussion is yet again another feature of the chat where participants who were engaged in multi-thread conversations appeared to be able to

follow the key discussion points even after the discussion deviated. This concept is different from the idea of re-focus which has been discussed at length where findings show that in chat, participants made use of FOCUS to draw others back to the discussion. Rather, the key point here is that even though the chat discussions were interrupted by many unrelated OFF TASK topics, chat participants were able to get back to their respective discussions of the assignment many turns later, as seen in example (98).

(98)

| Turn | Participant | Utterance |
|------|-------------|--|
| 002 | Sirin: | so... which topic we are discusssing? qns 1 or 2? |
| 003 | CL: | let"s finish reading it first? |
| 004 | JJ: | k |
| 005 | Sirin: | kk. i'm done... |
| 006 | JJ: | i haven't finished yet |
| 007 | Jes: | maybe we have more to write about on qn2 |
| 008 | Sirin: | i'm more on for qns one.....dunnnoe what to write 4 q 2.... |
| 009 | Jes: | why? i think for qns1 it is more or less the same as the article |
| 010 | CL: | why is the font so small |
| 011 | Jes: | sorry |
| 012 | CL: | omg |
| 013 | JJ: | but i think that q2 is much easier |
| 014 | Sirin: | haha...u guys really think alike.... |
| 015 | JJ: | it can incolve q1 Involve |
| 016 | Sirin: | oh... ok, i'll go with the majority... |
| 017 | CL: | me too |
| 018 | Jes: | no, we had better treat each question separately |
| 019 | Sirin: | will overlap in some pt one lah....i think.... |
| 020 | Jes: | ok, i agree |
| 021 | Sirin: | em.... what font size are u guys using... |
| 022 | JJ: | Jes? Sheng hongyuan ? |
| 023 | Jes: | 2 |
| 024 | CL: | ya |
| 025 | Sirin: | kk... |
| 026 | CL: | my font size 1 |
| 027 | Jes: | yes |
| 028 | JJ: | ft |
| 029 | Sirin: | also this big... |
| 030 | JJ: | how to change you nickname |
| 031 | Sirin: | yaya. teach me.. |
| 032 | Jes: | is this color better |
| 033 | JJ: | no |
| 034 | Sirin: | no |
| 035 | Jes: | wait for a while |
| 036 | Jes: | i'll go and find out |
| 037 | JJ: | ft |
| 038 | Sirin: | who is the 2 square boxes ah??? |
| 039 | CL: | u just go to IVLE 's profile |
| 040 | JJ: | cuijingjing |

| | | |
|-----|--------|--|
| 041 | CL: | then edit it |
| 042 | Jes: | on the homepage of ivle |
| 043 | Sirin: | haha, ok. |
| 044 | JJ: | then? |
| 045 | CL: | edit |
| 046 | Jes: | then you type your nickname |
| 047 | JJ: | can |
| 048 | Sirin: | ok, can |
| 049 | JJ: | no still can not |
| 050 | Sirin: | ya loh... |
| 051 | CL: | so we are on question 2 right? |
| 052 | Sirin: | so... which topic we are discussing? qns 1 or 2? |

[Main study, chat 8]

In turns 002, 007, 008 and 009, the discussion started with an enquiry on which question participants would like to discuss. From turn 010 to turn 050, participants went OFF TASK and had a lengthy chat on the features of chat with intersperse of turns (i.e. turns 013 to 020) addressing the enquiry. In turn 051, CL picked up the thread left off in turn 020 as if the OFF TASK chat from turn 021 to turn 050 had not interrupted the original discussion. This is an observation that is not prominent in face-to-face groups, even in F2F 3 which had the highest OFF TASK occurrence among all eight face-to-face groups.

The second observation relates to the relationship between participation rate and number of ideas contributed by individuals in the discussion. The natural assumption is that those who participate more should make more quality contribution to the discussion, namely in this study the contribution of ideas for the essay that are relevant to the essay. When a comparison was done to find out if the member with the highest participation rate in the discussion contributed the most ideas and if the member with the lowest participation rate contributed the least number of ideas, it was found that 50% of the time it was true for the former and 38.9% for the latter. In other words, high participation rate does not always equal high contribution rate in

terms of content that is usable for the essay. Similarly, a student who does not say much or speaks relatively little during the discussion may have contributed more significantly to the quality of the discussion. There were also two instances, namely in chat 3 and chat 6, where the student who had the lowest participation rate contributed the most ideas for content.

Interestingly, among the nine groups where the students' high participation rate corresponds with a high number of idea threads, six (i.e. 66.7%) were face-to-face groups. Additionally, four out of seven groups (i.e. 57.1%) with students' low participation rate matching a low number of idea threads were face-to-face groups. This suggests that in the face-to-face environment, participants with an outspoken personality contribute more in the discussion and participants who are more reserved contribute less in the discussion. The face-to-face environment does not encourage one who is more inhibited to interact more nor does it encourage one who is more outspoken to allow opportunities for others to speak. Looking at the results from another perspective, this finding could imply that the chat environment helps individuals to be less inhibited to 'speak' and thus could be a better tool in encouraging students with a more introverted personality to make more significant contributions in discussions. Such results are supported by studies done by Beauvois (1998a, 1988b), Chun (1994), Kern (1995), Leppanen and Kalaja (1995), Sengupta (2001), Sullivan and Pratt (1996), and Warschauer (1996) which found that compared to face-to-face discussion, online discussion is better at encouraging shy and less performing students to participate more.

5.3.2 Transfer of ideas from discussion to essay draft

Now that the frequency of ideas has been established, discussion in this chapter will move on to an analysis of transfer of ideas from collaborative discussion to individual draft.

Prior to drafting the essay, the students had a brainstorming session and had read two articles related to the essay topic. Because of this, idea threads in the brainstorming session and key points in the articles had to be taken into consideration when establishing where key and supporting points in the students' essays came from.

Using the reverse engineering approach as discussed in Chapter Three - Methodology One, idea threads were tracked and traced from the students' essays to the brainstorming session and the articles.

A number of different analyses were carried out to investigate answers to the following questions related to transfer of ideas from group discussion to individual writing:

- 1) How many ideas were transferred from brainstorming session to students' individual drafts?
- 2) Were ideas transferred from the brainstorming session to the draft more likely to be initiated by the writer of the draft or by other members of the group?
- 3) How many ideas and how many types of new ideas did students incorporate into their essays?
- 4) Are there any observable patterns that are either similar or different between the face-to-face and chat modes of discussion?

Initially, although there were 58 students in the study who participated in the study, only 52 students handed in their essay (i.e. submission rate of 89.7%). Among 31 students in face-to-face, 28 submitted their essay; in chat, 24 students out of 27 submitted their essay. The analysis was therefore done based on 52 essay scripts as shown in Table 5.18 for face-to-face groups and Table 5.19 for chat groups.

Table 5.18 Transfer of idea threads in face-to-face groups

| Student | Ideas in draft essays | | | | | | | | | | |
|---------|-----------------------|------|--------|------|----------|------|-----------------------|------|-----------|------|-------|
| | Self-initiated | | Others | | Articles | | Discussion & articles | | New ideas | | Total |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | |
| F2F 1 | | | | | | | | | | | |
| V | 4 | 12.1 | 6 | 18.2 | 4 | 12.1 | 1 | 3.0 | 18 | 54.5 | 33 |
| SH | 4 | 14.8 | 1 | 3.7 | 0 | 0 | 4 | 14.8 | 18 | 66.7 | 27 |
| Z | 2 | 7.7 | 3 | 11.5 | 3 | 11.5 | 2 | 7.7 | 16 | 61.5 | 26 |
| F2F 2 | | | | | | | | | | | |
| JL | 4 | 11.7 | 2 | 5.9 | 0 | 0 | 0 | 0 | 28 | 82.4 | 34 |
| SF | 2 | 4.7 | 7 | 16.7 | 0 | 0 | 0 | 0 | 31 | 73.8 | 42 |
| LD | 0 | 0 | 7 | 26.9 | 0 | 0 | 0 | 0 | 19 | 73.1 | 26 |
| Z | 7 | 16.3 | 10 | 23.3 | 1 | 2.3 | 0 | 0 | 25 | 58.1 | 43 |
| F2F 3 | | | | | | | | | | | |
| S | 1 | 2.9 | 1 | 2.9 | 1 | 2.9 | 1 | 2.9 | 31 | 88.6 | 35 |
| SHU | 0 | 0 | 0 | 0 | 2 | 4.1 | 2 | 4.08 | 45 | 91.8 | 49 |
| XW | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3.3 | 29 | 96.7 | 30 |
| F2F 4 | | | | | | | | | | | |
| P | 0 | 0 | 1 | 2.9 | 15 | 44.1 | 4 | 11.7 | 14 | 41.2 | 34 |
| N | 0 | 0 | 0 | 0 | 1 | 3.23 | 0 | 0 | 30 | 96.8 | 31 |
| Ena | 2 | 5.6 | 0 | 0 | 5 | 13.9 | 3 | 8.3 | 26 | 72.2 | 36 |
| LX | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 100 | 32 |
| F2F 5 | | | | | | | | | | | |
| C | 3 | 9.4 | 1 | 3.1 | 7 | 21.9 | 2 | 6.3 | 19 | 59.4 | 32 |
| W | 1 | 3.6 | 2 | 7.1 | 5 | 17.9 | 1 | 3.6 | 19 | 67.9 | 28 |
| PL | 4 | 13.3 | 5 | 16.7 | 3 | 10.0 | 1 | 3.3 | 17 | 56.7 | 30 |
| F2F 6 | | | | | | | | | | | |
| CS | 0 | 0 | 0 | 0 | 4 | 18.2 | 2 | 9.1 | 16 | 72.7 | 22 |

| | | | | | | | | | | | |
|-------|---|------|---|------|---|------|---|------|----|------|----|
| A | 0 | 0 | 0 | 0 | 4 | 22.2 | 2 | 11.1 | 12 | 66.7 | 18 |
| E | 0 | 0 | 1 | 2.3 | 7 | 16.3 | 3 | 6.98 | 32 | 74.4 | 43 |
| FY | 1 | 4.4 | 1 | 4.4 | 3 | 13.0 | 2 | 8.7 | 16 | 69.6 | 23 |
| F2F 7 | | | | | | | | | | | |
| J | 1 | 7.1 | 3 | 21.4 | 4 | 28.6 | 0 | 0 | 6 | 42.9 | 14 |
| QY | 0 | 0 | 3 | 9.7 | 1 | 3.2 | 0 | 0 | 27 | 87.1 | 31 |
| CL | 1 | 4.7 | 3 | 14.3 | 6 | 28.6 | 0 | 0 | 11 | 52.4 | 21 |
| Z | 0 | 0 | 0 | 0 | 5 | 16.1 | 0 | 0 | 26 | 83.9 | 31 |
| F2F 8 | | | | | | | | | | | |
| S | 2 | 12.5 | 0 | 0 | 1 | 6.3 | 2 | 12.5 | 11 | 68.8 | 16 |
| R | 1 | 3.9 | 0 | 0 | 7 | 26.9 | 1 | 3.9 | 17 | 65.4 | 26 |
| A | 1 | 3.0 | 1 | 3.0 | 4 | 12.1 | 0 | 0 | 27 | 81.8 | 33 |

Table 5.19 Transfer of idea threads in chat groups

| Student | Ideas in draft essays | | | | | | | | | | |
|-------------|-----------------------|------|--------|------|----------|------|-----------------------|------|-----------|------|-------|
| | Self-initiated | | Others | | Articles | | Discussion & articles | | New ideas | | Total |
| | Freq | % | Freq | % | Freq | % | Freq | % | Freq | % | |
| chat 1 | | | | | | | | | | | |
| ML | 2 | 10.0 | 0 | 0 | 6 | 30.0 | 3 | 15.0 | 9 | 45.0 | 20 |
| chat 2 | | | | | | | | | | | |
| T | 2 | 6.9 | 4 | 13.8 | 3 | 10.3 | 2 | 6.9 | 18 | 62.1 | 29 |
| JieJ | 3 | 9.1 | 7 | 21.2 | 6 | 18.2 | 3 | 9.1 | 14 | 42.4 | 33 |
| MT | 0 | 0 | 8 | 24.2 | 7 | 21.2 | 4 | 12.1 | 14 | 42.4 | 33 |
| CY | 9 | 28.1 | 2 | 6.3 | 4 | 12.5 | 1 | 3.1 | 16 | 50.0 | 32 |
| chat 3 | | | | | | | | | | | |
| Teck(Joker) | 2 | 4.9 | 13 | 31.7 | 0 | 0 | 8 | 19.5 | 18 | 43.9 | 41 |
| Ting(lim) | 2 | 6.5 | 2 | 6.5 | 4 | 12.9 | 5 | 16.1 | 18 | 58.1 | 31 |
| Peng(TatZz) | 9 | 27.3 | 3 | 9.1 | 1 | 3.0 | 7 | 21.2 | 13 | 39.4 | 33 |
| R | 0 | 0 | 3 | 9.7 | 1 | 3.2 | 0 | 0 | 27 | 87.1 | 31 |
| chat 4 | | | | | | | | | | | |
| G | 4 | 8.0 | 5 | 10.0 | 0 | 0 | 0 | 0 | 41 | 82.0 | 50 |
| Char | 1 | 2.9 | 5 | 14.7 | 2 | 5.9 | 0 | 0 | 26 | 76.5 | 34 |
| chat 5 | | | | | | | | | | | |
| BL | 2 | 6.7 | 8 | 26.7 | 4 | 13.3 | 3 | 10.0 | 13 | 43.3 | 30 |
| Mad | 8 | 20.0 | 6 | 15.0 | 4 | 10.0 | 2 | 5.0 | 20 | 50.0 | 40 |
| Jul | 0 | 0 | 4 | 11.8 | 11 | 32.4 | 5 | 14.7 | 14 | 41.2 | 34 |
| chat 6 | | | | | | | | | | | |

| | | | | | | | | | | | |
|--------|---|------|---|------|---|------|---|-----|----|-------|----|
| SY | 2 | 7.7 | 5 | 19.2 | 5 | 19.2 | 0 | 0 | 14 | 53.9 | 26 |
| PLX | 2 | 7.1 | 3 | 10.7 | 7 | 25.0 | 1 | 3.6 | 15 | 53.6 | 28 |
| IM | 2 | 10.0 | 3 | 15.0 | 1 | 5.0 | 0 | 0 | 14 | 70.0 | 20 |
| Huey | 2 | 8.0 | 4 | 16.0 | 1 | 3.7 | 1 | 3.7 | 17 | 62.96 | 25 |
| chat 7 | | | | | | | | | | | |
| WP | 3 | 5.9 | 3 | 5.9 | 6 | 11.8 | 0 | 0 | 39 | 76.5 | 51 |
| SL | 0 | 0 | 6 | 15.8 | 3 | 7.9 | 1 | 2.6 | 28 | 73.7 | 38 |
| HL | 0 | 0 | 2 | 7.7 | 2 | 7.7 | 0 | 0 | 22 | 84.6 | 26 |
| chat 8 | | | | | | | | | | | |
| Sirin | 3 | 10.3 | 6 | 20.7 | 2 | 6.9 | 1 | 3.5 | 17 | 58.6 | 29 |
| JJ | 0 | 0 | 0 | 0 | 1 | 7.7 | 0 | 0 | 12 | 92.3 | 13 |
| Jes | 1 | 4.0 | 2 | 8.0 | 2 | 8.0 | 2 | 8.0 | 18 | 72.0 | 25 |

Based on the quantitative data presented in Table 5.18 for face-to-face and Table 5.19 for chat, it was found that there are more instances of students in the face-to-face mode of discussion than in the chat mode who did not make use of ideas generated from the brainstorming session and points presented in the articles for their essay. Specifically, as displayed in Table 5.18, 17 out of 28 (or 60.73%) of the students in the face-to-face mode made use of ideas that they initiated in the brainstorming session. That means the remaining 39.3% of students in the face-to-face mode did not make use of ideas that they initiated in the brainstorming session. The percentage of such students is less in the chat mode, namely 6 out of 24 (or 25%) as reflected in Table 5.19 where results show that 75% of the chat participants made use of the ideas that they initiated in the discussion.

A closer examination of students who did not make use of self-initiated ideas reveal that among the 11 face-to-face students, eight or 72.7% of them also did not make use of ideas contributed by other group members. Most of the points written in their essays could not be traced to the discussion. Even among the four out of 11 or 27.3%

who did make use of ideas initiated by others, the mean number of idea threads was three. As for the six chat members who did not use any of their own ideas in the writing, it was found that five out of six or 83.3% did have in their writing ideas contributed by their respective group members in the discussion. This set of data corresponds with the findings in use of others' ideas, namely 64.3% of face-to-face and 91.7% of chat participants who used others' ideas in their respective drafts. The implication is that there is more likelihood in chat than in face-to-face for ideas generated in the discussion to be transferred to individual writing. One explanation for this finding could be due to the mode of discussion. Most frequently than not, there is a greater tendency for people to forget details of face-to-face discussions if they are not minuted or recorded. On the other hand in chat, participants verbalise their thoughts through writing or read ideas presented by others. Thus, they may have a better recollection of the discussion points.

Additionally, there is a similar trend observed in the use of points in the pre-writing articles. The percentage of students in the chat mode (i.e. 91.7%) as shown in Table 5.19 who used ideas from the articles was higher than that of the face-to-face mode (i.e. 78.6%) as illustrated in Table 5.18. In short, the proportion of idea threads that could be traced from the students' essays back to the brainstorming session and pre-writing articles is larger for chat than for face-to-face. This implies that there is more transfer of content from chat than face-to-face discussion to individual writing drafts.

Comparing the face-to-face and chat modes of discussion, the results suggest that the chat mode is more effective in facilitating the transfer of content from the brainstorming session to individual writing drafts. Such findings seem to be paradoxical to earlier ones on OFF TASK activity where students in the chat spent more

time off than on task. They also do not seem to go in tandem with the findings that there was less in-depth discussion in the chat mode.

The natural assumption is that the more focused and in-depth a brainstorming session is, the greater the likelihood it is for the content to be used in the essay. The quantitative data of this study appear to present the opposite. There could be a few possibilities to explain this finding. First, in the face-to-face discussion, it was observed that students hardly took notes. The focus was mainly on keeping the discussion going. Students in the chat mode, however, had to write down their thoughts due to the inherent nature of the chat mode which requires its users to express their thoughts in speech-like text. This may have created and left a deeper impression on the content discussed. The second possibility concerns an impact of computer-mediated-communication (CMC) tools that has been observed by many researchers – namely the lowering of affective filter which enables students to feel more relaxed and less stressful in performing a communication task (Beauvois, 1998a; Chun, 1994; Sengupta, 2001; Skinner & Austin, 1999). Students in the chat might have subconsciously absorbed or retained more of the discussion because of the less stressful and friendlier modality of the chat. Furthermore, findings of related studies suggest that the use of CMC tools helps to decrease writing apprehension (Beauvois, 1998a; Chun, 1994; Lee, 1998; Skinner & Austin, 1999; Sullivan & Pratt, 1996; Warschauer, 1996). Therefore, the use of an online discussion tool may have created a more conducive learning environment for students to recall the ideas presented at a discussion and re-produce or re-develop them in their writing.

In sum, in answering the research questions of (1) the amount of ideas that was transferred from brainstorming to individual draft and (2) whether ideas transferred were self-initiated or other initiated, findings of the present study show that more students in chat (than in face-to-face) who initiated ideas made use of them in their writing.

5.4 Case studies

In addition to quantitative data presented in Section 5.3.2, the study also took a closer look at how ideas were transferred. A detailed qualitative analysis was done on two face-to-face students and two chat students to establish how individuals transferred ideas from the reading texts and discussion to the first draft of an essay.

5.4.1 Qualitative analysis – chat

The students' essays were first parsed based on sentences and each considered a unit of analysis. Samples were taken from two members of the same chat group – CY who contributed most in the discussion and MT who contributed the least in the chat.

Idea code “P” represents point number 1 and the decimal point refers to the hierarchy of ideas. For example, “P1.1” to “P1.5” in CY’s body paragraph are elaboration or expansion of the main idea in paragraph “P1”. “P1.5.1”, on the other hand, is an elaboration of “P1.5”. Sometimes, a student may repeat the same idea. This is reflected in CY’s paragraph with two sentences coded “P1”. When this occurred in the present study, the number of idea thread counted was one, namely the idea was counted only once with no double or multiple counting of idea threads.

The column “Idea source” refers to the origin of the idea. There are essentially three sources of ideas – from the discussion, from the articles given, and from the writer while she wrote the essay. Idea source coded with names such as CY and MT represents the initiator of the idea thread. This is followed by a similar numerical system of categorising ideas, namely with the use of “P” to mean an idea thread and decimal points to refer to the hierarchy of ideas. The code “Art” indicates pre-writing articles given to students; “Art 1” means the first article and “Art 2” the second article. Suffixes “P” and “S” are codes for Problems and Solutions mentioned in the articles. These again are further parsed down to decimal points that refer to specific idea threads in the articles (see Appendix 10 and Appendix 11 respectively). For instance, Art 1 S3 refers to “An essential factor to a functional family is good communication” which is the third solution in Article 1 written by Karen Quek (see Appendix 10).

As displayed in Table 5.20, there are four idea threads that could be traced to the discussion – three contributed by the CY and one by MT which she cited from Article 1; two that originated from Article 1 and one that originated from Article 2. The rest with no indication of idea source are CY’s new addition when she drafted the essay.

Table 5.20 Transfer of ideas from chat discussion to body paragraph 1 of CY’s essay

| Sentence | Idea code | Idea source |
|--|-----------|-----------------------|
| Body paragraph 1 | | |
| ¹ In Singapore, it is very common that both parents are working and the job of looking after the children usually fall to the hands of the maid. | P1 | CY P1.2; CY P1.2.1 |
| ² This resulted in a decrease in the time spent with children. | P1.1 | CY P1.2.2 |
| ³ This is threatening to the family as children need special attention during certain phase of their growing up. | P1.2 | |
| ⁴ And when the parents are not with them, they might feel isolated, unimportant and might turn rebellious, straining the relationship with their parents. | P1.3 | |

| | | |
|--|--------|----------------------------------|
| ⁵ Therefore, parents play very important roles in preventing this from happening. | P1.4 | |
| ⁶ They should always find time for effective communication with their children and should spend real quality time with their children whenever they can. | P1.5 | MT S1 (Art 1, S3); Art 2, P6 |
| ⁷ Communication can be as simple as reading a bedtime story to your little ones, finding time to share the events of the day or week or just lend a listening ear to any distressed member. | P1.5.1 | Art 1, S2.1.1.4, Art 1, S2.1.1.6 |
| ⁸ Thus, effective communication should be used as the basic tool in building a strong resilient family. | P1.5 | |
| ⁹ This is especially essential when both parents are busy working. | P1 | |

The number of idea threads contributed by CY in the chat discussion was 18 or 43.9% of the total number of idea threads. She made use of 34.4% of the ideas in the discussion – the highest number used by a member in the group – among which 28.1% were contributed by her. These percentages are the highest among all four members in her chat group.

In terms of how ideas were transferred from discussion to writing, CY selected, incorporated and developed a few ideas as the main points of her essay. Incidentally, two of the three main ideas of CY’s essay were initiated by CY in the discussion. The third could be traced to Article 2 (see Table 5.21). Based on these three main points, CY further expanded her paragraphs with both ideas in chat and ideas newly added when she drafted the essay.

Table 5.21 Key ideas and their sources in chat and article (CY's essay)

| Key ideas in body paragraphs | Idea code | Idea threads in chat/article | Turn/sentence |
|---|-----------|---|---------------|
| Body paragraph 1 | | | |
| In Singapore, it is very common that both parents are working and the job of looking after the children usually fall to the hands of the maid. | P1 | more nuclear family... both parents are working... | 153 |
| | | maid to look after children... | 154 |
| Body paragraph 2 | | | |
| With the presence of globalization, there is a wide range of hobbies for everyone and thus, it is very hard to find a common hobby that both children and parents like. | P2 | mayb like hobbies | 178 |
| | | mayb like parents n child having diff activities | 181 |
| Body paragraph 3 | | | |
| Moreover, due to globalization, youngsters in Singapore have easy access to a lot of external factors of influences like the media, friends and games. | P3 | Technology's ascension has changed not only business, but the family as well. | Art 2, B1.3.2 |

The way in which CY made use of ideas in chat and articles widely differ from how MT, another chat group member utilised ideas. Contributing least ideas during discussion (namely 2 out of 41 or 4.9% of total idea threads in chat) and using only two points from articles that she highlighted during chat, MT relied mostly on her peers' ideas and points from the articles in developing her essay. Specifically, the sources of idea threads in MT's essay could be traced to ideas mentioned by others (24.2%), points from the articles (21.2%), points from the articles highlighted in chat (12.1%), and ideas developed when MT drafted the essay (42.4%). Table 5.22 illustrates the sources of ideas in body paragraph 1 of MT's essay. There is only an elaboration, namely sentence 7, which was newly added by MT when she drafted the essay.

Table 5.22 Transfer of ideas from chat discussion to body paragraph 1 of MT's essay

| Sentence | Idea code | Idea source |
|--|-----------|--|
| Body paragraph 1 | | |
| ¹ First of all, effective communications is one of essential factors in building and keeping good relationship with people everywhere, especially among the family members. | P1 | MT S1 (Art 1, S3); MT S1.1 (Art 1, S3) |
| ² Effective communications mean that the quality of communication is more important than the quantity or frequency. | P1.1 | Art 2, P6 |
| ³ This factor can be obtained in many ways. | | |
| ⁴ For example having conversation with all members during dinner time or during playing game (mahjong) together. | P1.1.1 | JieJ S3.4 (Art 1, S2.1.1.5); CY S3.3 |
| ⁵ In the conversation, each member should tolerate each other and be given the same opportunities including the small children (Lim-Quek, 2001). | P1.1.2 | Art 1, S3.2.1 |
| ⁶ Then all of children are allowed to share their opinions and thoughts or ask their doubts with parents. | P1.1.3 | CY S4.1.2 |
| ⁷ Open minded, moderate, and modern parents are really required. | P1.1.4 | |
| ⁸ The other way is parents spend more time with their children for hanging out together. | P1.2 | JieJ S2 |
| ⁹ They can go out together for watching movie, playing in the park or just jogging. | P1.2.1 | CY S3.1; CY S3.2 |

As seen in the examples of CY's and MT's first body paragraphs, although both are about effective communication in building a strong resilient family, they differ in terms of ideas each selected to develop their essays. CY's approach was to establish the cause or problem and provide solutions to it while MT immediately focused on the solution of building a strong resilient family. One similarity is the use of the reading articles as their source of support – four instances in CY's paragraphs and five in MT's paragraphs.

When an analysis was done on the key ideas of MT's essay, it was found that she made use of points found in the first article and highlighted during the discussion –

one of which she brought up (see Table 5.23). The second point of her body paragraph could be traced to one of the contributions made by her team mates while the third main point could be traced to both the discussion and reading article.

Table 5.23 Key ideas and their sources in chat and article (MT's essay)

| Key ideas in body paragraph | Idea code | Idea threads in chat/article | Turn/sentence |
|--|-----------|---|--------------------------|
| Body paragraph 1 First of all, effective communications is one of essential factors in building and keeping good relationship with people everywhere, especially among the family members. | P1 | by communication between family members? An essential factor to a functional family is good communication. | 214 Art 1, S3 |
| Body paragraph 2 Secondly is about hands on among the members. | P2 | 3. hands-on? | 255 |
| Body paragraph 3 Bonding and proper guidance since young ages are also important in building a strong family resilient. | P3 | ok like from young they should build bonds together Bonding is connecting positively with the family. | 217 Art 1, S2.1.1 |

The examples in CY's and MT's essays show the effect of chat discussion on the key ideas used in their respective essays. Whether it is building on self-initiated ideas such as in the case of CY or the development of others' ideas in MT's case, the chat discussion did have an impact on the content of the students' writing. In addition, it appears that most of the students in the same chat group made use of more than 50% of threads in articles highlighted in discussion. Four idea threads in the articles were brought up by members of the chat discussion. Among these four idea threads, T made use of two (i.e. 50%), JieJ made use of three (i.e. 75%), MT all four (i.e. 100%) and CY one (i.e. 25%). This set of data suggests that there is a relationship between two concepts: one, idea threads in articles highlighted in discussion and two, the

likelihood of their occurrence in the individuals' writing. Indeed, when the Pearson correlation analysis was done to investigate the relationship between number of idea threads from articles mentioned in chat and number of these ideas appearing in individual drafts, a significant positive correlation ($p = 0.05$, $r = 0.73$, $n = 24$) was found. This has implications for pedagogy, namely getting English for Academic Purposes students to discuss pre-writing reading passages during brainstorming session is more effective than simply asking them to read the passages. This raises an observation regarding how a person processes information. If one talks about something that one has read, there seems to be a higher likelihood and possibility that one remembers what is mentioned in the text and one may even refer to ideas in the text in writing.

In fact, what is clear in both cases is that all the key ideas in paragraphs 1, 2 and 3 could be traced to the discussion. This is reflected in an analysis of all the essays written by students in chat discussion. Among 24 essays, six or 25% and ten or 41.2% had more than 60% of all the key ideas originated from ideas brought up in discussion. In fact, 69.4% of the chat students' key ideas in their respective essays could be attributed to the discussion or/and reading articles (see Table 5.24).

Table 5.24 Key points in chat students' essays and their sources

| Student | Sources of key points in essay | | |
|-------------|--|--|-------------------------------------|
| | Key Point 1 | Key Point 2 | Key Point 3 |
| Chat 1 | | | |
| ML | ML S11 (Art 1, S3) | ML S2.1; Art 1, S2 | ML S2.2 (Art 2, B3.2) |
| Chat 2 | | | |
| T | MT S1 (Art 1, S3) | CY S3 (Art 1, S2.1.1) | new |
| JieJ | CY S3 (Art 1, S2.1.1) | MT S1 (Art 1, S3) | Art 1, S4.6.2 |
| MT | MT S1 (Art 1, S3); MT S1.1 (Art 1, S3) | T S5; Art 1, S4.6.2 | CY S3 (Art 1, S2.1.1) |
| CY | CY P1.2; CY P1.2.1 | CY P1.3.1 | Art 2, B1.3.2 |
| Chat 3 | | | |
| Teck(Joker) | Peng(TatZz) P1 | new | Peng(TatZz) P3.1 |
| Ting(lim) | Peng(TatZz) S2 (Art 1, S1) | Peng S5 (Art 1, S4.6.2; Art 2, P7.2.2) | Peng(TatZz) S1.1 (Art 2, P6) |
| Peng(TatZz) | Peng(TatZz) S3.4.1 | Ting(lim) S3 (Art 1, S3) | Teck(Joker) S4.5 |
| R | new | new | new |
| Chat 4 | | | |
| G | Jan P4.1 | G S1 | new |
| Char | new | Jan S2 | new |
| Chat 5 | | | |
| BL | Jul S2 (Art 2, P3); BL S2.2 (Art 2, P3) | BL S7 | new |
| Mad | Mad S1 (Art 1, S3); | Mad B1.3 | Mad S5 |
| Jul | Art 1, S4.6; Jul S2 (Art 2, P3); BL S2.1 (Art 2, P3) | Art 1, S1; Mad S7.3 (Art 1, S1.3.1) | Mad S1 (Art 1, S3); Art 1, S2.1.1.2 |
| Chat 6 | | | |
| SY | SY P7 | Art, P4.1.2 | new |
| PLX | SY P3 | Art, A4.1.2 | new |
| IM | PLX P4.3; IM P4.4 | new | Huey P5 |
| Huey | new | SY P3 | Huey P5 |
| Chat 7 | | | |
| WP | WP S2; Art 5 | new | WP S1.1 |
| SL | WP S2 | WP S1 | WP S3 |
| HL | WP S1 | new | new |
| Chat 8 | | | |
| Sirin | Jess S1 | JJ S2 | new |
| JJ | - | new | - |
| Jes | Art 2 | new | new |

This finding shows the importance of discussion points in contributing to key ideas in students' essays. The difference lies in which points students chose to use as key points and which as sub-points, examples or elaboration. The discussion may have contributed to and acted as stimulus for ideas or more ideas but the way in which students piece together the idea threads may be different. For instance, an idea thread could be used as a key idea in one essay and a supporting detail in another.

Another observation that the analyses of CY's and MT's essays reveal is the value of pre-writing activities to students. CY who is a more outspoken participant contributed to 107 out of 402 turns or 26.6% of turns in the chat discussion while MT, a quieter participant in the same chat group with the lowest number of turns, contributed 37 turns or 9.2% of turns. Although CY's total number of turns was not the highest in the group, she initiated the most number of ideas, namely 43.9%. MT who had the lowest percentage of turns also initiated the least number of ideas in the discussion, namely 4.9%. However, 57.6% of idea threads in her essay could be traced to the discussion (i.e. 36.4%) and reading articles (21.2%). In CY's case, 50% of idea threads in her essay came from discussion (37.5%) and reading articles (12.5%). Data pertaining to the other two members, JieJ and T, show a similar trend that is approximately half of the idea threads in the essays could be attributed to the discussion and reading articles with a higher percentage coming from discussion. This implies that pre-writing activities such as discussion and reading articles do provide support and scaffolding for the drafting of essay. Indeed, the data show that 38.9% of ideas in chat students' essays could be traced to discussion and reading passages.

The challenge, however, is in determining the originator or originators of any idea that is built in a collaborative context. In the academic and professional world, the benchmark that clearly identifies and demarcates if an idea is original and if it belongs to the originator of the idea is through patent in science and through written publications and sometimes oral records. In the case of this study, the key criterion used to establish if an idea 'belongs' to a student was through the tracing of who said what first and whether this idea could be further traced to the articles that students

were given as a stimulus to the writing assignment. Such ideas may not be novel since the theme is current affairs and students might have discussed, heard or read about it before. Nonetheless, within the context of the requirement of the essay task and the discussion, ownership of ideas corresponds with the initiation of ideas.

5.4.2 Qualitative analysis – face-to-face

A similar qualitative analysis exercise was done on a face-to-face group to see how ideas were transferred from face-to-face discussion to individual writing drafts. Similarly, the essays of two students from F2F 1 were selected for the analysis. One of them, SH, had the highest number of idea initiation and turn taking percentage and another, V, had the lowest for both. Table 5.25 shows the first body paragraph of SH’s essay where most of the idea threads were not based on the discussion or reading articles. Instead, these were ideas that SH incorporated during the drafting of the essay. In fact, the percentage of ideas in SH’s essay that could be traced back to the discussion is 33.3% out of which 14.8% were ideas that SH initiated. The remaining 66.7% of idea threads were newly added by SH. It could be inferred that SH did not make much use of the ideas contributed by others or the reading articles.

Table 5.25 Transfer of ideas from chat discussion to body paragraph 1 of SH’s essay

| Sentence | Idea code | Idea source |
|--|-----------|-------------------|
| Body paragraph 1 | | |
| ¹ Firstly, in order to start a family, needless to say, is for couple to get together and then get married. | P0 | |
| ² In fact, for a family to stay strong in this society, the fundamental is to have a strong marital relationship. | P1 | SH S1 (Art 1, S1) |
| ³ With that as a foundation, couples would be more bonded together and there will be definitely harmony in the family. | P1.1 | |
| ⁴ Furthermore, trust is also very important within a couple, because of the busy schedule, the couple is seldom together so trust is very | P1.2 | |

important.

| | |
|---|--------|
| ⁵ Many divorces are often due to third party whereby there are outside-marriage relationships. | P1.3 |
| ⁶ Actually one thing to prevent this is to make sure that the couple has been together for quite some time and the relationship is strong. | P1.3.1 |
| ⁷ Research has shown that those couples that rush to get married often have a short marriage term. | P1.3.2 |

Table 5.26 displays the first body paragraph of V's essay. In drafting the essay, V made use of 30.3% of ideas originated in the face-to-face discussion (namely consisting of 12.1% of self-initiated ideas, 18.3% of ideas initiated by others and 3% of ideas from articles which were discussed) and 12.1% of ideas from the articles. V's newly added ideas while drafting amounted to 54.5%. The data show that V who initiated the least number of ideas in the discussion (i.e. 23.9% of total ideas initiated in the group) did benefit from listening to ideas contributed by his team mates.

Table 5.26 Transfer of ideas from chat discussion to body paragraph 1 of V's essay

| Sentence | Idea code | Idea source |
|---|-----------|-------------------|
| Body paragraph 1 | | |
| ¹ Time management plays an important role in the building of a strong family bonding. | P1 | V S4.3; Art 1, S2 |
| ² Currently, parents spent most of their time at work as they faced stiff competition in work. | P1.1 | ZY S4.1 |
| ³ They need to manage their time to balance out the time spent at work and the time given to their family. | P1.1.1 | |
| ⁴ Parents can try to squeeze out time in between here and there such as trying to have dinner at home. | P1.1.2 | SH S4.3.1.2 |
| ⁵ Although it may seem trivial, every bit does count in building of a strong relationship. | P1.2 | |
| ⁶ Time is of utmost importance to building strong relationship between family members. | P1 | |

| | |
|--|--------|
| ⁷ Although work may be the leading factor to bring survival of the family in term of physical needs, time spent on building of relationship can be said as the “mental” bread to provide the surviving of the family. | P1.3 |
| ⁸ The motivation behind all this hard work and sufferings at work is to bring in income for the family. | P1.3.1 |
| ⁹ Thus, this means that family is the motivation behind all this hard work. | P1.3.2 |
| ¹⁰ Therefore, time must also be spent in building the relationship between the family members. | P1 |
| ¹¹ So time management do play a vital part in building a strong resilient family under harsh social and economic climate. | P1 |

In fact, tracking of the essay of the remaining group member also shows a similar pattern namely less than 50% of the idea threads in the essay could be traced to pre-writing activities of brainstorming and reading articles. Data from face-to-face discussion groups reveal similar trends in all but two students’ essays. This is in contrast with the data emerging from chat discussions where in 16 out of 24 (or 66.2%) of the students’ essays, approximately half or more than 50% of the idea threads could be attributed to the discussion and reading articles.

When a similar analysis was done to find out how SH and V shaped their key points of the essay, it was found that both SH’s and V’s respective key points could be traced back to either the discussion or the reading articles. Table 5.27 shows the sources of SH’s key points. SH further developed the supporting details based on these key points by adding new idea threads which constituted 66.7% of the total number of ideas in his essay.

Table 5.27 Key ideas and their sources in chat and article (SH's essay)

| Key ideas in body paragraphs | Idea code | Idea threads in chat/article | Turn/sentence |
|--|-----------|--|---------------|
| Body paragraph 1 | | | |
| In fact, for a family to stay strong in this society, the fundamental is to have a strong marital relationship. | P1 | So, I shall name the first point, which is, strong marital relationship. Strong marriage relationship, the first point. | 21 |
| | | Strong Marital Relationship | Art 1 S1 |
| Body paragraph 2 | | | |
| When a couple have a strong marital relationship, the next important point in line is communication and understanding. | P2 | I think communication is very important. | 35 |
| | | To make a better understanding, <i>lah</i> . | 38 |
| Body paragraph 3 | | | |
| Lastly, in order for a family to continue staying together, mutual respect and tolerance is very crucial. | P3 | One thing I think is mutual respect and tolerance. | 47 |
| | | They can then build up their family on values such as love, care and concern; mutual respect; filial responsibility; commitment and communication. | Art 1, S4.6.2 |

Similar to SH, all the three key points in V's ideas (see Table 5.28) originated from the face-to-face discussion and reading articles. Like SH, V built the supporting details by adding new idea threads which contributed to 54.5% of the total number of idea threads in his essay. Indeed, V's use of key points that could be traced to the face-to-face discussion and reading articles again demonstrates that less active participants do benefit from pre-writing activities such as attentive listening during the discussion.

Table 5.28 Key ideas and their sources in chat and article (V's essay)

| Key ideas in body paragraphs | Idea code | Idea threads in chat/article | Turn/sentence |
|---|-----------|--|---------------|
| Body paragraph 1 | | | |
| Time management plays an important role in the building of a strong family bonding. | P1 | Most important points is time management, <i>lah?</i> | 112 |
| | | Appropriate Bonding & Separateness | Art 1 S2 |
| Body paragraph 2 | | | |
| Another essential factor contributing to the building of a strong resilient family in the midst of the prevailing social and economic climate in Singapore is to have family outings and discussion sessions regularly. | P2 | Family outings. | 125 |
| | | Like if the children have problems or the wife, they don't keep that in the heart. They take out and discuss with each other. | 134 |
| Body paragraph 3 | | | |
| Lastly, instilling of family values can help to develop self-discipline. | P3 | They can then build up their family on values such as love, care and concern; mutual respect; filial responsibility; commitment and communication. | Art 1, S4.6.2 |

SH and V are not the only cases where face-to-face participants drew key points from pre-writing activities. Analysis of the last member of the team, Z, shows that all three key points in his essay were also from the face-to-face discussion and reading articles (see Table 5.29).

Table 5.29 Key ideas and their sources in chat and article (Z's essay)

| Key ideas in body paragraphs | Idea code | Idea threads in chat/article | Turn/sentence |
|---|-----------|--|---------------|
| Body paragraph 1 | | | |
| Firstly, we can have better understanding of each other just by communicating and interacting more with each other. | P1 | I think communication is very important. | Art 1 S3 |
| | | To make a better understanding, <i>lah</i> . | 38 |
| Body paragraph 2 | | | |

Next, mutual respect and tolerance must also be observed in the family. P2 One thing I think is mutual respect and tolerance. SH S3 (Art 1, S4.6.2)

Body paragraph 3

Lastly, we need to establish stronger family ties. P3 Appropriate Bonding & Separateness Art 1, S2

In fact, of all 28 essays of face-to-face group that were analysed, 50% of the key points of these essays could be attributed to either the discussion and/or reading articles (see Table 5.30).

Table 5.30 Key points in face-to-face students' essays and their sources

| Student | Sources of key points in essay | | |
|---------|--------------------------------|--------------------------|-----------------------|
| | Key Point 1 | Key Point 2 | Key Point 3 |
| F2F 1 | | | |
| V | V S4.3; Art 1, S2 | V S4.5; SH S2.5.1 | Art 1, S4.6.2 |
| SH | SH S1 (Art 1, S1) | Z S2 (Art 1, S3); Z S2.2 | SH S3 (Art 1, S4.6.2) |
| Z | Z S2.2; Z S2 (Art 1, S3) | SH S3 (Art 1, S4.6.2) | Art 1, S2 |
| F2F 2 | | | |
| JL | new | JL P8 | new |
| SF | H P1 | SF P3 | new |
| LD | ZW P9 | JL S1.2 | new |
| ZW | SF P6 | JL P2.1 | new |
| F2F 3 | | | |
| S | M S1 | XW Q2, S1 (Art 1, S3) | new |
| SHU | new | new | new |
| XW | new | new | new |
| F2F 4 | | | |
| P | Art 1, S1 | N S3 (Art 1, S3) | P S2 (Art 1, S4) |
| N | new | new | new |
| Ena | new | N S3 (Art 1, S3) | P S5 (Art 1, S4.6.2) |
| LX | new | new | new |
| F2F 5 | | | |
| C | C S1 | C S2 | PL S4 |
| W | C S1 | C S2 | new |
| PL | C S1 | C S2 | PL T1 |
| F2F 6 | | | |
| CS | A S3 (Art, F2.1) | new | new |
| A | new | new | A S3 (Art, F2.1) |
| E | new | new | new |
| FY | A S3 (Art, F2.1) | new | new |
| F2F 7 | | | |
| J | Art, A4.2 | new | CL P5.4 |
| QY | new | J P5.3 | new |
| CL | new | new | new |
| Z | new | Art, A4.1.1 | new |
| F2F 8 | | | |

| | | | |
|---|---------------|----------|-------------|
| S | S P1.1.1 | new | - |
| R | new | new | Art, A4.1.2 |
| A | A S1.3; Art 2 | S P1.1.1 | new |

Similar to data in chat, face-to-face students selected different idea threads in discussion to use as key points as seen in SH's and V's key points as well as CY's and MT's key points. This relates to how individual students make sense of the ideas discussed and later make use of them in their respective essays. It was also observed that most of the key points were formulated based on more than one idea thread as demonstrated in CY's key points one and two, MT's key points one and three, SH's all three key points, and V's key points one and two.

In sum, the discussion in this section that presents qualitative analysis of four essays reveals that comparing chat and face-to-face, it seems that chat is a more powerful discussion tool than face-to-face in facilitating the transfer of ideas from discussion to essay. Specifically, chat students made more use of idea threads discussed as their key points in the essays than face-to-face students. However, this observation does not imply that essays with a higher percentage of transfer are of a higher quality. What it suggests is that there is a higher possibility of ideas in chat than in face-to-face being retained and used. Again, this finding concurs with findings in the quantitative data.

5.5 Intervening factors

In order to investigate if there were any intervening factors (besides ideas initiated in the brainstorming session) that influenced the ideas in the draft, a semi-structured interview was constructed and administered (see Appendix 4). After students drafted

their essay, every member of each discussion group was interviewed separately to find out first, if individual students did more research or reading on the topic; second, if they discussed the topic with their group members; and third, if they discussed the topic with others besides their group members.

It was found that among 28 students interviewed in face-to-face and 24 in chat, 11 or 39.3% in face-to-face and six or 25% in chat claimed that they did not refer to any other print or web sources for their draft. The rest in both modes except one of the students, who mentioned that she referred to the newspaper that she brought to class, referred to the Internet for more information on the topic while they were drafting their essay. This was possible since students did their draft in a computer lab that was equipped with Internet connection.

When enquired if they further discussed with their respective team members, 100% of students in both modes of discussion said they did not do so. Nonetheless, eight or 28.6% out of 28 in face-to-face mentioned that they spoke to other classmates (besides their team members) about the essay topic. This is in contrast with the result of the chat group where none of the students checked with their other classmates, details as illustrated in Table 5.31.

Table 5.31 Further discussion after brainstorming session

| Group (size) | Team members | Other classmates |
|---------------------|---------------------|-------------------------|
| F2F 1 (N = 3) | 0 | 0 |
| F2F 2 (N = 4) | 0 | 2 |
| F2F 3 (N = 3) | 0 | 1 |
| F2F 4 (N = 4) | 0 | 1 |
| F2F 5 (N = 3) | 0 | 0 |
| F2F 6 (N = 4) | 0 | 2 |
| F2F 7 (N = 4) | 0 | 0 |
| F2F 8 (N = 3) | 0 | 2 |

| | | |
|---------------|----------|------------------|
| Total (N= 28) | 0 | 8 (28.6%) |
| Chat 1 (N= 1) | 0 | 0 |
| Chat 2 (N= 4) | 0 | 0 |
| Chat 3 (N= 3) | 0 | 0 |
| Chat 4 (N= 3) | 0 | 0 |
| Chat 5 (N= 3) | 0 | 0 |
| Chat 6 (N= 4) | 0 | 0 |
| Chat 7 (N= 3) | 0 | 0 |
| Chat 8 (N= 3) | 0 | 0 |
| Total (N=24) | 0 | 0 |

In summary, the data on intervening factors reveal that during the drafting process, students referred to the Internet the most compared to consulting their own team members and other classmates. However, it was not clear how many among the added ideas in students' draft were ideas from sources on the Internet. In the current technology era where students have been used to going on the web to surf and search for information, the reference to and dependence on the Internet when they complete their assignment came as no surprise, as reflected in the finding. What is more pertinent is what students do with the information and sources that they gathered from the Internet.

5.6 Summary of findings

5.6.1 Connection between pre-writing texts and brainstorming and drafts

Writing teachers believe that pre-writing passages not only serve as a stimulus and springboard for the generation of ideas in the brainstorming session, they (i.e. ideas) also give students an understanding of the issue or issues being discussion. In fact, pre-writing passages also serve as a source of language when the writing is done in second language. For writing teachers who teach English for Academic Purposes courses, the use of reading texts for pre-writing is one way of developing students'

paraphrasing, summarising and synthesising skills in addition to appropriate use of citation and referencing methods.

In this study, through reverse tracing of students' ideas from their writing draft to the reading articles, the extent to which students borrowed or incorporated ideas from the reading articles was established. Two categories of idea threads were established in this reverse tracing – one set of data that specifically identified if ideas in the articles appeared in the writing drafts and another set of data that attempted to trace ideas in the articles to discussion to writing drafts. Table 5.32 displays idea threads (or part of) from F2F 1 V's essay that could be attributed to the pre-writing articles.

Table 5.32 Use of ideas from pre-writing articles (V's essay)

| Idea threads in essay | Idea threads in article |
|---|--|
| Introduction | |
| They are also being exposed to the media that may not be a good influence on them. | Consequentially, our children are receiving their values from media moguls who are inspired by the dollar instead of the heart. |
| Body paragraph 2 | |
| In these small bits of care and concern, it will bring a lasting relationship between family members. | They can then build up their family on values such as love, care and concern; mutual respect; filial responsibility; commitment and communication. |

Results reveal that 104.8 mean number of idea threads or 12.4% of the total idea threads in the face-to-face group writing drafts and 86.4 mean number of idea threads or 11.5% of total idea threads in the chat group students' writing drafts could be traced to the pre-writing articles. A similar tracing technique was employed in identifying idea threads in articles that appeared in the face-to-face and chat

discussions and finally writing drafts. Results also show that 41.1 idea threads or 4.9% of the total idea threads in the face-to-face students' drafts and 48.3 idea threads or 6.4% of the total idea threads in the chat students' drafts could be attributed to the articles.

In short, it could be seen that approximately 17% of students' ideas in their respective writing drafts originated from the pre-writing articles. Even though the influence of pre-writing reading articles on students' writing does not seem significantly high, there is indeed a potentially important connection established between pre-writing reading articles and students' use of idea threads in these articles. In addition, although results of this study do not show the extent to which students acknowledged their sources of ideas, there are implications for the selection and use of reading texts assigned by teachers as a pre-writing activity.

5.6.2 Co-construction of knowledge and meaning between participants of a discussion

The results of this study confirm that there is co-construction of knowledge between participants of a discussion in the brainstorming session in both face-to-face and chat modes. In fact, as discussed and presented, approximately 50% of the idea threads in students' writing drafts could be traced to the brainstorming session. The value of discussion is therefore in its ability to stimulate students' thinking and the co-construction of knowledge in a community (Scardamalia & Bereiter, 1987).

As discussed in Chapter Two, Scardamalia differentiates between learning and knowledge building (2009). She postulates that learning is merely an act of acquiring information whereas knowledge building involves contribution to something new.

For students to build knowledge, she says that they must be in a design mode.

Learning activities or tasks should be geared towards knowledge building. In the case of this study, the scaffold brainstorming and discussion session and the pre-writing articles seem to act as an impetus and stimulus for the development of ideas and the co-construction of meaning. Analysing again the transfer of ideas in the main points of CY's and MT's body paragraphs in Table 5.21 and Table 5.22, it was observed that both started with key words and pieced them together to give them meaning. For example, CY made use of "both parents are working..." and "maid to look after children..." to formulate her first point "In Singapore, it is very common that both parents are working and the job of looking after the children usually fall to the hands of the maid." Similarly, a one-time mention of "hands-on?" by another member, T, in turn 255 of the chat discussion became MT's key point two "Secondly is about hands on among the members." In short, the study confirmed that collaborative or team brainstorming acts as a scaffold or springboard to students' individual writing.

There is also strong evidence in the study suggesting that students in both discussion modes tried to achieve agreement or consensus through the sharing of personal experiences and through the reference to articles assigned by the teacher.

5.6.3 Observable similarities and significant differences between face-to-face and chat discussion

As a way to summarise Chapter Five, a comparison and contrast will be made between the face-to-face and chat modes of discussion. This study started with the aim of looking at how ideas are transferred from a collective group discussion mode to an individual effort of writing. Two modes of discussion were compared: face-to-

face and chat. The data reveal there are both differences and similarities in how meaning is co-constructed in group and subsequently how knowledge is transferred into individual writing draft. The following discussion will start with a discussion of similarities and followed by differences.

In terms of similarities, it was found that students in both groups tried to agree with one another rather than argue for an idea to be accepted. There seemed to be a tacit understanding that their role was to help one another improve any idea presented instead of commenting on the strength or value of ideas. Therefore, there was very little evidence indicating defending of one's idea or arguing for one's idea. The nature of negotiation in the discussion was more on building new knowledge. This could be attributed to the nature of the task assigned to students and possibly to cultural preferences where negotiation of meaning refers to consensus building instead of commenting on each other's ideas or arguments. They were indeed being asked to brainstorm for ideas based on a prompt. Had the requirement of the task been different, for example, if students were asked to argue for or defend their position or case, the outcome of the study might have been significantly different. It is thus revealed in the results that in the construction of knowledge or meaning, features such as ELABORATION and CLARIFICATION occurred much more frequently than DEFEND and ARGUE.

Another observation in terms of similarities between face-to-face and chat discussion modes concerns the use of language during talk. Chat scripts and face-to-face transcripts show significant use of informal language form especially features of Singapore English (Singlish). These include particles such as *lah*, *leh*, *hor*, *what*, and

can and sentence-like patterns such as *is it?*, *so u want to*, *i very blur*, and *read already*. Singlish features were observed not only frequently among Singaporean students, but also some foreign students seemed to have picked them up as well.

Another similarity is the balance of participation among members of discussion.

Contrary to trends in other research, the results of this study show that there was no significant difference in the pattern of participation of students in the face-to-face and chat discussion modes. Specifically, although there were instances in which a few students dominated the discussion, this occurrence was evidenced in both discussion modes. In addition, in both discussion modes, it was observed that unequal participation usually happened when there was a ratio imbalance between genders. Groups where there were females than males would witness the male students contributing less during the discussion and vice versa.

In terms of differences in a collaborative construction of knowledge between face-to-face and chat members, the first key difference is focus and concentration in carrying out the brainstorming activity. In general, the face-to-face group was more on task than the chat group. A high percentage of talk in face-to-face was on the task assigned whereas the chat group members engaged in personal or small talk which had little relevance to the task. Even when the face-to-face group members were talking about personal matters, the theme or topic of the talk still had some relevance to the topic of discussion. This implies that the quality of discussion in face-to-face mode is better than the chat discussion mode.

Another difference that has close relevance to the quality of discussion is the depth of discussion. The data show that although more ideas were generated in chat than in face-to-face, the face-to-face mode facilitated more in-depth discussion. The chat may be good for the generation of multiple idea threads but the face-to-face mode seems more effective in allowing for further discussion on ideas initiated by members of the discussion. The findings, however, do not further suggest if there is any difference reflected in the quality of students' individual drafts between two factors, namely the quantity of ideas and quality of discussion.

However, when it concerns the transfer of content from discussion and articles to writing drafts, the results suggest that there was more transfer of idea threads in chat than face-to-face. Members of chat might not have as much depth in their discussion but the use of idea threads was more frequent than the face-to-face students. In fact, approximately 50% of the total number of idea threads in the students' writing drafts could be attributed to either the discussion or articles with the former having a higher ratio than the latter.

CHAPTER SIX

IMPLICATIONS AND CONCLUSION

One of the key motivations of the research of this dissertation stems from the belief that writing, specifically second language writing in an academic setting, is a skill that can be developed. Silva and Brice (2004) note that “the study of second language writing has become a legitimate area of inquiry in its own right” (p. 70). Every individual, even the most prolific writer, goes through a similar writing cycle namely the incubation stage where ideas and new ideas, which may be fluid, are formed in the mind and they are then formulated and articulated in the text form which then goes through a few rounds of revision before the final draft is completed. This cycle or process may be influenced by factors including pre-writing stimulus, discussion mode, teacher intervention and writing tool. In addition, each stage or sub-process of the writing cycle is an important element in both the learning and writing process. Silva and Brice’s (2004) compilation and discussion of research scholarship in second language writing in areas such as composing processes, writing assessment, the use of technology in writing, peer review, teacher feedback and the connection between reading and writing is a recognition of the variety, breadth and depth of research in the field.

The present study which focused on the impact of a collaborative pre-writing activity on students’ writing draft has helped in confirming, if not contributing to the understanding of, a few key questions about how students generate, co-construct, shape and develop their ideas from brainstorming to writing.

6.1 Implications of findings for teaching

There are a few implications of the findings in this study for teaching. First, group brainstorming acts as a springboard for students to generate and further develop their ideas.

The findings show that most students made use of ideas in the discussion in their respective drafts although the manner in which they arranged these ideas may be very different. In particular, a key point that is highlighted or brought up in the discussion may be seen as an elaboration or expansion of another point. In addition, the students in the present study employed ideas and arranged or developed them differently from one another. For instance, a key discussion point was used as a key point by one student and a supporting point by another student.

In addition, the concept of ownership of ideas comes up prominently in both face-to-face and chat modes with the latter having more students making use of self-initiated ideas in their respective drafts. However, at a micro level, the findings of ownership of ideas in the face-to-face group reveal that there is a significant correlation between those who contributed more and used more of these self-initiated ideas.

Furthermore, the high frequency of KNOWLEDGE CONSTRUCTION codes such as ELABORATION and CLARIFICATION reflects co-construction of meaning among members of a discussion group. The high percentage of students in chat and face-to-face modes in the present study who made use of other-initiated ideas in their writing confirms the positive influence discussion has on helping students develop their ideas.

In sum, these key findings demonstrate the value of collaborative discussion in providing an avenue for students to articulate their thoughts and enhance them with the help of others in the group. One of the implications for writing teachers is to create opportunities for students to test out and share their ideas with others so that these ideas can be further enhanced.

Another implication is the importance of providing scaffolding within the same learning

community for students so that they not only learn from others but they also contribute to the learning of their peers.

The second implication for the writing teachers pertains to the types of ideas that are transferred from collaborative discussion to the students' individual draft. In the present study where two modes of discussion were investigated, it was found that the face-to-face conventional mode of discussion generated more in-depth discussion among members and the discussion sessions were also more focused with less episodes of chatting about issues that were not related to the assigned task. On the other hand, the chat discussion produced more new idea threads though they might not have been as developed as the ideas in face-to-face context.

These findings have implications for the type of discussion mode to use in achieving various objectives. Writing teachers may make use of both discussion modes as pre-writing activities in an effort to help students generate and develop ideas. The pre-writing activity could start with a brainstorming session in the chat to get as many idea threads as possible. This could be followed by another discussion session where students talk about how the ideas generated in chat could be best developed and organised. Whether writing teachers choose the combined use of discussion modes or the use of individual types of communication tool, they should be informed by research findings of the potential impact these tools have on writing so that learning is maximised.

The third implication for teaching is the nature of discussion modes and how they influence communication. The findings of the present study show that in the chat mode, the language that students use is mostly informal and peppered with abbreviations, emoticons and words or

phrases which are not complete sentences although meaning in most cases is understood by members of the community. This use of informal language is present despite the fact that students use chat in an academic environment set up particularly for academic discussions.

This brings up the question of students' awareness and ability to code-switch between social and academic contexts. The chat mode though implemented or administered in an academic environment still brings with it the inherent features of the chat genre as discussed in Chapter Two. The question to writing teachers who would like to make use of the chat room as a discussion tool is whether students should be given the freedom to communicate or write in the manner in which they are comfortable or whether they should be asked to communicate without the use of abbreviations and shortened forms of texts thus an unnatural and artificial use of the tool. It may be argued that this is counter-productive since the chat mode of communication which values fast response rate necessitates the use of simplified text and abbreviations which are inherent in chat. Whichever the case, teachers should recognise the influence these inherent features have on the behaviours of the users.

This observation or phenomenon may not be apparent in all online or computer-mediated-communication tools but is peculiar only to synchronous modes such as chat, short text messages and twitter. Besides speed of response, another key feature governing these synchronous communication tools is conciseness and brevity of message without losing the essence or meaning of the message. In terms of asynchronous modes of communication tools like the discussion forum, blog and wiki, students should be required and in some cases be taught to frame their ideas in formal language befitting the audience, community, context and purpose of their communication.

The problem with allowing students to communicate following the inherent nature or characteristic of the respective online modes of communication is that students may learn a form of language that is not consistent with what is expected of in an academic genre. The dilemma of the writing teachers may very well be between the focus on the generation of ideas and the use of language; and the contention between fluency and accuracy. The answer to this predicament again lies in the purpose of the writing task and learning objectives.

In addition, the concept of employing an appropriate communication tool for specific learning or teaching objectives should be applicable to the use of new technologies such as blog, wiki and twitter. This is because not all tools can produce the same and desired learning outcomes. Therefore, an understanding and appreciation of these tools and technologies before they are implemented in the classroom is a crucial step in the adoption of these tools.

Fourth, in addition to investigating the modes of communication and the effects they have on the transfer of ideas to individual drafts, this study also looked at the impact of another pre-writing stimulus, namely reading texts, had on the discussion and subsequently the writing drafts. The findings show there is a high occurrence of points highlighted in reading texts during discussion appearing in the students' draft. In fact, the findings agree with Grabe's (2003) suggestion of a strong link between reading and writing, an area for further exploration. This indicates to writing teachers the importance of allowing students the opportunity to talk about the reading texts instead of assigning them only as homework and not allocating time during class for discussion. Since the key objective of the reading texts is to give students some background ideas about the topic of the writing task and to provide them with a springboard in which to start writing their essay, it follows that the opportunity to

discuss these ideas will give students a more in-depth understanding and appreciation of the passages. Besides, the pre-writing reading texts are a form of scaffolding that helps to orientate students into the theme and issues concerning the theme.

Fifth, another interesting observation that emerged from the data has to do with size and gender ratio. In both face-to-face and chat groups of the present study, there did not seem to be any significant difference in the participation level of the members. Both had members who were active and those who preferred to listen rather than participate. Therefore, in terms of encouraging more equal participation in discussion, this study found that there is no significant difference between both communication modes.

What is interesting is that the data from both modes of communication show that group size and gender ratio have an effect on the participation level of members. In particular, a group size of less than three members will inevitably have an almost equal participation from members. The question is therefore not how much each speaks but who seems to lead the discussion and the content or quality of ideas presented by these members. A group size of more than three especially if the number of members is five and above seems to encourage some members to be silent and less participative. It appears easy in both face-to-face and chat modes to 'hide' when the group size is large. In short, the study may have concurred with many teachers' intuition and experience that the optimum group size in order to maximise student interaction in discussion is three.

In terms of gender ratio, the data show that in groups of three or more where there was only one member of a particular gender, the participant had the tendency to speak less and

contribute less. In all-female or all-male groups, for example, the participation rate was more for all members.

Both these findings have implications for pedagogy. They inform teachers that when students are grouped, depending on the outcome that the teachers would like to achieve, a group size of three is optimum for maximising the participation rate of all the participants. In addition, groups with only one gender may have the same outcome. It must be noted and highlighted that the finding on gender ratio, though applicable to classes with mainly Southeast Asian students, may not yield the same outcome as classes with students who come from cultures and backgrounds where speaking up in class is a common phenomenon.

Another observation is the near absence of argument or negotiation of ideas in both discussion modes. In the present study, the participants' focus was on reaching a consensus on points for the writing task. There were very few instances where students disagreed with ideas presented by others thus there were very few occurrences of students making a case for their respective arguments or points. Although this could be attributed to the cultural background of students where consensus seeking and establishment of harmony are highly valued, this lack of negotiation of ideas may have its roots in the nature of the discussion task or assignment. Participants were told to brainstorm ideas that could contribute to the writing prompt. The requirement of the task did not state that they had to question others' ideas. Participants seemed to accept one another's ideas without much question or query. They too seemed to be more focused on generating more ideas and expanding on ideas brought up during the discussion instead of questioning the quality of the ideas.

Again, this has implications for how and what teachers intend to see as the outcome of their discussion session. The instructions and nature of the task given to the students will already have determined to a certain extent the rhetoric and discourse of the discussion. For a task such as the one implemented in the present study, although the teacher expected to see a good level of negotiation of ideas, this expectation was not communicated explicitly to the students. As such, it came as no surprise that consensus seeking was reflected prominently in both the face-to-face and chat discussions.

6.2 Genre-based content analysis model

The genre-based content analysis model was developed based on a combination of many frameworks and models that look at both online and face-to-face discourse and communication. It is a robust and comprehensive framework that can be used not only to trace the content of a discussion, but it can also be used to discern different functions and aspects of a discussion. Four main categories, TASK CONCEPTUALISATION, MANAGEMENT OF DISCUSSION, KNOWLEDGE CONSTRUCTION and SOCIAL AND METACOGNITIVE, were established. Descriptors in these categories help to make more explicit how prominently each category is represented in a discussion. Specifically and most importantly, the KNOWLEDGE CONSTRUCTION dimension and its descriptors will provide a deeper appreciation of how content is built in a discussion. These 16 sub-categories in the KNOWLEDGE CONSTRUCTION dimension account for most, if not all, of the functions of a discussion. In fact, the key difference and thus contribution of the genre-based content analysis model as compared to earlier frameworks is its applicability for both face-to-face and online communication.

6.3 Limitations of study

There are a few limitations which the study was not able to address due to time constraint and the need for a narrower focus. The first limitation of the study is concerned with the collection of written drafts that the students wrote immediately after their brainstorming session, which was one of the most integral parts of the study. Although careful effort had been taken to collect students' drafts, there were some students who did not hand them in but proceeded to submitting the final drafts of the writing assignment. The final drafts could not be and were not taken into consideration in the study since there might be other variables that could not be accounted for thus affecting the reliability of the data. Therefore, the total number of writing drafts collected was 52 instead of 58 which was the total number of participants in the main study.

Second, the students' outlines were not considered in the tracing and tracking procedure. This is because the study focused on pre-writing stimuli, namely the brainstorming activity, and later the pre-writing reading texts. Outlines are a response to the stimuli. In addition, the first writing draft which was produced immediately after the brainstorming session was deemed sufficient to capture data required for the study.

Third, because collection was confined to the first drafts of the students' writing, they were not required to include citation and referencing though some did attempt to cite their sources. It was thus not feasible to establish how or to what extent students acknowledged the sources of information they included in their drafts, specifically if they drew ideas from sources not assigned by the teacher. Nonetheless, the study was able to trace similar points that appeared in the assigned reading articles and the students' individual drafts.

Fourth, the study did not trace students' first drafts to their final drafts which in the process writing approach would have been implemented through activities such as peer review and conferencing with the teacher. This is, however, in line with the aim of the study which was to investigate the process between the brainstorming session and the first draft of the essays.

The fifth limitation of the study is related to the use of online chat despite its inherent features which may be a setback to communication such as the use of abbreviations and multiple threads. The decision to use online chat (instead of discussion forum) was due to its speech-like nature of communication and its real-time response which are similar to the face-to-face environment. The discussion forum with a delayed response time, though an easier tool in tracking idea threads, was not used due to its asynchronous nature. The idea was to find an online tool that could resemble as closely as possible to the synchronous communication nature as the face-to-face mode. A relatively recent development in technology that allows for online collaborative writing, wiki, was also not taken into consideration. First, wiki was not yet available during the collection of the data for this study. Second, despite its usefulness as an e-learning tool for projects and assignments that require students to produce a collaborative piece of work such as a team project or research paper, even if the wiki had been available, it would not have been used for the study. This is because like the discussion forum, the wiki being asynchronous is not as robust a communication tool as chat and does not allow for instantaneous response similar to the face-to-face environment.

The sixth limitation of the study is that it did not look at *why* students did *what* they did. Instead, the study focused on *how* and *what*. As noted by Manchón and de Larios (2007), the answer to *what* goes on is as important as the inquiry into the *why* of the writing process.

6.4 Conclusion

In Chapter One, it was mentioned that this dissertation aimed to fill a gap in literature on a sub-process of the process approach to writing instruction, specifically the impact of collaborative discussion on individual writing. It was also explained that the study was situated at a time when the university was keen to explore how teaching and learning can be optimised with the use of technology. The results of this study may not be able to fully address the quality of writing draft but it has been able to answer the extent to which ideas are transferred from the discussion and the differences and similarities in how content is transferred in the conventional face-to-face and online chat modes.

Teaching is indeed an art and a science. Striking and establishing that precarious balance that ensures the achievement of optimum learning is an exciting challenge faced by every teacher. It is hoped that this dissertation has provided a perspective to this balance.

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Five-paragraph essay model
(Langan, 2001, p. 294)

Introductory Paragraph

Introduction
Thesis statement
Plan of development:
Points 1, 2, 3

The *introduction* attracts the reader's interest. The *thesis statement* (or *thesis sentence*) states the main idea advanced in the paper.

The *plan of development* is a list of points that support the thesis. The points are presented in the order in which they will be developed in the paper.

First Supporting Paragraph

Topic sentence (point 1)
Specific evidence

The *topic sentence* advances the first supporting point for the thesis, and the *specific evidence* in the rest of the paragraph develops that first point.

Second Supporting Paragraph

Topic sentence (point 2)
Specific evidence

The *topic sentence* advances the second Supporting point for the thesis, and the *specific evidence* in the rest of the paragraph develops that second point.

Third Supporting Paragraph

Topic sentence (point 3)
Specific evidence

The *topic sentence* advances the third supporting point for the thesis, and the *specific evidence* in the rest of the paragraph develops that third point.

Concluding Paragraph

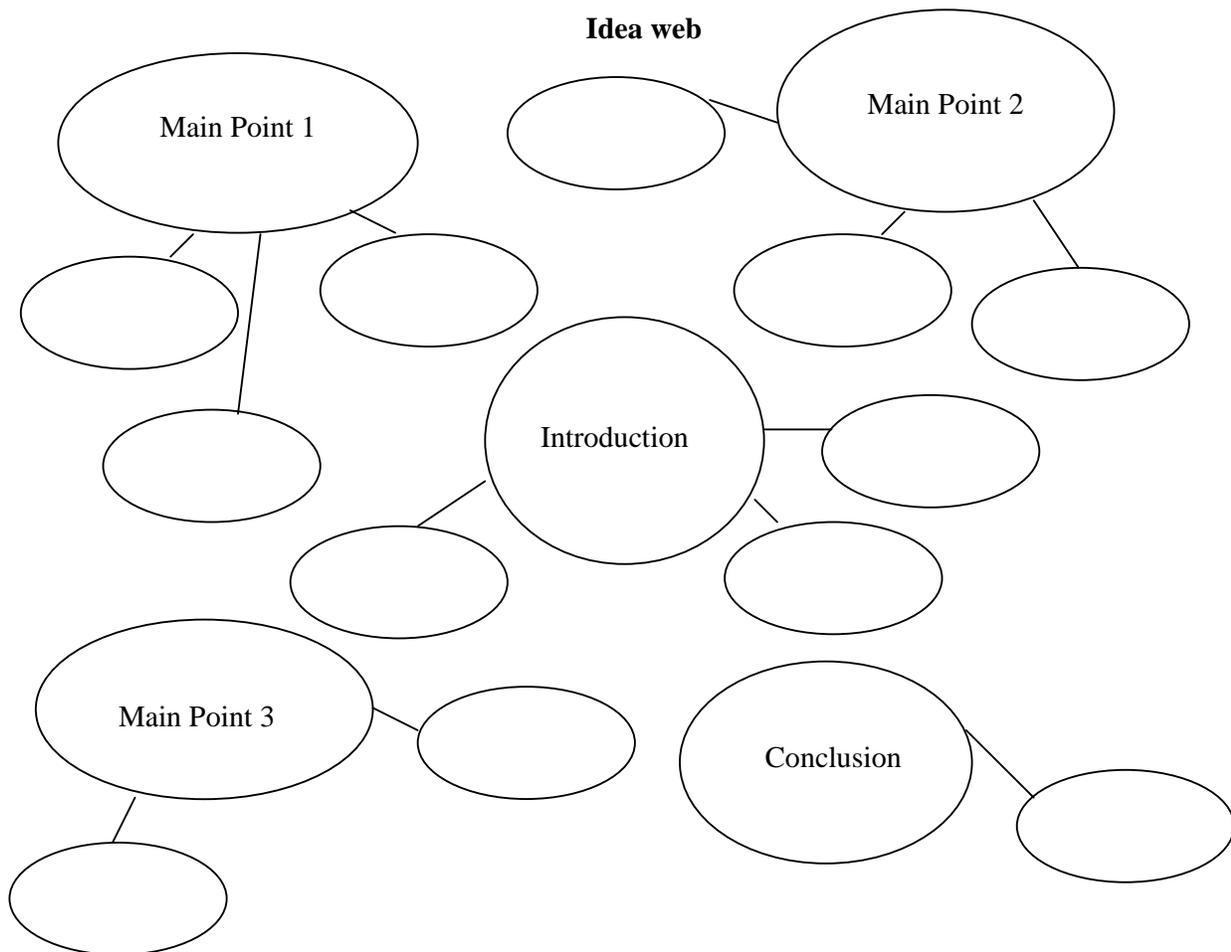
Summary, conclusion, or both

A *summary* is a brief restatement of the thesis and its main points. A *conclusion* is a final thought or two stemming from the subject of the paper.

Appendix 2

Outline

- I. Introduction: Thesis Statement/Statement of Purpose
- II. Main Body Paragraphs
 - a. Key Point/Solution #1: Topic Sentence
 - 1. Supporting evidence/examples
 - 2. Supporting evidence/examples
 - b. Key Point/Solution #2: Topic Sentence
 - 1. Supporting evidence/examples
 - 2. Supporting evidence/examples
 - c. Key Point/Solution #3: Topic Sentence
 - 1. Supporting evidence/examples
 - 2. Supporting evidence/examples
- III. Conclusion: Summary/Restatement of Purpose
Evaluation of solution(s)/Recommendation of the best solution(s)



Appendix 3

Peer Review Checklist - Essay

Reviewer _____

Group _____

Read through your partner's essay carefully and put a tick beside each area that you feel she/he has done satisfactorily. On areas that your partner has not done well, please give him/her some suggestions/recommendations on how to improve.

| Item | Satisfactory | Needs improvement | Suggestions |
|-------------------------|---------------------|--------------------------|--------------------|
| Introduction | | | |
| Attention-getter | | | |
| Context | | | |
| Thesis statement | | | |
| Plan of development | | | |
| Body Paragraph 1 | | | |
| Topic Sentence | | | |
| Supporting evidence | | | |
| Body Paragraph 2 | | | |
| Topic Sentence | | | |
| Supporting evidence | | | |
| Body Paragraph 3 | | | |
| Topic Sentence | | | |
| Supporting evidence | | | |
| Conclusion | | | |
| Summary | | | |
| Final thought(s) | | | |
| Overall | | | |
| Cohesive | | | |
| Coherent | | | |
| Appropriate | | | |
| Interesting | | | |

Appendix 4

Semi-structured interview questions

A semi-structure interview was designed and conducted in the pilot study and main study to find out any other factors influencing the content of the first writing draft after brainstorming session. Basic questions asked were:

1. Did you do more research or reading on the topic after the brainstorming session? If so, what did you do?
2. Did you discuss the topic with the same group members after the brainstorming session? If so, what did you discuss?
3. Did you discuss the topic with anyone else after the brainstorming session? If so, what did you discuss?

Appendix 5

Research Consent Form

Dear Student,

I am currently doing a pilot study that aims to trace/track how ideas for writing are generated and developed into a piece of written text. Two discussion environments will be used in this study – the online synchronous chat discussion (via the IVLE chatroom) and face-to-face discussion. Some of the research methodologies that I will use are 1) audio recording of face-to-face group discussions, 2) interviews with you for your feedback, and 3) writing drafts.

I hope that you would assist me in my research by agreeing to be a participant. The research has no bearing on your grade and any feedback or data collected from you will be treated with the strictest confidentiality.

Thank you.

Research Consent Form

I agree to be a participant of the pilot study and understand that all information provided by me will be treated with the strictest confidentiality.

Name: _____ Signature: _____ Date: _____

List of Relational Propositions
Mann and Thompson (1986, pp. 60-66)

| Relational Proposition | Meaning |
|-------------------------------|--|
| solutionhood | one part (of text) provides solution to the problem posed in the other part |
| evidence | second part of text provide evidence for the claim in the first part |
| justification | one part of text attempts to explicitly establish the appropriateness or acceptability of speech act(s) performed by the other part |
| motivation | to provide the addressee with motivation for complying with the directive in the text (usually found in advertisements) |
| reason | one part provides a rationale for the volitional action expressed in the other part |
| sequence | when 2 parts of text convey event, the second part is understood to follow the first |
| enablement | one part of the text provides information that enables the addressee to comply with the directive |
| elaboration | 5 kinds of relationship – set-member, generalization-instance, whole-part, process-step, object-attribute |
| restatement | second part of the text restates the first |
| condition | one proposition provides the condition under which the other proposition holds |
| circumstance | between 2 parts of a text, if one of the parts establishes a circumstance or situation, the other part is interpreted within or relative to that circumstance or situation |
| concession | speaker acknowledges, in one part of the text, the truth of a point which potentially detracts from a point in another part of the text; signalled by 'although'; involves agreement with a possible objection from the reader |
| background | one part of text provides background information without which the other part of the text cannot be adequately comprehended |
| thesis-antithesis | when 2 concepts contrast, speaker commits to one and de-commits from the other; does not involve agreement with a possible objection from the reader |
| cause | one portion of text present a cause for a condition conveyed by the other portion |

Notes to raters

Thank you for agreeing to be one of the raters of this research project. Before I go into what needs to be done, I would like to highlight some of the main objectives of the research. They are to investigate

- how knowledge is constructed collaboratively, in face-to-face (F2F) and synchronous chat (SC) environments;
- how knowledge that is constructed collaboratively is transferred to individual writing; and
- the patterns of interaction among members of a discussion, in both F2F and SC modes.

To investigate the above, I have collected and transcribed audio-taped F2F discussions and chat scripts. These discussions were the brainstorming sessions which students did before they wrote their individual essays. The class was EG1471 (English for Academic Purposes, Engineering)/ES1301 (English for Academic Purposes, Science).

For the pilot study

Prior to the brainstorming session, students were shown the structure of a problem-solution essay, namely the situation-problem-solution-(evaluation) model. They had also analysed a sample problem-solution essay to identify how the author shaped or built his points. Their task for the brainstorming session was to think about a specific problem and some solutions that they would write for their essay. They were not given any particular topic or theme.

In a semi-structured pre-writing discussion such as this, participants of the discussion group were operating within a certain framework. In this case, the rhetorical pattern of the discussion reflected that of the written task, namely a problem-solution task. In addition, the coding scheme developed takes into consideration this particular aspect.

For the main study

Prior to the brainstorming session, students were shown the structure of an expository essay following the five-paragraph essay model. They had also analysed a sample essay to identify how the author shaped or built his points. Their task for the brainstorming session was to think about ideas for an essay task. Writing prompts were given to the students.

In a semi-structured pre-writing discussion such as this, participants of the discussion group were operating within a certain framework. In this case, the rhetorical pattern of the discussion reflected that of the written task, namely an expository writing task. In addition, the coding scheme developed takes into consideration this particular aspect.

There are four main categories in the coding scheme:

1. Task conception – refers mainly to how statements and questions about the structure or format of the essay, organisation of ideas, and requirement of the task
2. Management of discussion – is concerned with the flow of the discussion and how members manage the discussion
3. Knowledge construction – looks at what knowledge and how knowledge is generated
4. Social and metacognitive – refers to social talk that has no bearing on topic or issue being discussed and interrupted thoughts

Coding the F2F and SC transcripts:

1. Please use the coding scheme to assign each segment to a category, namely task conception, management, and knowledge construction, and its relevant subcategories.
2. As far as possible, assign only one category and one subcategory to each segment. However, in some cases, a segment could fall into more than one category or one subcategory. In such cases, indicate all the relevant categories or subcategories.
3. Please take note of any areas of difficulty while coding.

Coding the essays:

1. Each essay has been divided according to each sentence.
2. The themes, thesis statements, topic sentences, problem statements and solution statements generated in either the F2F or SC brainstorming session have been coded.
3. Please use the idea codes assigned to the themes, thesis statements, topic sentences, elaboration, evidence and examples to code each segment of the essay.

Appendix 8

Emoticons in chat

(as defined in the Integrated Virtual Learning Environment chat)

| Emoticon | What it means |
|---|--------------------------|
|  | smile |
|  | smile with a wink |
|  | question |
|  | smile (showing interest) |
|  | tongue sticking out |
|  | crying |
|  | angry |
|  | thumb down |
|  | thumb up |
|  | sad |
|  | unhappy |
|  | sleepy |
|  | mad |
|  | confused |
|  | very happy |
|  | baring teeth |

Appendix 9

Survey questionnaire on students' background

The aims of this survey are to find out a little bit more about your background and your experience in using the chat room. Please be assured that your feedback will be treated with strict confidentiality.

Instruction: Please put a tick in the appropriate bracket.

A. Background Information

1. Gender – Male () Female ()

2. Nationality

Singaporean () PRC Chinese () Malaysian ()

Other (please specify) _____

3. My major is _____

4. Is English the medium of instruction in your

| | Yes | No |
|--|------------|-----------|
| primary school? | () | () |
| secondary school? | () | () |
| pre-university institutions (JC, college, etc.)? | () | () |

5. How long has it been since you learned how to write **essays** in English?

| | Yes | No |
|----------------------------|------------|-----------|
| less than 5 years ago | () | () |
| between 5 and 10 years ago | () | () |
| more than 10 years ago | () | () |

B. Experience with the use of chatroom

6. Have you used the (English medium) chatroom (e.g. ICQ, IRC) to communicate socially with your friends?

Yes () No ()

7. Have you used the chatroom in the IVLE to discuss study-related topics or issues with your classmates?

Yes () No ()

Thank you very much for participating in this survey.

Reading article (pilot study)
Water- Everybody's Problem

Whether trying to live with the depressing spectacle of drought or battling rampaging floods or suffering from debilitating disease caused by contaminated drinking water, people in almost every corner of the world have had their problems with the vagaries of water. Although water covers much of our planet, more than 97% is in the oceans. Another 2% is unusable ice. Furthermore, much of the remainder is polluted. Developed and developing countries alike are now talking about a water crisis and about ways to solve it.

The demand for clean water is expected to double in the next 25 years. This increase will coincide with increasing population and industrialization – and the attendant risk of factory and human wastes further contaminating rivers, lakes and ground water. Currently, worldwide, there are about 250 million new cases of water-borne diseases discovered each year, and about 25,000 people die from them every day. Pollution continues to plague us. “Even as the rain falls,” says Russell W. Peterson, former chairman of the United States Council on Environmental Quality, “it scours pollutants from the air. In fact, nearly all the pollutants the people of the world discharge into the air end up in our water systems.” Whether tainted by industrial waste, sewage or pollution, unreliable water supplies frequently create breeding grounds for deadly water-borne diseases when safeguards and purification are inadequate.

To help solve the water problem, specialists in many countries are looking at methods to improve the supply and conservation of water. Already in place, forecasting – including predictions of snow, rain, river levels and soil loss – can help scientists head off, or at least cope with, floods. Canals, another method long in use, can ease another major water-related problem – drought. Another idea that has been around for a long time entails dragging ice bergs to drought areas. Attempts to overcome the drawbacks – a great deal of energy would be needed to tow the ice and pump the water inland and the ice might melt before reaching its destination – are still being made.

Specialists are also developing methods to increase the supply of clean water. Research into desalinating sea-water continues by inventing new and improving existing desalinating methods although no method can yet promise truly low-cost fresh water. Fossil water-underground water dating from the ice age – could be drilled for in some areas, but supplies are non-renewable. Work continues in these areas. It is obvious that a lot of time, money and research are going into finding solutions for the looming water crisis.

In conclusion, the lack of clean water will only get worse as population and industrialization increase. However, this situation is being addressed on several fronts focused on conserving our current supplies as well as finding new supplies. Whatever the method, though, the crisis is not going to be resolved easily or cheaply.

Adapted from *Interactive Writing*, Kwan Terry, Cook and Ragan, Prentice-Hall, UK, 1988.

Reading article 1 (main study)

Traits Of A Functional Family

By Karen Lim-Quek

At a family workshop, one father remarked that a Singapore family is one that lives in a HDB flat but desires a condo. His 7 year-old-daughter interrupted, "Daddy, that's what you want!" Everyone-broke into laughter, leaving Dad feeling quite embarrassed. That idea must have been communicated directly or indirectly within the family circle, and the young member has absorbed it like a sponge. Soaking themselves into family conversations, behaviour and values, children are certainly influenced by the standards set by parents. In fact, the way a family operates has tremendous implications for how the individuals develop and function. The following are some traits of a functional family that help enhance family relations.

- **Strong Marital Relationship**

Research indicates that one key factor to a functional family is the healthy marital relationship between parents. In such a relationship, the couple can be viewed as two holistic individuals making music together. Each person utilises his/her own skills and instruments to play their songs in tune. They are committed to each other by choice, to stand by each other "for richer or for poorer, in sickness and in health,...till death do us part". It is a union based on unconditional love. It takes responsibility for meeting personal needs as well as enhancing each other's growth.

When a couple feel secure and stable, they do not need to use their children to meet their needs. In fact, they are in a healthy position to provide a model relationship for their children and offer family leadership. As a result, their children can develop and function fully. If the marriage component is not functioning well, the family members can be stressed and may exhibit dysfunctionality in their lives.

- **Appropriate Bonding & Separateness**

Another fundamental factor to a functional family is understanding the emotional system within the family. This includes the need to form deep loving attachments (i.e. bonding), to take responsibility for one's own tasks (i.e. separateness) and to develop the ability to make wise and responsible choices.

Bonding is connecting positively with the family. A family member experiences bonding when he/she "matters" to the family, and can count on the family to nurture his/her emotional needs. Bonding can be developed through saying prayers or reading bedtime stories together, talking over the dinner table about the day's events, or sharing painful instances at work or school.

While bonding is important, it is not sufficient. Family members also need to learn "separateness". This requires each member to know his/her boundary. A boundary determines what the person is responsible for, and it must be clear and well-defined for proper family functioning. At the same time, the system has to be open to allow contact with other family members. Boundaries are therefore both limiting and permeable.

For example, a mother defines the boundary of the parents when she tells her 17-year-old daughter, the oldest of their three children, "Your father and I will decide whether your sisters are old enough to go out with their friends." However, she may redefine that boundary to include the eldest daughter

when she announces, "I want the both of you to listen to your eldest sister while your father and I are out this evening." Thus, there is a clarification of the boundaries between parents and siblings.

A functional family, whilst close-knit, respects and tolerates the individuality and personal autonomy of its members. Members are allowed to think for themselves, state their opinions and disagree without fear.

- **Effective Communication**

An essential factor to a functional family is good communication. Conversation among family members nurtures caring, empathic, open and trusting relationships. Establishing bonds and creating boundaries facilitate communication as members are free to express their thoughts and feelings. With a basic respect for one's own views and those of others, every member of the family, including small children, is seen and heard. Whilst power resides in the parents, children have their opinions and therefore, negotiations are made possible between parents and children.

- **Understanding Family Rules**

One other issue considered crucial to a functional family is understanding family rules. Some families forbid discussion of certain topics, while others forbid overt expressions of anger or irritation with one another. Still others foster dependency. In general, such rules are made for the family members, to help them in their growing process. These rules must therefore be clear and negotiable.

As the family evolves through the family life cycle, rigid rules that stifle maturity or cause immobility will require some modification. When children grow up, they press for a redefinition of family relationships and rules. For instance, teenagers may no longer wish to accompany their parents on a shopping spree over the weekends, preferring instead to go with their friends. They may also challenge family values and traditions. Such crises have the capacity for conflict. Unless the family is flexible and open to change, some family members will feel trapped and, eventually, the family may break down.

Just as Rome was not built in a day. it takes time and continued effort for families to function effectively. Conscious effort is needed to inculcate healthy family values and rules. Parents are encouraged first to work on their own emotional issues so as to build a strong foundation for their family. They can then build up their family on values such as love, care and concern; mutual respect; filial responsibility; commitment and communication.

Extracted from Families Today, Issue No 2/96

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Retrieved from http://www.aboutfamilylife.org.sg/1_2_30_0_0_0_2_0.htm on 19 June 2003

(Adapted)

Reading article 2 (main study)
The Importance of Father's Time
By Seth Metcalf (sman306@hotmail.com)

Take a look around. If you really want to, you can pick up the phone and call China. If you want a package from Germany tomorrow, you need only click a mouse or, at most, make a phone call. Technology's ascension has changed not only business, but the family as well. Most children no longer play in the park and hunt frogs, but rather watch television and surf the Internet. With the resources like these available today, it seems that much of the developing influence previously reserved for parents lies in the media. Consequentially, our children are receiving their values from media moguls who are inspired by the dollar instead of the heart. We cannot allow society to corrupt the minds of the future. As fathers, we have a responsibility to do something to save our children, to rescue them from the values portrayed in video games and on television. Much of what is available now in the media will only contribute to the downslide of society into a state of moral apathy.

To reverse this process, we need to look at the problem on the most basic level. 'Parental involvement' has come to mean that Mom helps with the homework and activities. Finding the necessary time to spend with our children is, indeed, more and more difficult because of the ever-increasing demands of a competitive marketplace; but as society slips away into a moral state of numbness, our greatest trump card as fathers may just be ourselves. An increased amount of father-child involvement has proven to increase a child's social stability, educational achievement, and even their potential to have a solid marriage as an adult (United States, p. 4).

Fathers have a lot of responsibility. Much of their time is spent at work providing for the family while their wives are at home. Because their time with their children is limited, the question for fathers arises: In what ways can I as a father influence my children for good? Just as women and men differ from one another, so, too, are some of the influences they have on their children inherently different. While mothers are often seen as the nurturer, fathers often have an important role when it comes to playing with their children and teaching them how to do physical tasks. Fathers tend to be more focused on 'doing practical, educational things rather than talking about doing things.' As they are more physical with their children than moms, dads play an important role in developing their children's motor skills and ethical limits in regard to physical interaction (Horn, pp. 37-39). Children of these highly interactive fathers are also more curious about the world around them and develop greater problem solving skills (United States, p. 4).

The window of opportunity through which to provide that vital influence starts very young. In fact, it is safe to assume that dads have an effect on their children even before the little ones begin speaking. One study showed that at as early as five months babies had already been influenced by their interaction with their fathers. Those infants that had more contact with their fathers were more vocal and playful when placed with a friendly, but unfamiliar male. (Horn, p. 39) This is in large part due to the fact that children begin at a very young age to establish patterns of trust and to form their social style. Since they develop so early, it is not safe to assume that a child is immune to negative influences before he can fully interact with his surroundings. When fathers acknowledge this, they can guide their children to receive the influences of their environment in a positive manner. A father's guidance will help children attain a higher level of social stability.

The well-liked are often those who conform to the trends of the crowd. Although this is one way to be popular, there are other ways children gain acceptance of their peers. When parents use the home to teach their children how to interact with the world around them, their children develop better

relationship skills which will aid them throughout their lives. As they grow, children will find that their ability to work together and communicate with their peers brings the same kind of approval as simply conforming but with a higher level of confidence. This social acceptance often leads to a greater sense of self worth which plays a crucial role in academic achievement. Excellence in both academic and social spheres is strongly linked to the child's relationship with its father. A study done by Kevin MacDonald found that when children spent more time playing with their fathers, their teachers consistently rated them as well-liked by their peers (Horn, p. 39). Children glean much more from their interaction with their fathers than we realize.

When fathers take an active role in their children's lives, it not only helps them to develop healthy friendships and achieve good grades, but it will play a major role in their success as adults. Those adults who say their fathers were highly involved in their lives attend more schooling and have a higher average salary than those with lower father involvement (Peters, p. 106). It is apparent that a father's interest in his child carries over to the child's own ambition to succeed. What then are we to do to assure that our children achieve the success noted in these studies?

As a general finding, researchers note that although time with children is important, it isn't necessarily the amount, but the quality of that time that matters. Especially when our time is limited, we need to make sure that the opportunities to be with our children count. One example can also give you a needed break from the hustle and bustle of work. Playing with your kids can be a positive experience for both you and your children, especially when they are young. This time needs to be free of distraction. Children tend to feel their surroundings more than analyze them, so they notice when they don't have the full attention of their parent. Additionally, by playing with your children, you allow them to release energy built up from school or other activities, and this aids to develop a stronger personal bond. Simply through your eager interaction with them, they will trust you more, creating the foundation for healthy relationships throughout their lives.

Another opportunity for fathers, especially when their children are young, is bedtime. Hopefully, the night has calmed down and there is an opportunity to have quality time alone with the children. Simple things such as reading a book or recounting the day's events have the potential to make a child feel more secure while deepening the father-child relationship. When children learn to respect and love their parents, they are more willing to communicate and accept the guidance they will receive later in life. Parents, in turn, respect their children for their social maturity. Mutual respect promotes sensitivity and understanding toward others and plays a crucial role in how well our children are able to work together with others in all aspects of their lives (Horn, p. 37).

Some of the fondest memories I have from my childhood are those spent working with my father. It's true that I wasn't always excited to go and work in the yard, but once into it, I enjoyed the time it afforded me to get to know my father on a more mature level. Working together gives you time to talk without having to 'have a talk.' It was through working side by side with my father that I really developed a respect for him and his experiences in life. Because of these times together, I am willing to turn to him for counsel. By nurturing our relationship, my father prepared me to deal with others generously on a personal level. His influence wasn't only effective because of the wisdom that he possessed, but more so because I knew that he really cared. His concern motivates me to extend that same level of caring to those around me.

The world is demanding. As fathers, we don't hold all of the answers to repairing society. Despite all our attempts as a father, our children may still have unresolved social issues; there is no cure-all in fatherhood. As a father, we hold some of the keys to unlocking the hopes and dreams within our children. When they are grown, we hope that they look back on us as their hero, someone who

shaped their life for good. John Gottman, a family researcher, indicated why it is that fathers have such a deciding effect on their children's lives. He states, 'We believe the reason fathers have this extreme influence on their children is because the father-child relationship evokes such powerful emotions in kids' (Horn, p. 39). Spending quality time with our children can unleash this huge potential to guide them to happy, healthy development.

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Reading article A (main study)
Fiscal incentive weighed to boost US organ supply
by Carey Goldberg

With more than 6,000 Americans dying each year while they wait for organ transplants, medical and political leaders are considering a desperate experiment long viewed as taboo: rewarding the families of brain-dead donors with thousands of dollars in hope of increasing the organ supply.

The American Medical Association (AMA), which represents nearly 300,000 doctors nationwide, and the United Network for Organ Sharing, the national group that oversees the organ supply, have endorsed the idea of a test on whether offering financial incentives will lead to a rise in donations.

Earlier this year, a group of academics, doctors, clerics, and others created The Ad Hoc Committee for Solving the Intractable Organ Shortage, the first group organized expressly to lobby for the idea of payment to encourage organ donations.

Now, a bill in Congress proposes overturning a section of the current law that bars payment for organs. Some advocates say its chances appear better than similar attempts in the past. "The number of deaths is so much more glaring, now that people who were once against the idea now recognize that it might have merit," said Dr. Thomas Peters, director of the Jacksonville Transplant Center in Florida and a member of the ad-hoc committee.

Peters, who has been following the issue in Congress, said he believes that the bill, sponsored by Representative James C. Greenwood, a Pennsylvania Republican, is the first to have a real chance of attracting broad support.

The idea of mixing money into heart-wrenching decisions about organ donation is repugnant to many and prompts fears that sinister organ farms could traffic body parts or that the bodies of the poor could be exploited to supply the rich.

But proponents' central argument has gained strength with each passing year: The waiting list for organs, now at about 82,000 people, keeps growing, and nothing has succeeded in significantly increasing the number of donations. Almost 60 percent of those on the list are expected to die waiting.

Research indicates that the families of less than half of possible donors agree to donate. The transplant community has tried various initiatives, from public awareness campaigns to donor registries, that have helped some.

But the gap keeps growing. Overall, the waiting list has been increasing by about 12 percent a year, while the number of brain-dead donors has been rising by under 3 percent, to about 6,000 a year.

A recent study estimated that the number of potential donors each year is about 17,000.

Proponents of financial incentives emphasize that they are not proposing the buying and selling of organs and that the incentives would not be offered to "live donors," those who plan to go on living after they volunteer an organ.

Rather, members of the ad hoc committee and other advocates propose that the federal government finance carefully controlled pilot studies to determine whether donation rates rise when families of brain-dead donors receive a standard sum, perhaps \$5,000, as thanks for public service.

They say the payment is comparable to the money given to families of soldiers who die in the line of duty. Another suggestion would give a \$10,000 tax credit to the donor's estate.

The AMA has not endorsed a specific figure, and the United Network for Organ Sharing endorses legislation that could carefully study the effect of incentives, whether financial or non-financial.

For more than a decade, advocates have been pushing for such financial incentives, said Harold Kyriazi, a neuroscientist at the University of Pittsburgh and the founder of the ad hoc committee. "But it's always been sort of a fringe voice," he said. "Now, I'd call it a vocal minority."

Opposition from groups including the American Society of Transplant Surgeons remains broad and strong. Dr. Francis L. Delmonico, a Massachusetts General Hospital transplant surgeon who is active in the National Kidney Foundation, said financial incentives inevitably raise many of the same ethical problems inherent in the outright buying and selling of organs. "Any attempt to assign a monetary value to the human body or its body parts, even in the hope of increasing organ supply, diminishes human dignity and devaluates the very human life we seek to save," he testified at a congressional hearing on increasing organ donation in June 2003. He also warned that payments could "undermine the integrity of the donor pool" and would give relatives incentives to cover up flaws in a potential donor's medical history to get the money.

Other opponents argue that some families who would have donated a patient's organs out of altruism may be turned off by the money and that donations could actually drop or that some families could pull the plug more quickly on their relatives.

The AMA was closely divided over endorsing the incentive experiment, initially shelving the proposal before the organization finally endorsed it last year.

Ultimately, supporters say the only way to determine whether money works as an incentive is to test the ideas -- whether they are gifts that go straight to the family, cash to cover funeral expenses, or tax benefits for the estate of the donor.

"The point is to say, 'Look, let's set up a few demonstration projects,'" said Alan Eisenberg, an adviser to Greenwood.

Without knowing the effects that those financial incentives would have on donations, proponents say, it is impossible to assess the balance between harm and good.

If the proposal is approved, the United States would apparently be the first country to try an official program using financial incentives, said Lloyd Cohen, a member of the ad hoc committee and a George Mason University School of Law professor who has written extensively on organ markets.

The economic principles involved in such incentives are elementary, he said. "If you pay for something, you're more likely to get it than if you don't."

Eisenberg said Greenwood has not yet been trying to sign up co-sponsors for the bill, which was introduced in July.

But the measure has been drawing support across party lines, he said, and, in general, editorial boards and national groups such as the AMA "are starting to build up this swell of pressure to say, 'Let's try to do this.'"

He also said that Tommy G. Thompson, US secretary of health and human services, would probably support trying the idea. Thompson's office did not respond to a request for his position.

John M. Newmann, an economist and two-time kidney recipient, opposes the sale of organs from live donors, but said he strongly supports careful research to test financial incentives.

"Everyone seems to have a very strong opinion on one side or the other," he said. But "no one offers any objective data to support these opinions, because there are none."

By Carey Goldberg, Globe Staff, 10/8/2003

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Company.

Source:

http://www.boston.com/news/local/articles/2003/10/08/fiscal_incentive_weighed_to_boost_us_organ_supply/

(Adapted)

Writing Task

Choose only ONE of the following writing tasks and write about 500 words. You may draw on your own knowledge and views as well as ideas from the article in this paper but do not copy large chunks without acknowledgement.

1. The article mentions that American medical and political leaders are considering the use of financial incentives in an attempt to increase human organ donation. What are your views on using monetary rewards to boost the supply of organs for transplants, in any country or the world as a whole?
2. Is human organ transplant the best or only solution to the problem of organ failure? Are there possible alternatives and what are the medical, ethical and moral issues involved, if any?

Appendix 14

Chat scripts of pilot study

Chat 1 pilot

| Turn | Std | Utterances | Category | Subcategory |
|------|--------------------------|--|-----------|-----------------|
| 1 | (9:21:19 AM) CH to ALL : | hello | social | off task |
| 2 | (9:21:37 AM) YF to ALL : | ha ha | social | off task |
| 3 | (9:21:44 AM) CH to ALL : | later got phy tut? | social | off task |
| 4 | (9:22:01 AM) JH to ALL : | got... but no do | social | off task |
| 5 | (9:22:06 AM) JH to ALL : | champion brand | social | off task |
| 6 | (9:22:12 AM) YF to ALL : | going to win money in the upcoming matches today | social | off task |
| 7 | (9:22:28 AM) CH to ALL : | u made yr bet? | social | off task |
| 8 | (9:22:45 AM) YF to ALL : | no no | social | off task |
| 9 | (9:23:50 AM) CH to ALL : | try out the commands | social | off task |
| 10 | (9:23:55 AM) CH to ALL : | /me say hi | social | off task |
| 11 | (9:24:22 AM) YF to ALL : | 😊 | social | off task |
| 12 | (9:24:30 AM) JH to ALL : | 🤔 | social | off task |
| 13 | (9:24:44 AM) YF to ALL : | interesting | social | off task |
| 14 | (9:25:05 AM) YF to ALL : | 👍 | social | off task |
| 15 | (9:25:12 AM) CH to ALL : | 🤔 | social | off task |
| 16 | (9:25:13 AM) YF to ALL : | 😊 | social | off task |
| 17 | (9:25:20 AM) CH to ALL : | hehheh | social | off task |
| 18 | (9:25:28 AM) YF to ALL : | ha ha so fun | social | off task |
| 19 | (9:25:43 AM) CH to ALL : | hello | social | off task |
| 20 | (9:26:19 AM) CH to ALL : | lets discuss | mgmt | focus |
| 21 | (9:26:19 AM) YF to ALL : | ARSENAL GOING TO WIN THE MATCH TODAY YEAH | social | off task |
| 22 | (9:26:35 AM) CH to ALL : | arsenal v dortmund | social | off task |
| 23 | (9:26:48 AM) YF to ALL : | OK WHAT TOPIC U SUGGEST | mgmt | elicitation |
| 24 | (9:26:59 AM) CH to ALL : | pollution | knowledge | initiation |
| 25 | (9:27:04 AM) CH to ALL : | air pollution | knowledge | initiation |
| 26 | (9:27:12 AM) JH to ALL : | Ok... i am fine with it | knowledge | agreement |
| 27 | (9:27:13 AM) YF to ALL : | OKAY FINE WITH ME | knowledge | agreement |
| 28 | (9:27:22 AM) JH to ALL : | then steady ... | knowledge | agreement |
| 29 | (9:27:24 AM) YF to ALL : | OKAY I AGREE | knowledge | agreement |
| 30 | (9:27:27 AM) CH to ALL : | onz | knowledge | acknowledgement |
| 31 | (9:27:44 AM) JH to ALL : | So how???? | knowledge | clarification |
| 32 | (9:28:04 AM) YF to ALL : | SO THE PROBLEM IS AIR POLLUTION? | knowledge | clarification |
| 33 | (9:28:17 AM) JH to ALL : | air pollution is a problem itself? hehe | knowledge | clarification |

| | | | | |
|----|--------------------------|--|-----------|------------------|
| 34 | (9:28:30 AM) CH to ALL : | how shld the q b like? | task | requirement |
| 35 | (9:29:14 AM) CH to ALL : | the impact of air pollution? | knowledge | elaboration |
| 36 | (9:29:36 AM) JH to ALL : | impact of air polution should be our problem? | knowledge | clarification |
| 37 | (9:29:55 AM) YF to ALL : | i think can | knowledge | agreement |
| 38 | (9:29:55 AM) JH to ALL : | then how to reduce air polution be solution part? | knowledge | elaboration |
| 39 | (9:30:14 AM) CH to ALL : | yah so will b impact n solution | knowledge | agreement |
| 40 | (9:30:23 AM) CH to ALL : |  | | |
| 41 | (9:30:30 AM) YF to ALL : | ok | knowledge | agreement |
| 42 | (9:31:08 AM) CH to ALL : | wat r the impacts of air pollution and their solution? | knowledge | repetition |
| 43 | (9:31:31 AM) JH to ALL : | ok... | knowledge | agreement |
| 44 | (9:31:41 AM) YF to ALL : | health of mannkind | knowledge | initation |
| 45 | (9:32:17 AM) CH to ALL : | ok so we decide on the q first | task | structure |
| 46 | (9:32:41 AM) JH to ALL : | pussy colour | social | social |
| 47 | (9:32:48 AM) YF to ALL : | ya | social | social |
| 48 | (9:32:53 AM) CH to ALL : | nice | social | social |
| 49 | (9:33:16 AM) CH to ALL : | impacts | knowledge | repetition |
| 50 | (9:33:25 AM) CH to ALL : | environment | knowledge | initation |
| 51 | (9:33:34 AM) CH to ALL : | human | knowledge | initation |
| 52 | (9:33:37 AM) JH to ALL : | good good good... keep on feeding us... | knowledge | acknowledge ment |
| 53 | (9:33:48 AM) JH to ALL : | hiakz | knowledge | response |
| 54 | (9:33:53 AM) CH to ALL : | env(1) human (2) | task | structure |
| 55 | (9:34:04 AM) CH to ALL : | so there b 3 pts | task | structure |
| 56 | (9:34:07 AM) YF to ALL : | not bad | task | structure |
| 57 | (9:34:13 AM) YF to ALL : | why 3 | task | structure |
| 58 | (9:34:30 AM) YF to ALL : | 3 part is the solution | task | structure |
| 59 | (9:34:36 AM) YF to ALL : | correc ct | task | structure |
| 60 | (9:34:40 AM) JH to ALL : | 3 pts??? thought the solution are suppose to consitute 3 para <i>liao</i> ? | task | structure |
| 61 | (9:34:51 AM) CH to ALL : | 3 prob so got 3 soln | task | structure |
| 62 | (9:34:59 AM) JH to ALL : | and the impact is the first para | task | structure |
| 63 | (9:35:02 AM) JH to ALL : | ? | task | structure |
| 64 | (9:35:14 AM) CH to ALL : | hmm... | task | structure |
| 65 | (9:35:31 AM) JH to ALL : | that is wht i thought she want us to do? | task | requirement |
| 66 | (9:35:38 AM) YF to ALL : | na be | task | requirement |
| 67 | (9:35:45 AM) JH to ALL : | is this colour ok? | social | off task |
| 68 | (9:35:52 AM) YF to ALL : | can use darker colours | social | off task |
| 69 | (9:36:12 AM) CH to ALL : | ermm state the impact in each para n discuss the solns | task | structure |
| 70 | (9:36:25 AM) JH to ALL : | ok,... so now we doing the brainstorming then we can go and surf our other sites??? heeh | social | off task |

| | | | | |
|----|--------------------------|---|-----------|----------------------|
| 71 | (9:36:26 AM) YF to ALL : | so so our impact is the problem??? | knowledge | repetition |
| 72 | (9:36:35 AM) JH to ALL : | yeah babay yeah | knowledge | agreement |
| 73 | (9:37:48 AM) JH to ALL : | ok.... i contribute one solution. | knowledge | initiation |
| 74 | (9:38:05 AM) CH to ALL : | l impact l soln | task | structure |
| 75 | (9:38:06 AM) YF to ALL : | how come got 3??? impact on ev(1) and impact on human(2) right | knowledge | repetition |
| 76 | (9:38:08 AM) JH to ALL : | Education is the key to reduce air pollution. in order for ppl to know the importance of it.. | knowledge | initiation |
| 77 | (9:38:58 AM) JH to ALL : | so by education ppl the importance of it... people will reduce contribution to air pollution by themselves. | knowledge | elaboration |
| 78 | (9:38:58 AM) CH to ALL : | ok i contribute 1 | knowledge | initiation |
| 79 | (9:39:24 AM) CH to ALL : | limiting the amount of pollutants to be released into the atmosphere | knowledge | initiation |
| 80 | (9:39:32 AM) CH to ALL : | by factories n cars | knowledge | elaboration |
| 81 | (9:40:17 AM) JH to ALL : | luckily i contribute first.. if not run out of ideas! muahhahahahahahahah\ | social | off task |
| 82 | (9:40:19 AM) YF to ALL : | whoa i think u all very good i can not think of ideas right now | social | off task |
| 83 | (9:40:46 AM) CH to ALL : | oh mayb 1 impact on env 1 on human n the last on other animals | knowledge | initiation |
| 84 | (9:40:52 AM) JH to ALL : | another thing i can think of is to promote global effort to reduce the pollution | knowledge | initiation |
| 85 | (9:41:28 AM) JH to ALL : | today... every country is very selfish as countries like US is not helping countries like indon to solve their problems as it is none of their concern and not profitable | knowledge | elaboration |
| 86 | (9:41:40 AM) YF to ALL : | goo good i think animal not bad | knowledge | agreement |
| 87 | (9:42:10 AM) JH to ALL : | i think i am lost from the discussion already | mgmt | focus |
| 88 | (9:42:20 AM) YF to ALL : | when animal dies, affect the food chain | knowledge | elaboration |
| 89 | (9:42:25 AM) CH to ALL : | but i think US shld solve its own prob first | knowledge | clarification |
| 90 | (9:42:37 AM) YF to ALL : | thus air pollu affect animals as well | knowledge | elaboration |
| 91 | (9:42:40 AM) CH to ALL : | wah seh bio <i>liao</i> | knowledge | acknowledgment |
| 92 | (9:42:49 AM) CH to ALL : | food chain <i>sia</i> | knowledge | repetition |
| 93 | (9:43:02 AM) CH to ALL : | but not bad | knowledge | judgment |
| 94 | (9:43:45 AM) CH to ALL : | human will be health prob again | knowledge | reference (internal) |
| 95 | (9:43:52 AM) CH to ALL : | but what are the solutions? | mgmt | elicitation |
| 96 | (9:44:42 AM) YF to ALL : | ask them not to buy cars | knowledge | initiation |
| 97 | (9:45:16 AM) YF to ALL : | ask them to use public transport | knowledge | initiation |

| | | | | |
|-----|--------------------------|---|-----------|----------------|
| 98 | (9:45:18 AM) CH to ALL : | soln to health or soln to pollution? | knowledge | clarification |
| 99 | (9:45:28 AM) CH to ALL : | chim leh | knowledge | judgment |
| 100 | (9:46:00 AM) YF to ALL : | i think both can use depending on how to write | knowledge | elaboration |
| 101 | (9:47:20 AM) CH to ALL : | sae | knowledge | acknowledgment |
| 102 | (9:47:39 AM) JH to ALL : | hehe | knowledge | acknowledgment |
| 103 | (9:48:08 AM) JH to ALL : | si bei sian sia.... later still got physics tutorial and go in and let her smoke! | social | off task |
| 104 | (9:48:19 AM) JH to ALL : | and also programming tutorial.. which our lab 2 result will be announced | social | off task |
| 105 | (9:48:24 AM) CH to ALL : | she super fast | social | off task |
| 106 | (9:48:28 AM) JH to ALL : | life sucks this week.. | social | off task |
| 107 | (9:48:43 AM) JH to ALL : | and if we dun sucks,.... we blow! muahahahahaha | social | off task |
| 108 | (9:48:44 AM) YF to ALL : | you sure the lab 2 results come out ?? | social | off task |
| 109 | (9:48:48 AM) CH to ALL : | lab2 sure bang balls | social | off task |
| 110 | (9:48:59 AM) CH to ALL : | i lick | social | off task |
| 111 | (9:49:00 AM) CH to ALL : | hahah | social | off task |
| 112 | (9:49:03 AM) YF to ALL : | i already bang to the wall | social | off task |
| 113 | (9:49:14 AM) JH to ALL : | my friend got full marks! god damn it | social | off task |
| 114 | (9:49:26 AM) JH to ALL : | and his programme not very wekl written one | social | off task |
| 115 | (9:49:26 AM) CH to ALL : | wat the ... | social | off task |
| 116 | (9:49:34 AM) JH to ALL : | i think my physics lab is confirm gone one | social | off task |
| 117 | (9:49:40 AM) YF to ALL : | whoa he must be very good | social | off task |
| 118 | (9:49:41 AM) JH to ALL : | change reading until like dunno <i>what</i> | social | off task |
| 119 | (9:49:51 AM) JH to ALL : | he is not very good.. his code is from me one! | social | off task |
| 120 | (9:50:03 AM) JH to ALL : | and my physics lab report ANYHOW write <i>one!</i> | social | off task |
| 121 | (9:50:14 AM) JH to ALL : | sigh..... can we drop physics?!?!?!?!?!? | social | off task |
| 122 | (9:50:19 AM) YF to ALL : | nevr mind we don get back the phsics lab results rright | social | off task |
| 123 | (9:50:23 AM) CH to ALL : | i also wan | social | off task |
| 124 | (9:50:23 AM) JH to ALL : | last year EV and Chem engine no need takre physics one <i>le</i> | social | off task |
| 125 | (9:50:36 AM) CH to ALL : | huh serious <i>ah</i> | social | off task |
| 126 | (9:50:38 AM) JH to ALL : | u also want <i>whf?</i> | social | off task |
| 127 | (9:50:43 AM) CH to ALL : | y we so suauy | social | off task |
| 128 | (9:50:51 AM) JH to ALL : | u all mean u all dunno that we are the first eyar to take physics? | social | off task |

| | | | | |
|-----|--------------------------|--|--------|----------|
| 159 | (9:55:12 AM) JH to ALL : | have fun??? i confirm will have fun... but may cry at the end of the sem? | social | off task |
| 160 | (9:55:14 AM) JH to ALL : | hiakz | social | off task |
| 161 | (9:55:34 AM) CH to ALL : | me aiming for a pass this sem | social | off task |
| 162 | (9:55:42 AM) YF to ALL : | ME TOO' | social | off task |
| 163 | (9:55:50 AM) CH to ALL : | pass all the modules can <i>liao</i> | social | off task |
| 164 | (9:55:53 AM) JH to ALL : | cannot <i>le...</i> imagine u get a pass... ard 2.5 or lower | social | off task |
| 165 | (9:55:55 AM) CH to ALL : | then happy like bird | social | off task |
| 166 | (9:56:06 AM) CH to ALL : | wat will happen? | social | off task |
| 167 | (9:56:14 AM) JH to ALL : | bloody hell... best u can get is a third class.. and that is if u pia until shit comes out for the rest of the sem | social | off task |
| 168 | (9:56:17 AM) YF to ALL : | rathe r than da bao right | social | off task |
| 169 | (9:56:43 AM) YF to ALL : | my friend in ntu eat bao last sem alrwady | social | off task |
| 170 | (9:56:45 AM) CH to ALL : | so 2.5 n above will b save <i>ah?</i> | social | off task |
| 171 | (9:56:54 AM) JH to ALL : | my friends were saying that if they dun do well... they going to change course!!!! | social | off task |
| 172 | (9:57:04 AM) JH to ALL : | 2.5 still got chance? | social | off task |
| 173 | (9:57:27 AM) CH to ALL : | lets go tut | social | off task |

Chat 2 pilot

| Turn | Std | Utterances | Category | Subcategory |
|------|--------------------------|--|-----------|-------------|
| 1 | (9:21:08 AM) QM to ALL : | hello | social | off task |
| 2 | (9:21:29 AM) QM to ALL : | nice to meet u all | social | off task |
| 3 | (9:21:37 AM) SL to ALL : | hello | social | off task |
| 4 | (9:21:55 AM) DO to ALL : | haha | social | off task |
| 5 | (9:22:06 AM) SL to ALL : | hehe | social | off task |
| 6 | (9:22:08 AM) QM to ALL : | crazy woman | social | off task |
| 7 | (9:22:18 AM) QM to ALL : | shld be women | social | off task |
| 8 | (9:22:22 AM) DO to ALL : | sickenening qiumei | social | off task |
| 9 | (9:22:29 AM) QM to ALL : | how to do | task | requirement |
| 10 | (9:22:35 AM) DO to ALL : | do what | task | requirement |
| 11 | (9:22:40 AM) DO to ALL : | do what? | task | requirement |
| 12 | (9:22:43 AM) QM to ALL : | do the paragraph inside loh | task | requirement |
| 13 | (9:22:58 AM) DO to ALL : | we're supp to do this as a grp?? | task | requirement |
| 14 | (9:23:03 AM) SL to ALL : | are we suppose to do in a group? | task | requirement |
| 15 | (9:23:04 AM) QM to ALL : | huh???wat...yah i noe....why daphne watch pornography | task | requirement |
| 16 | (9:23:16 AM) QM to ALL : | solution how?? | task | requirement |
| 17 | (9:23:19 AM) DO to ALL : | iiddiiioottt | social | off task |
| 18 | (9:23:20 AM) SL to ALL : | dap why u ask the same qn as me ? | task | requirement |
| 19 | (9:23:53 AM) QM to ALL : | do as a group | task | requirement |
| 20 | (9:24:00 AM) DO to ALL : | yup do it as a grp | task | requirement |
| 21 | (9:24:09 AM) SL to ALL : | are we supp to to the same topic | task | requirement |
| 22 | (9:24:16 AM) DO to ALL : | yupyup | task | requirement |
| 23 | (9:24:16 AM) SL to ALL : | ?? | task | requirement |
| 24 | (9:24:23 AM) SL to ALL : | so wat topic? | mgmt | elicitation |
| 25 | (9:24:29 AM) DO to ALL : | so what topic are we doing? | mgmt | elicitation |
| 26 | (9:24:31 AM) SL to ALL : | not pornography hor | knowledge | initiation |
| 27 | (9:24:50 AM) QM to ALL : | okay so how????social issues?environmental?? or general matters? | knowledge | initiation |
| 28 | (9:24:57 AM) SL to ALL : | cos i noe quimei very interested in this topic | knowledge | repetition |
| 29 | (9:25:01 AM) QM to ALL : | i think social issues??? | knowledge | repetition |
| 30 | (9:25:09 AM) DO to ALL : | i'm okay with anything | mgmt | consensus |
| 31 | (9:25:12 AM) QM to ALL : | hey my name is Qiumei...hehe...not Quimei | social | off task |
| 32 | (9:25:19 AM) SL to ALL : | okie lah | social | off task |
| 33 | (9:25:26 AM) DO to ALL : | yah i think so too | knowledge | agreement |
| 34 | (9:25:32 AM) QM to ALL : | 🤔 | social | off task |
| 35 | (9:25:39 AM) SL to ALL : | environmental issues shld be okie | knowledge | agreement |
| 36 | (9:25:48 AM) QM to ALL : | okay loh | knowledge | agreement |
| 37 | (9:26:07 AM) SL to ALL : | 🤔 | social | off task |
| 38 | (9:26:28 AM) DO to ALL : | okay think we bedda so it | mgmt | focus |
| 39 | (9:26:29 AM) SL to ALL : | or what u all suggest | mgmt | elicitation |
| 40 | (9:26:29 AM) QM to ALL : | okay...environmental???or social? | mgmt | consensus |
| 41 | (9:26:48 AM) DO to ALL : | hmm actually if we do env we can touch on our article | knowledge | agreement |
| 42 | (9:26:59 AM) DO to ALL : | i wanna go to the toilet!!!! | social | off task |

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|----|--------------------------|---|-----------|-------------------------|
| 43 | (9:27:05 AM) SL to ALL : | ya ..so how | mgmt | elicitation |
| 44 | (9:27:10 AM) QM to ALL : | environmental...we can do global warming..i got time magazine.... | knowledge | repetition; initiation |
| 45 | (9:27:15 AM) DO to ALL : | haha you wanna go now? | social | off task |
| 46 | (9:27:28 AM) DO to ALL : | hahaha can leave qiumei here to chat to herself! | social | off task |
| 47 | (9:27:31 AM) QM to ALL : | if do on social can do delinquencies | knowledge | repetition; initiation |
| 48 | (9:27:32 AM) SL to ALL : | ya agree with global topic | knowledge | agreement |
| 49 | (9:27:51 AM) SL to ALL : | okie...i want to go also | social | off task |
| 50 | (9:27:54 AM) DO to ALL : | ok then which global issue? | knowledge | clarification |
| 51 | (9:28:01 AM) QM to ALL : | crazy,,,,u so urgent...do it here | social | off task |
| | |  | | |
| 52 | (9:31:59 AM) QM to ALL : | then how??? | mgmt | elicitation; consensus |
| 53 | (9:32:00 AM) DO to ALL : | howhow??? | mgmt | elicitation; consensus |
| 54 | (9:32:10 AM) QM to ALL : | we do global warming | knowledge | repetition |
| 55 | (9:32:17 AM) DO to ALL : | ok then | knowledge | agreement |
| 56 | (9:32:23 AM) SL to ALL : | okie since we have info | knowledge | agreement |
| 57 | (9:32:27 AM) DO to ALL : | so global warming | knowledge | agreement |
| 58 | (9:32:30 AM) QM to ALL : | but quite a general and broad issue | knowledge | clarification |
| 59 | (9:32:31 AM) SL to ALL : | okie | knowledge | agreement |
| 60 | (9:32:41 AM) DO to ALL : | like how it affects the world? | knowledge | elaboration |
| 61 | (9:32:55 AM) SL to ALL : | its cause and effects and sols | knowledge | elaboration |
| 62 | (9:33:02 AM) QM to ALL : | problems...i got inside the time magazine..hehe | knowledge | reference (external) |
| 63 | (9:33:10 AM) DO to ALL : | ok gd... | knowledge | acknowledgment |
| 64 | (9:33:11 AM) QM to ALL : | but how to take out now?> | social | off task |
| 65 | (9:33:17 AM) SL to ALL : | u brought the mag? | social | off task |
| 66 | (9:33:20 AM) QM to ALL : | yah lah | social | off task |
| 67 | (9:33:24 AM) DO to ALL : | why cannot?stuck in your bag? | social | off task |
| 68 | (9:33:28 AM) QM to ALL : | i was reading on tge taxi | social | off task |
| 69 | (9:33:28 AM) SL to ALL : | how come u brought? | social | off task |
| 70 | (9:33:39 AM) SL to ALL : | u noe what u going to do today ? | social | off task |
| 71 | (9:33:44 AM) QM to ALL : | haha...i see the cover then thought got haze matter | social | off task |
| 72 | (9:33:52 AM) SL to ALL : | okie nice | social | off task |
| 73 | (9:33:54 AM) DO to ALL : | anyway we can talk abt the problems that global warming brought abt | knowledge | repetition |
| 74 | (9:33:59 AM) QM to ALL : | thought good for our reading thing | social | off task |
| 75 | (9:34:09 AM) DO to ALL : | and what are the side effects.. | knowledge | clarification |
| 76 | (9:34:25 AM) QM to ALL : | problems....got alot...the climate....hot... | knowledge | initiation |
| 77 | (9:34:34 AM) SL to ALL : | global warming causes rise in temp...melting of ice caps | knowledge | elaboration; initiation |
| 78 | (9:34:42 AM) QM to ALL : | then the rising sea levels..yah | knowledge | elaboration |
| 79 | (9:34:44 AM) DO to ALL : | what the nations have done to p-revent it from worsening | knowledge | initiation |
| 80 | (9:34:46 AM) SL to ALL : | rising in sealevels | knowledge | repetition |

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|-----|--------------------------|---|-----------|---------------------------------|
| 81 | (9:34:53 AM) DO to ALL : | uh huh | knowledge | agreement |
| 82 | (9:34:59 AM) DO to ALL : | the el nino | knowledge | initiation |
| 83 | (9:35:11 AM) QM to ALL : | wow...prevent,,,then must read whole article... | knowledge | reference (external) |
| 84 | (9:35:17 AM) SL to ALL : | and also becoss of changes in temp tt some animals cannot adapt and want to shift their habitat | knowledge | initiation |
| 85 | (9:35:17 AM) DO to ALL : | change in climates | knowledge | repetition |
| 86 | (9:35:39 AM) QM to ALL : | cos' the whole article got mentioned abt one treaty...wat kyoto protocol... | knowledge | reference (external) |
| 87 | (9:35:49 AM) DO to ALL : | ohh ok that's gd | knowledge | acknowledgment |
| 88 | (9:36:12 AM) SL to ALL : | el nino still got another friend ...dunno wat nino laio | knowledge | clarification |
| 89 | (9:36:16 AM) SL to ALL : | mean liao | knowledge | clarification |
| 90 | (9:36:18 AM) QM to ALL : | it also mentioned abt the alternative measures.that we could have taken to minimise it | knowledge | reference (external) |
| 91 | (9:36:25 AM) DO to ALL : | el nina | knowledge | initiation |
| 92 | (9:36:34 AM) QM to ALL : | who is el nino?? | knowledge | clarification |
| 93 | (9:36:45 AM) SL to ALL : | so we got some ideas already...how to start? | task | structure |
| 94 | (9:36:58 AM) DO to ALL : | el nino is the one that causes the change in the climate | knowledge | repetition; elaboration |
| 95 | (9:37:12 AM) SL to ALL : | start frm where? | task | structure |
| 96 | (9:37:13 AM) DO to ALL : | the movement of the currents | knowledge | initiation; elaboration |
| 97 | (9:37:17 AM) DO to ALL : | that's what i think | knowledge | initiation; elaboration |
| 98 | (9:37:45 AM) QM to ALL : | starts from solutions right???not the introduction | task | structure |
| 99 | (9:37:48 AM) SL to ALL : | movement of currents also cause the fishes to decline in pop i read | knowledge | elaboration; initiation |
| 100 | (9:38:08 AM) DO to ALL : | yup and the animals to migrate | knowledge | agreement; reference (internal) |
| 101 | (9:38:19 AM) SL to ALL : | actually we are supp to skip the intro and do the body fers rite? | task | structure |
| 102 | (9:38:23 AM) QM to ALL : | migrate to where?? | knowledge | clarification |
| 103 | (9:38:38 AM) DO to ALL : | start from the solutions | task | structure |
| 104 | (9:38:42 AM) SL to ALL : | to else where where conditions more favourable | knowledge | elaboration |
| 105 | (9:38:53 AM) DO to ALL : | par 2-4 | task | structure |
| 106 | (9:39:07 AM) QM to ALL : | yah,.hey act we should talk about problem in each paragraph then give solutions is it??? | task | structure |
| 107 | (9:39:12 AM) DO to ALL : | cos we're supp to write the body of the par first | task | structure |
| 108 | (9:39:21 AM) DO to ALL : | oopps of the esay | task | structure |
| 109 | (9:39:28 AM) DO to ALL : | essay | task | structure |
| 110 | (9:39:34 AM) SL to ALL : |  | social | off task |
| 111 | (9:39:37 AM) DO to ALL : | so we shud touch on par2 | task | structure |
| 112 | (9:40:12 AM) SL to ALL : | okie understood | task | structure |

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|-----|--------------------------|---|-----------|---------------|
| 113 | (9:40:15 AM) DO to ALL : | so what is the topic sentence of our 2 par? | task | structure |
| 114 | (9:40:26 AM) QM to ALL : | yah.....then pose a problem then a solution in each para? | task | structure |
| 115 | (9:40:29 AM) DO to ALL : | like what shud we cover in par 2? | task | structure |
| 116 | (9:40:32 AM) SL to ALL : | start with sols rite? | task | structure |
| 117 | (9:40:34 AM) DO to ALL : | yupyup | task | structure |
| 118 | (9:40:44 AM) DO to ALL : | like par2 is one main pt | task | structure |
| 119 | (9:40:49 AM) DO to ALL : | thenpar3 is another mainpt | task | structure |
| 120 | (9:40:55 AM) DO to ALL : | and par4 is another main pt | task | structure |
| 121 | (9:41:00 AM) SL to ALL : | i find all problems interrelated | knowledge | clarification |
| 122 | (9:41:03 AM) QM to ALL : | lohsoh woman..haha | social | off task |
| 123 | (9:41:18 AM) QM to ALL : | daphne..... | social | off task |
| | |  | social | off task |
| 124 | (9:41:22 AM) DO to ALL : | kind of think we're supp to simplify it | social | off task |
| 125 | (9:41:31 AM) DO to ALL : | eh what's that face for? | social | off task |
| 126 | (9:41:42 AM) SL to ALL : | it resembles u dap | social | off task |
| 127 | (9:41:51 AM) QM to ALL : | haha....yah lah,,,,, | social | off task |
| 128 | (9:42:08 AM) DO to ALL : | HUMPH!!! | social | off task |
| | |  | social | off task |
| 129 | (9:42:09 AM) SL to ALL : | what to do now | task | requirement |
| 130 | (9:42:15 AM) QM to ALL : | that means not 3 pple do as a group?? | task | requirement |
| 131 | (9:42:21 AM) SL to ALL : | this face looks like u even more dap | social | off task |
| 132 | (9:42:30 AM) SL to ALL : | hehe | social | off task |
| 133 | (9:42:34 AM) DO to ALL : | no just brain storm first | task | requirement |
| 134 | (9:42:39 AM) QM to ALL : | is 1 person 1 essay | task | requirement |
| 135 | (9:42:50 AM) DO to ALL : | yup it's 1 person 1 essay | task | requirement |
| 136 | (9:43:02 AM) QM to ALL : | aiyoh.....chey.. 1 essay | task | requirement |
| 137 | (9:43:04 AM) DO to ALL : | ok so are we kinda done with ours? | task | requirement |
| 138 | (9:43:06 AM) SL to ALL : | but 3 pple must have diff essay with same toipc? | task | requirement |
| 139 | (9:43:14 AM) QM to ALL : | i think so.... | task | requirement |
| 140 | (9:43:19 AM) DO to ALL : | yup that's right | task | requirement |
| 141 | (9:43:56 AM) QM to ALL : | this chat room not bad...the face still got animation... | social | off task |
| 142 | (9:44:13 AM) SL to ALL : | ya..... | social | off task |
| 143 | (9:44:15 AM) DO to ALL : | ok bedda start writing now.... | mgmt | focus |
| 144 | (9:44:26 AM) QM to ALL : | huh...so sian..very hungry now | social | off task |
| 145 | (9:44:33 AM) DO to ALL : | same i'm very hungry | social | off task |
| 146 | (9:44:40 AM) SL to ALL : | must wait till 2 b4 u can eat | social | off task |
| 147 | (9:44:42 AM) DO to ALL : | i still have a half eaten bread | social | off task |
| 148 | (9:44:54 AM) QM to ALL : | haha..hungry liao | social | off task |
| 149 | (9:44:55 AM) QM to ALL : |  | social | off task |
| 150 | (9:44:56 AM) SL to ALL : | left frn last week one huh ? | social | off task |
| 151 | (9:45:06 AM) QM to ALL : | huh???then i better go and buy smt/... | social | off task |
| 152 | (9:45:18 AM) DO to ALL : | nah la frm this morning i was eating | social | off task |
| 153 | (9:45:20 AM) QM to ALL : | why linh keeps on smiling? | social | off task |
| 154 | (9:45:33 AM) DO to ALL : | then yaya came in...so i bedda stop | social | off task |
| 155 | (9:45:37 AM) DO to ALL : | really?hahhha | social | off task |

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|-----|--------------------------|--|-----------|-----------------------|
| 156 | (9:45:40 AM) QM to ALL : | yee....why half?/?kaioon...ate leftover? | social | off task |
| 157 | (9:45:44 AM) DO to ALL : | must be changcheng | social | off task |
| 158 | (9:45:52 AM) DO to ALL : | HAHAHAHAHAHAHAHAH | social | off task |
| 159 | (9:47:17 AM) QM to ALL : | only write in points??? | task | requirement |
| 160 | (9:47:41 AM) DO to ALL : | yup i shud think so | task | requirement |
| 161 | (9:47:41 AM) QM to ALL : | not paragraphs rite???friday then write out complete? | task | requirement |
| 162 | (9:47:42 AM) SL to ALL : | think so | task | requirement |
| 163 | (9:47:58 AM) DO to ALL : | yup that's right | task | requirement |
| 164 | (9:48:20 AM) QM to ALL : | yee...so sian...so many things to do..still have to write essay | social | off task |
| 165 | (9:48:34 AM) SL to ALL : | waste time lah | social | off task |
| 166 | (9:48:47 AM) QM to ALL : | yah lah... | social | off task |
| 167 | (9:49:03 AM) DO to ALL : | testing | social | off task |
| 168 | (9:49:11 AM) DO to ALL : | hah nice color eh? | social | off task |
| 169 | (9:49:18 AM) QM to ALL : | hey u two...tell some jokes..then we can laugh..like linh their group | social | off task |
| 170 | (9:49:25 AM) DO to ALL : | crazy | social | off task |
| 171 | (9:49:31 AM) QM to ALL : | my stomach growling | social | off task |
| 172 | (9:49:40 AM) SL to ALL : | my one nicer | social | off task |
| 173 | (9:49:46 AM) DO to ALL : | think we bedda write already cos we're left with only 15 min | mgmt | focus |
| 174 | (9:49:55 AM) DO to ALL : | you are mad... | social | off task |
| 175 | (9:49:57 AM) QM to ALL : | oh yah...quick | mgmt | focus; instruction |
| 176 | (9:55:15 AM) QM to ALL : | hey u all still remember the device installed on car....wat catalyst?? | knowledge | clarification |
| 177 | (9:55:31 AM) QM to ALL : | what's that call?? | knowledge | clarification |
| 178 | (9:55:53 AM) DO to ALL : | it's called a catalytic coverter | knowledge | elaboration |
| 179 | (9:55:56 AM) SL to ALL : | catalytic converter? | knowledge | clarification |
| 180 | (9:56:05 AM) QM to ALL : | oh i see..hehe..thanks/ | knowledge | acknowledg ment |
| 181 | (9:57:31 AM) QM to ALL : | sigh have to write essay | social | off task |
| 182 | (9:57:45 AM) QM to ALL : | so many things to do... | social | off task |
| 183 | (9:57:45 AM) SL to ALL : | byeeee | social | off task |
| 184 | (9:57:46 AM) QM to ALL : | sigh.. | social | off task |
| 185 | (9:57:57 AM) QM to ALL : | bye bye | social | off task |
| | | 🙄 | social | off task |
| 186 | (9:58:05 AM) DO to ALL : | byebye | social | off task |

Chat 3 pilot

| Turn | Std | Utterances | Category | Subcategory |
|------|--------------------------|---|-----------|--------------------|
| 1 | (9:21:58 AM) ZZ to ALL : | hello | mgmt | contact |
| 2 | (9:23:53 AM) CC to ALL : | hi\ | mgmt | contact |
| 3 | (9:24:03 AM) ZZ to ALL : | shuo hua [meaning 'speak' or 'say something'] | mgmt | elicitation |
| 4 | (9:24:35 AM) ZZ to CC : | come on | mgmt | elicitation |
| 5 | (9:24:58 AM) CC to ZZ : | it's very easy | social | off task |
| 6 | (9:25:02 AM) CC to ZZ : | right? | social | off task |
| 7 | (9:25:05 AM) ZZ to CC : | no | social | off task |
| 8 | (9:25:06 AM) ZZ to CC : | come on | social | off task |
| 9 | (9:25:17 AM) CC to ZZ : | you shouldn't | social | off task |
| 10 | (9:25:25 AM) ZZ to CC : | i will beat you | social | off task |
| 11 | (9:25:38 AM) CC to ZZ : | we should talk about our topic | mgmt | focus |
| 12 | (9:25:49 AM) ZZ to CC : | what should we write | mgmt | elicitation |
| 13 | (9:25:53 AM) CC to ZZ : | haha | social | off task |
| 14 | (9:26:12 AM) CC to ZZ : | i have no idea | knowledge | response |
| 15 | (9:27:04 AM) ZZ to CC : | hi | social | off task |
| 16 | (9:27:11 AM) CC to ZZ : | shit\ | social | off task |
| 17 | (9:27:15 AM) ZZ to CC : | shit happened | social | off task |
| 18 | (9:27:58 AM) CC to ZZ : | stop taling about this | mgmt | focus; instruction |
| 19 | (9:28:15 AM) ZZ to ALL : | rain? | knowledge | initiation |
| 20 | (9:28:40 AM) CC to ZZ : | why? | knowledge | clarification |
| 21 | (9:29:09 AM) CC to ZZ : | is it because there is a lot of rains here | knowledge | clarification |
| 22 | (9:29:10 AM) CC to ZZ : | ? | knowledge | clarification |
| 23 | (9:30:00 AM) ZZ to CC : | but you should know if there are not too much rains ,we will feel very hot ,isn't it? | knowledge | elaboration |
| 24 | (9:30:16 AM) CC to ZZ : | right? | knowledge | clarification |
| 25 | (9:30:41 AM) ZZ to CC : | not for feeling | knowledge | elaboration |
| 26 | (9:30:58 AM) ZZ to CC : | not for feeling at all | knowledge | elaboration |
| 27 | (9:31:11 AM) ZZ to CC : | not like in ;china | knowledge | example |
| 28 | (9:31:26 AM) ZZ to CC : | since it is too hot here. | knowledge | elaboration |
| 29 | (9:31:30 AM) ZZ to CC : | this is the main reason | knowledge | elaboration |
| 30 | (9:31:34 AM) ZZ to CC : | right> | knowledge | clarification |
| 31 | (9:31:35 AM) CC to ZZ : | ? | knowledge | clarification |
| 32 | (9:32:16 AM) ZZ to CC : | the difference between the rain in china and singapore? | knowledge | initiation |
| 33 | (9:32:39 AM) CC to ZZ : | what are our points ? | knowledge | clarification |
| 34 | (9:32:55 AM) ZZ to CC : | firstly, it is very quickly coming | knowledge | initiation |
| 35 | (9:32:59 AM) ZZ to CC : | all the time | knowledge | elaboration |
| 36 | (9:33:09 AM) CC to ZZ : | hometown and singapore? | knowledge | clarification |
| 37 | (9:33:30 AM) ZZ to CC : | but we are from different homtown | knowledge | clarification |
| 38 | (9:33:35 AM) CC to ZZ : | right? | knowledge | clarification |
| 39 | (9:33:45 AM) CC to ZZ : | any other points? | mgmt | elicitation |
| 40 | (9:34:18 AM) ZZ to CC : | is there anything left after rain in china? | knowledge | initiation |
| 41 | (9:34:46 AM) CC to ZZ : | then what has happened in china after rain? | knowledge | initiation |
| 42 | (9:35:09 AM) ZZ to CC : | after the rain | knowledge | repetition |
| 43 | (9:35:31 AM) CC to ZZ : | why didi you say "the rain will stay for | knowledge | clarification |

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|----|-------------------------|---|-----------|-------------------------|
| | | a long time? | | |
| 44 | (9:35:42 AM) ZZ to CC : | oh ic | knowledge | response |
| 45 | (9:35:53 AM) ZZ to CC : | that is because the temperature is very high here | knowledge | elaboration; initiation |
| 46 | (9:36:03 AM) ZZ to CC : | right? | knowledge | clarification |
| 47 | (9:36:32 AM) CC to ZZ : | thinking | knowledge | response |
| 48 | (9:36:51 AM) CC to ZZ : | yes | knowledge | agreement |
| 49 | (9:37:11 AM) ZZ to CC : | also because the high temperature | knowledge | elaboration |
| 50 | (9:37:34 AM) CC to ZZ : | no | knowledge | response |
| 51 | (9:37:38 AM) ZZ to CC : | i like the rain here | social | off task |
| 52 | (9:37:52 AM) ZZ to CC : | because after the rain you will not feel hot | social | off task |
| 53 | (9:38:14 AM) ZZ to CC : | otherwise it is really very; very hot outside your room | social | off task |
| 54 | (9:38:32 AM) ZZ to CC : | but after the rain, you will feel very cool | social | off task |
| 55 | (9:38:37 AM) ZZ to CC : | and very "shuang" [meaning 'comfortable'] | social | off task |
| 56 | (9:39:41 AM) CC to ZZ : | what is the problem | mgmt | focus |
| 57 | (9:39:42 AM) ZZ to CC : | ? | mgmt | focus |
| 58 | (9:39:52 AM) ZZ to CC : | e? | mgmt | focus |
| 59 | (9:40:12 AM) CC to ZZ : | we made a mistake | mgmt | focus |
| 60 | (9:40:16 AM) ZZ to CC : | just now | mgmt | focus |
| 61 | (9:40:43 AM) ZZ to CC : | we should talk some other things? | mgmt | focus |
| 62 | (9:41:03 AM) CC to ZZ : | since the pollution has been talked for so many times | knowledge | initiation |
| 63 | (9:41:26 AM) CC to ZZ : | we should change to other problems. | knowledge | initiation |
| 64 | (9:42:06 AM) ZZ to CC : | can you show me the solution that you can give others? | knowledge | clarification |
| 65 | (9:42:14 AM) CC to ZZ : | i still have no idea now | knowledge | response |
| 66 | (9:42:53 AM) ZZ to CC : | maybe after going back home ,we can think it carefully ,and then decide,ok? | mgmt | instruction |
| 67 | (9:43:27 AM) CC to ZZ : | we can organise!!!??? | mgmt | instruction |
| 68 | (9:43:48 AM) ZZ to CC : | you see it is fantastic | | |
| 69 | (9:45:02 AM) CC to ZZ : | so..... | mgmt | focus |
| 70 | (9:45:36 AM) CC to ZZ : | what are the main points? | knowledge | clarification |
| 71 | (9:46:00 AM) CC to ZZ : | 还有什么? [meaning 'anything else'] | mgmt | elicitation |
| 72 | (9:46:08 AM) ZZ to CC : | 想 [meaning 'I am thinking'] | knowledge | response |
| 73 | (9:46:18 AM) CC to ZZ : | 哈哈 [meaning 'haha'] | social | off task |
| 74 | (9:46:26 AM) CC to ZZ : | 对头 [meaning 'right'] | social | off task |
| 75 | (9:46:33 AM) ZZ to CC : | 三个 [meaning 'three'] | task | requirement |
| 76 | (9:46:38 AM) ZZ to CC : | points | task | requirement |
| 77 | (9:47:17 AM) ZZ to CC : | we should have three points on our question | task | requirement |
| 78 | (9:47:20 AM) CC to ZZ : | isit? | task | requirement |
| 79 | (9:47:31 AM) ZZ to CC : | i know this | task | requirement |
| 80 | (9:47:46 AM) ZZ to CC : | i mean the solution that we can list out | task | requirement |
| 81 | (9:48:10 AM) ZZ to CC : | three points for the solution | task | requirement |
| 82 | (9:48:15 AM) CC to ZZ : | how could i know? | task | requirement |
| 83 | (9:48:55 AM) ZZ to CC : | alllllllllll the solutions have been listed out by the seniors | knowledge | response |
| 84 | (9:48:56 AM) ZZ to CC : | already | knowledge | response |
| 85 | (9:49:15 AM) ZZ to CC : | we have no new points | knowledge | response |

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|-----|--------------------------|---|-----------|---------------------------|
| 86 | (9:49:22 AM) CC to ZZ : | 所以就会很俗 [meaning 'Therefore, it's very common'] | knowledge | response |
| 87 | (9:49:30 AM) ZZ to CC : | 俗, 俗不可耐 [meaning 'Common, nothing special'] | knowledge | response |
| 88 | (9:49:53 AM) CC to ZZ : | 这是和砷讲的 [meaning 'This is according to He Kun'] | knowledge | reference (external) |
| 89 | (9:50:29 AM) ZZ to CC : | 想 [meaning 'I am thinking'] | knowledge | response |
| 90 | (9:51:29 AM) CC to ZZ : | sorry | knowledge | response |
| 91 | (9:51:34 AM) ZZ to CC : | TT | mgmt | contact |
| 92 | (9:51:40 AM) TT to ALL : | Hi ZZ & CC, have you decided on a topic? | knowledge | clarification |
| 93 | (9:52:08 AM) ZZ to TT : | since we have no new points on our topic that CC told you just now | knowledge | initiation |
| 94 | (9:52:17 AM) ZZ to TT : | so that we must change it | knowledge | clarification |
| 95 | (9:52:33 AM) TT to ALL : | pollution caused by use of plastic? | knowledge | clarification |
| 96 | (9:52:41 AM) ZZ to TT : | yes | knowledge | agreement |
| 97 | (9:53:06 AM) CC to TT : | overuse? | knowledge | elaboration |
| 98 | (9:53:19 AM) TT to ALL : | okay - situation and problem? | knowledge | clarification |
| 99 | (9:53:42 AM) ZZ to TT : | ok lt me c | knowledge | acknowledgment |
| 100 | (9:54:10 AM) TT to ALL : | in other words, what's the current situation on the "overuse" of plastic & what are the problems this has caused? | knowledge | clarification; repetition |
| 101 | (9:54:42 AM) ZZ to TT : | and then we list out the sollution to this problem? | task | requirement |
| 102 | (9:55:44 AM) TT to ALL : | yes - then the sollutions | task | requirement |
| 103 | (9:55:45 AM) ZZ to CC : | correct | task | requirement |
| 104 | (9:56:03 AM) ZZ to TT : | ok, thanks a lot | knowledge | acknowledgment |
| 105 | (9:56:36 AM) TT to ALL : | okay.. I am signing out | mgmt | contact |
| 106 | (9:57:27 AM) ZZ to ALL : | 👉 | mgmt | contact |
| 107 | (9:57:41 AM) ZZ to CC : | 👉 | mgmt | contact |

Chat 4 pilot

| Turn | Std | Utterances | Category | Subcategory |
|------|--------------------------|--|-----------|----------------|
| 1 | (9:22:19 AM) KL to ALL : | hi | mgmt | contact |
| 2 | (9:22:54 AM) JJ to ALL : | no idea | mgmt | contact |
| 3 | (9:23:15 AM) LJ to ALL : | hello all | mgmt | contact |
| 4 | (9:23:18 AM) DF to ALL : | what topic shall we choose? | mgmt | focus |
| 5 | (9:23:47 AM) JJ to ALL : | shall we do e same topic | task | requirement |
| 6 | (9:23:56 AM) JJ to ALL : | ? | task | requirement |
| 7 | (9:24:11 AM) KL to ALL : | about pollution | knowledge | initiation |
| 8 | (9:24:39 AM) DF to ALL : | that is boring <i>leh</i> | knowledge | judgment |
| 9 | (9:24:49 AM) KL to ALL : | hum | knowledge | acknowledgment |
| 10 | (9:25:18 AM) LJ to ALL : | hello | mgmt | contact |
| 11 | (9:25:50 AM) KL to ALL : | oh, can't see, LJ | mgmt | contact |
| 12 | (9:25:53 AM) LJ to ALL : | hello | mgmt | contact |
| 13 | (9:25:54 AM) LJ to ALL : |  | social | off task |
| 14 | (9:26:13 AM) KL to ALL : |  | social | off task |
| 15 | (9:26:39 AM) JJ to ALL : |  | social | off task |
| 16 | (9:26:44 AM) LJ to ALL : |  | social | off task |
| 17 | (9:26:51 AM) LJ to ALL : |  | social | off task |
| 18 | (9:26:56 AM) LJ to ALL : |  | social | off task |
| 19 | (9:26:57 AM) KL to ALL : |  | social | off task |
| 20 | (9:27:05 AM) LJ to ALL : |  | social | off task |
| 21 | (9:27:22 AM) DF to ALL : | shall we choose the topic first..... really dun wanna write on the spot.....my brain is dead now | mgmt | focus |
| 22 | (9:27:23 AM) DF to ALL : |  | social | off task |
| 23 | (9:27:36 AM) KL to ALL : | ok, now we discuss? or display all face? it is more interesting | mgmt | focus |
| 24 | (9:28:07 AM) DF to ALL : | no more faces <i>lah</i> that is not fun | mgmt | focus |
| 25 | (9:28:22 AM) LJ to ALL : | what topic? | mgmt | elicitation |
| 26 | (9:28:23 AM) JJ to ALL : | we just write about pollution or need to specify one pollution like weter pollution or something else? | knowledge | repetition |
| 27 | (9:28:24 AM) JJ to ALL : |  | social | off task |
| 28 | (9:28:57 AM) KL to ALL : | yes, I like to write about pollution too | knowledge | agreement |
| 29 | (9:29:08 AM) LJ to ALL : | dun know | knowledge | response |
| 30 | (9:29:24 AM) LJ to ALL : | dunknow | knowledge | response |
| 31 | (9:29:38 AM) DF to ALL : | errr.....really no idea | knowledge | response |
| 32 | (9:29:49 AM) KL to ALL : | what about Lijian | mgmt | elicitation |
| 33 | (9:30:03 AM) LJ to ALL : | what? | knowledge | clarification |
| 34 | (9:30:07 AM) JJ to ALL : | what pollution? water pollution atmosphere pollution or pollution of everything | knowledge | initiation |
| 35 | (9:30:08 AM) JJ to ALL : |  | social | off task |
| 36 | (9:30:55 AM) KL to ALL : |  | social | off task |
| 37 | (9:30:58 AM) LJ to ALL : | got water pollution already, so i think air pollution is better | knowledge | agreement |

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|----|--------------------------|---|-----------|------------|
| 38 | (9:30:59 AM) DF to ALL : | okay water, water | knowledge | agreement |
| 39 | (9:31:17 AM) KL to ALL : | ok, air | knowledge | agreement |
| 40 | (9:31:44 AM) KL to ALL : | let's vote, everybody | mgmt | focus |
| 41 | (9:31:52 AM) DF to ALL : | how about urban decay? | knowledge | initiation |
| 42 | (9:32:22 AM) JJ to ALL : | urban decay? <i>so chim</i> | knowledge | judgment |
| 43 | (9:32:23 AM) JJ to ALL : | 😄 | social | off task |
| 44 | (9:32:51 AM) DF to ALL : | hehe just kidding | social | off task |
| 45 | (9:32:52 AM) DF to ALL : | 🤔 | social | off task |
| 46 | (9:33:10 AM) JJ to ALL : | 😄 | social | off task |
| 47 | (9:33:24 AM) LJ to ALL : | what is the meaning of chim? | social | off task |
| 48 | (9:33:31 AM) KL to ALL : | 🤔 | social | off task |
| 49 | (9:33:56 AM) JJ to ALL : | shen ao [meaning 'profound'] | social | off task |
| 50 | (9:34:22 AM) KL to ALL : | hey, i don't know chinese | social | off task |
| 51 | (9:34:23 AM) KL to ALL: | 🤔 | social | off task |
| 52 | (9:34:43 AM) LJ to JJ : | thanks la | social | off task |
| 53 | (9:35:08 AM) JJ to ALL : | i dunn noe how to explain in english sorry | social | off task |
| 54 | (9:35:09 AM) JJ to ALL : | 🤔 | social | off task |
| 55 | (9:35:25 AM) DF to ALL : | ah ya wanna sleep and hopefully can get some inspirations from the dreams | social | off task |
| 56 | (9:35:26AM) DF to ALL : | 😄 | social | off task |
| 57 | (9:35:35 AM) KL to ALL : | hehe, khong sao dau. | social | off task |
| 58 | (9:35:48 AM) LJ to JJ : | ok just do it | social | off task |
| 59 | (9:35:49 AM) JJ to ALL : | ? | social | off task |
| 60 | (9:35:57 AM) KL to ALL : | it 's vietnamese | social | off task |
| 61 | (9:35:58 AM) KL to ALL : | 🤔 | social | off task |
| 62 | (9:36:08 AM) LJ to JJ : | khong sau dau! | social | off task |
| 63 | (9:36:22 AM) JJ to ALL : | what does that mean? | social | off task |
| 64 | (9:36:26 AM) LJ to JJ : | khong sau dau! | social | off task |
| 65 | (9:36:29 AM) DF to ALL : | shall we decide which language to use first? | social | off task |
| 66 | (9:36:35 AM) KL to ALL : | haha, welldone. My good student, LiJian | social | off task |
| 67 | (9:36:41 AM) JJ to ALL : | 🤔 | social | off task |
| 68 | (9:36:50 AM) KL to ALL : | hihi | social | off task |
| 69 | (9:37:11 AM) LJ to JJ : | actually i dun know the meaning | social | off task |
| 70 | (9:37:14 AM) JJ to ALL : | what does "khong sau dau" mean? | social | off task |
| 71 | (9:37:17 AM) JJ to ALL : | \ | social | off task |
| 72 | (9:37:29 AM) LJ to ALL : | yes | social | off task |
| 73 | (9:37:44 AM) DF to ALL : | ZZZZZ..... | social | off task |
| 74 | (9:37:44 AM) KL to ALL : | it means that no problem. ANd now talk about our topic | mgmt | focus |
| 75 | (9:37:54 AM) JJ to ALL : | ok | mgmt | focus |
| 76 | (9:37:55 AM) KL to ALL : | hihi | mgmt | contact |
| 77 | (9:38:15 AM) JJ to ALL : | so we decide to write about air pollution is it? | mgmt | consensus |
| 78 | (9:38:19 AM) KL to ALL : | and then, we will talk together in 3 languanges | social | off task |
| 79 | (9:38:25 AM) KL to ALL : | ok | social | off task |
| 80 | (9:38:52 AM) DF to ALL : | SOUNDS perfect | social | off task |

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|-----|--------------------------|---|-----------|-------------------------------|
| 81 | (9:38:53 AM) KL to ALL : | we will talk about the reasons cause air pollution? | knowledge | initiation |
| 82 | (9:39:31 AM) LJ to ALL : | ok air pollution | knowledge | repetition |
| 83 | (9:39:41 AM) KL to ALL : | hey, come on | mgmt | focus |
| 84 | (9:39:42 AM) KL to ALL : |  | social | off task |
| 85 | (9:39:45 AM) JJ to ALL : | i dunn noe, need to discuss the reason? | knowledge | clarification |
| 86 | (9:40:09 AM) DF to ALL : | actually i prefer water, easier | knowledge | negotiation (counter-propose) |
| 87 | (9:40:17 AM) KL to ALL : | because we have to devide many paragraph in our topic | task | structure |
| 88 | (9:40:39 AM) LJ to ALL : | i think air pollution is a easier topic | knowledge | negotiation (argue) |
| 89 | (9:40:43 AM) JJ to ALL : | i thought today on;y need to discuss about the topic | task | requirement |
| 90 | (9:41:02 AM) LJ to ALL : | coz i have done research | knowledge | negotiation (defend) |
| 91 | (9:41:09 AM) DF to ALL : | just fix the topic will do | mgmt | focus |
| 92 | (9:41:11 AM) KL to ALL : | ok, but we have to choose | mgmt | consensus |
| 93 | (9:41:16 AM) JJ to ALL : | air | mgmt | consensus |
| 94 | (9:41:25 AM) LJ to ALL : | air | mgmt | consensus |
| 95 | (9:41:28 AM) KL to ALL : | air, too | mgmt | consensus |
| 96 | (9:41:32 AM) DF to ALL : | water | mgmt | consensus |
| 97 | (9:41:47 AM) JJ to ALL : | haha DF, we got 3 person | mgmt | consensus |
| 98 | (9:41:51 AM) LJ to ALL : | 3 to 1 | mgmt | consensus |
| 99 | (9:41:51 AM) KL to ALL : | haha, DF , only you | mgmt | consensus |
| 100 | (9:42:01 AM) KL to ALL : | hehe, we won, DF | mgmt | consensus |
| 101 | (9:42:10 AM) LJ to ALL : | 1 to 3 | mgmt | consensus |
| 102 | (9:42:20 AM) JJ to ALL : | faint | social | off task |
| 103 | (9:42:28 AM) DF to ALL : | do i have to surrender? | social | off task |
| 104 | (9:42:31 AM) LJ to ALL : | sorry so big | social | off task |
| 105 | (9:42:33 AM) KL to ALL : | is 1 greater than 3. | social | off task |
| 106 | (9:42:54 AM) KL to ALL : | DF, u 'd better study 1st form, hehe | social | off task |
| 107 | (9:42:54 AM) LJ to ALL : | no | social | off task |
| 108 | (9:42:58 AM) JJ to ALL : | or u want to fight with us? | social | off task |
| 109 | (9:43:11 AM) LJ to ALL : | me? | social | off task |
| 110 | (9:43:22 AM) JJ to ALL : | i mean DF | social | off task |
| 111 | (9:43:23 AM) KL to ALL : | ok, let 'sgo out. | social | off task |
| 112 | (9:43:28 AM) DF to ALL : | now is geater but dun know in the future | social | off task |
| 113 | (9:43:50 AM) LJ to ALL : | good expectation | social | off task |
| 114 | (9:44:05 AM) KL to ALL : | i'm intersting in fighting now. And then , maybe difan will have a wonderful dream | social | off task |
| 115 | (9:44:17 AM) KL to ALL : |  | social | off task |
| 116 | (9:44:35 AM) JJ to ALL : | r u going to do the outline now? | mgmt | focus |
| 117 | (9:44:45 AM) LJ to ALL : | SMOKE: | social | off task |
| 118 | (9:44:48 AM) DF to ALL : | maybe a nightmare.....god knows..... | social | off task |
| 119 | (9:44:49 AM) DF to ALL : |  | social | off task |
| 120 | (9:44:56 AM) LJ to ALL : |  | social | off task |

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|-----|--------------------------|--|--------|-------------|
| 121 | (9:45:06 AM) LJ to ALL : | :laugh: | social | off task |
| 122 | (9:45:12 AM) JJ to ALL : | what r u talking about? i am lost! | mgmt | focus |
| 123 | (9:45:30 AM) LJ to ALL : | testing | mgmt | contact |
| 124 | (9:45:42 AM) KL to ALL : | LJ, you are the only boy in group.Why don't say any thing | mgmt | elicitation |
| 125 | (9:45:52 AM) LJ to ALL : | ok let us do outline | mgmt | focus |
| 126 | (9:46:06 AM) DF to ALL : | testing testing 1,2,3..... | mgmt | contact |
| 127 | (9:46:07 AM) DF to ALL: | 🤔 | | |
| 128 | (9:46:16 AM) KL to ALL : | agree. | mgmt | consensus |
| 129 | (9:46:21 AM) LJ to ALL : | math lecturer | social | off task |
| 130 | (9:46:27 AM) JJ to ALL : | difan u reminds me the maths lecturer | social | off task |
| 131 | (9:46:36 AM) LJ to ALL : | grab the idea | social | off task |
| 132 | (9:46:48 AM) DF to ALL : | intuition | social | off task |
| 133 | (9:46:53 AM) KL to ALL : | ah, the teacher dancing very well | social | off task |
| 134 | (9:47:07 AM) LJ to ALL : | dancing? | social | off task |
| 135 | (9:47:50 AM) DF to ALL : | oh, that is ballet actually..... | social | off task |
| 136 | (9:47:51 AM) DF to ALL : | 😄 | social | off task |
| 137 | (9:47:55 AM) KL to ALL : | yes, u see, in the lecture, he always dance and i always sleep | social | off task |
| 138 | (9:47:56 AM) KL to ALL: | 🤔 | social | off task |
| 139 | (9:48:05 AM) JJ to ALL : | he dances very funny | social | off task |
| 140 | (9:48:06 AM) JJ to ALL : | 😄 | social | off task |
| 141 | (9:48:20 AM) KL to ALL : | hihi, or we change the topic about him? | social | off task |
| 142 | (9:48:30 AM) JJ to ALL : | ok | social | off task |
| 143 | (9:48:47 AM) KL to ALL : | my teacher, the greatest dancer in lecture? | social | off task |
| 144 | (9:48:49 AM) JJ to ALL : | r u intend to finish ur outline during this lesson? | mgmt | focus |
| 145 | (9:49:01 AM) DF to ALL : | can..... then move the topic to whom? | social | off task |
| 146 | (9:49:03 AM) KL to ALL : | haha, it's great. | social | off task |
| 147 | (9:49:25 AM) JJ to ALL : | let's talk about programming!!!!!!!!!! | social | off task |
| 148 | (9:49:44 AM) DF to ALL : | actually not leh, just wanna have fun | social | off task |
| 149 | (9:49:44 AM) DF to ALL : | 🤔 | social | off task |
| 150 | (9:49:45 AM) KL to ALL : | hihi, oh | social | off task |
| 151 | (9:49:46 AM) KL to ALL: | 🤔 | social | off task |
| 152 | (9:49:54 AM) KL to ALL : | how can I do the test today. | social | off task |
| 153 | (9:50:09 AM) KL to ALL : | you remind me of my sadness | social | off task |
| 154 | (9:50:15 AM) JJ to ALL : | i think i will die | social | off task |
| 155 | (9:50:16 AM) DF to ALL : | okay okay programming is more important | social | off task |
| 156 | (9:50:27 AM) JJ to ALL : | for the programming | social | off task |
| 157 | (9:50:39 AM) KL to ALL : | do you review much | social | off task |
| 158 | (9:50:59 AM) JJ to ALL : | no i haven't finish reading the last chapter | social | off task |
| 159 | (9:51:02 AM) KL to ALL : | now, let's do our topic | mgmt | focus |
| 160 | (9:51:18 AM) DF to ALL : | let us pray for | social | off task |

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|-----|--------------------------|---|-----------|-------------|
| | | ourselves.....Jesus,Jesus help me..... | | |
| 161 | (9:51:27 AM) KL to ALL : | hihi | social | off task |
| 162 | (9:51:34 AM) JJ to ALL : | yes? | social | off task |
| 163 | (9:51:46 AM) KL to ALL : | i haven't finish 3rd charpter | social | off task |
| 164 | (9:52:07 AM) KL to ALL : | forget it, , or I will die here | social | off task |
| 165 | (9:52:18 AM) KL to ALL : | now discuss about topic | mgmt | focus |
| 166 | (9:52:39 AM) KL to ALL : | we have to outline | mgmt | focus |
| 167 | (9:52:43 AM) JJ to ALL : | only eight mins left | mgmt | focus |
| 168 | (9:52:50 AM) KL to ALL : | OK | mgmt | consensus |
| 169 | (9:52:54 AM) JJ to ALL : | no time to do the outline already | mgmt | focus |
| 170 | (9:53:03 AM) KL to ALL : | let's do it now, one by one | mgmt | focus |
| 171 | (9:53:18 AM) DF to ALL : | no lah | mgmt | consensus |
| 172 | (9:53:20 AM) KL to ALL : | only outline | mgmt | focus |
| 173 | (9:53:29 AM) KL to ALL : | if talk about air pollution | knowledge | repetition |
| 174 | (9:53:32 AM) JJ to ALL : | seven more mins | mgmt | focus |
| 175 | (9:53:38 AM) KL to ALL : | hihi | mgmt | contact |
| 176 | (9:54:02 AM) KL to ALL : | so continuing chatting | social | off task |
| 177 | (9:54:08 AM) DF to ALL : | have not decided the topic yet how to talk about outline?! | task | requirement |
| 178 | (9:54:10 AM) KL to ALL : | or study | social | off task |
| 179 | (9:54:28 AM) KL to ALL : | why, i think air pollution | knowledge | repetition |
| 180 | (9:54:28 AM) LJ to ALL : | hungary | social | off task |
| 181 | (9:54:35 AM) JJ to ALL : | sigh i am just waiting to die | social | off task |
| 182 | (9:54:39 AM) KL to ALL : | or you want to fight | social | off task |
| 183 | (9:55:00 AM) KL to ALL : | no, don't die, wait for me | social | off task |
| 184 | (9:55:05 AM) LJ to ALL : | no need to wait. i die already | social | off task |
| 185 | (9:55:14 AM) KL to ALL : | hihi | social | off task |
| 186 | (9:55:16 AM) JJ to ALL : | hahaha | social | off task |
| 187 | (9:55:19 AM) DF to ALL : | chat chat more meaningful.....hungry.....dying | social | off task |
| 188 | (9:55:22 AM) KL to ALL : | u die because of hungry | social | off task |
| 189 | (9:55:36 AM) LJ to ALL : | no la | social | off task |
| 190 | (9:55:42 AM) JJ to ALL : | i die coz of programming | social | off task |
| 191 | (9:55:48 AM) KL to ALL : | me too | social | off task |
| 192 | (9:55:52 AM) LJ to ALL : | coz no time to live | social | off task |
| 193 | (9:55:54 AM) KL to ALL : | and hungry | social | off task |
| 194 | (9:55:57 AM) KL to ALL : | and sleepy | social | off task |
| 195 | (9:56:01 AM) DF to ALL : | me too too | social | off task |
| 196 | (9:56:06 AM) KL to ALL : | hu hu | social | off task |
| 197 | (9:56:09 AM) JJ to ALL : | and cold | social | off task |
| 198 | (9:56:47 AM) KL to ALL : | 4 minutes left | mgmt | focus |
| 199 | (9:56:52 AM) DF to ALL : | my brain died already although my hreat is still beating..... | social | off task |

Face-to-face scripts of pilot study

| Turn | Std | Utterances | Category | Subcategory |
|------------|-----|---|---------------------|-------------------------------|
| 1 | JL | What you want me to say? | social | off task |
| 2 | WC | Hallo, testing.. | social | off task |
| 3 | WC | (O)kay. What problems? | mgmt | elicitation |
| 4 | JM | Pollution <i>lo</i> . | knowledge | initiation |
| 5 | JL | Pollution? | knowledge | clarification |
| 6a 6b | WC | Pollution? Land pollution, water pollution, air pollution? No.. no! 3 main pollution <i>lah</i> : air, water, land. | knowledge | clarification; elaboration |
| 7 | JM | Then you have to come up with solution <i>le</i> . | task | requirement |
| 8 | WC | Okay, okay <i>lah</i> . 3 air pollution <i>lah</i> . Air pollution the main topic then 3 air <i>lor</i> . | knowledge | repetition |
| 9 | JM | Then, what's the solution? | mgmt | elicitation |
| 10 | WC | No solution <i>what</i> . What solution? | task | requirement |
| 11a 11b | JM | You have to come up with the solution <i>what</i> . What's the problem then what's the solution. | task | requirement; planning |
| 12 | WC | I thought we come up with 3 types of problems? | task | requirement |
| 13 | JM | Yeah... and no solution? Ha...ha...ha... | task | requirement |
| 14 | JL | I thought the essay is about ... | task | requirement |
| 15 | WC | You come up with the problem then you come up with the solution <i>lah</i> . | task | requirement |
| 16 | JL | You must talk about the situation then the problem. | task | structure |
| 17 | JM | Situation? | task | structure |
| 18 | JL | Situation now. | task | requirement |
| 19 | JM | Situation. Then you copy the whole text <i>lah</i> . | task | requirement |
| 20 | JL | Situation... problem.... solution.... evaluation. | task | structure |
| 21 | WC | Situation <i>lah</i> then... | task | structure |
| 22 | MC | No evaluation. | task | structure |
| 23a 23b | WC | No need evaluation. Solution is very easy <i>what</i> . You know, the car exhaust, you can put the catalytic converter, you know, that kind of stupid stuff? | task & knowledge | structure; initiation |
| 24 | JM | Then everybody can just ... | social | interrupted |
| 25 | JL | You can say the car exhaust. The problem is the car exhaust, | knowledge | repetition |
| 26 | WC | the lead compounds | knowledge | initiation |
| 27 | JL | like compounds, lead compounds? | knowledge | clarification |
| 28 | WC | That means you ... Leaded petrol. You see <i>wah-lah-way</i> damn smart man. | knowledge | acknowledgement |
| 29 | JL | You can elaborate into a paragraph. | task | structure |
| 30 | WC | Lead petrol, unleaded petrol, CO become CO2 using converter; CO become CO2 <i>what</i> . | knowledge | elaboration |
| 31 | JL | Okay ... so that's one problem. | knowledge | agreement |
| 32 | JM | The pollution ... | social | interrupted |

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| 33a 33b | WC | What else, huh? Air pollution then we have water pollution. We ... | mgmt; knowledge | elicitation; initiation |
| 34 | JM | Finish already. | mgmt | focus |
| 35 | JL | Why don't we write about common environment pollution? | knowledge | initiation |
| 36 | JM | Then .. | social | interrupted |
| 37 | JL | Then, you can have, you can have .. <i>ah..</i> | social | interrupted |
| 38 | MC | Then it's like ... | social | interrupted |
| 39 | WC | The introduction will be environmental issues that we.. | task | structure |
| 40 | JL | The situation will be the current .. <i>ah..</i> situation in most countries or Singapore. | knowledge | elaboration |
| 41 | WC | We highlight, Singapore would be very very .. the scope is very small. | knowledge | negotiation (contrast) |
| 42 | JL | You don't make the scope too big <i>what</i> . Because you need to provide a solution. | knowledge | negotiation (defend) |
| 43 | WC | Singapore gets it - air pollution. It's everywhere in the world <i>what</i> . Singapore is much better than everywhere <i>lah</i> . Right? | knowledge | negotiation |
| 44 | MC | Singapore is much better than other parts. Much better. | knowledge | agreement |
| 45 | WC | Water pollution. | knowledge | repetition |
| 46 | JM | Actually, you must find the problem <i>what</i> . Then you have to find a few solutions to that one problem <i>leh</i> . | task | structure |
| 47 | JL | Is it? No <i>lah</i> . | task | structure |
| 48 | JM | You can't be doing this problem then like that solve then this problem then like that solve. You look at the paragraphs, the outline is actually written down there what is the problem then what are the different solutions. | task | structure |
| 49 | WC | Oh.. then we make the topic bigger <i>lah</i> . Increase the scope then you have a longer situations with 3 main problems and 3 main solutions. | task | structure |
| 50 | JL | That means each paragraph is situation, problem, solution. | task | structure |
| 51a 51b | WC | I think each paragraph can have more than one problems with more than one solutions. That means one situation, with some problems and some solutions. So, the paragraph will be situation then problem, solution, problem 1, solution 1, problem 2, solution 2, problem 3, solution 3. Then, we lengthen the passage <i>lah</i> . | task | structure requirement |
| 52 | JL | <i>Huah!</i> . Okay <i>lah</i> . It'll be too long. | task | structure |
| 53 | WC | No <i>lah</i> . It won't be too long if it's one sentence one problem. Actually, it's one problem, one solution, one example. | task | structure |
| 54 | JM | Actually, his ideas also not bad. can write quite a lot <i>lor</i> . If you, if you, only write one problem | task | structure |

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| | | then one solution. | | |
| 55 | WC | You, then, you'll be trying to lengthen your essay without any substantial points. It depends <i>lah</i> if you can get a very good problem, a very good solution. | task | structure |
| 56 | JM | Can we go on? | mgmt | focus |
| 57a 57b | WC | We choose the main topic first <i>lah</i> . So are you sure we are going to write about pollution? Pollution. So this is our main topic: pollution. Another one .. ah.... Okay.. this is our discussion ... ah... pollution. Okay, we have to talk about the crap about the pollution. Then we go to main body. Main body, okay. So in the introduction, we say that now we highlight about the many kinds, different kinds of pollution in Singapore, if you want. .. eh.. we talk about air pollution, air pollution is easier to write. | task & knowledge | structure; summation |
| 58 | JL | (referring to the example given in <i>Materials Book</i>) For this passage, right, the topic sentence is banning of IRCs converter. | knowledge | reference (external) |
| 59 | WC | We must write about why ... why we should ban IRC. We must make sure that the topic sentence is depending on ... | task | requirement |
| 60 | JL | For us, let's say you want to write about pollution, what do you think we should do about pollution? | knowledge | repetition |
| 61 | JM | It's according to which one <i>huh?</i> | knowledge | clarification |
| 62 | WC | It's according to the ... so our problem is pollution we have to come up with 3 solutions. | knowledge & task | repetition; requirement |
| 63 | JM | Reason number one. Then what's reason number two? There's only one problem and you must come up with 3 solutions. | task | requirement |
| 64 | WC | Okay. The problem is air pollution. We have to come up with 3 solutions. | task | requirement |
| 65a 65b | JM | If it's air pollution, then what's the ...? What would be the ...? How to solve it? | knowledge & mgmt | repetition; focus |
| 66 | | <i>Silence</i> | | |
| 67a 67b | JL | Must write what is the purpose of the essay. The purpose of the essay is just to talk about the pollution? Or the essay is to talk about solving environmental problems? Because if you just write pollution, then how are you going to form the thesis statement? | knowledge & task | search; requirement |
| 68 | WC | Then, we must be more specific <i>lah</i> . | task | requirement |
| 69 | JL | No. What should be our thesis statement? | knowledge | clarification |
| 70a 70b | JM | Err.. err.. Pollution. I mean our .. pollution (<i>lah</i>) then after that you come to like a ... a more certain one, just like discuss ... bodies ... <i>ah</i> | knowledge & task | repetition; requirement |
| 71 | JL | Oh! I know what you mean. | social | off task |

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| 72 | JM | For this essay, we'll be specifically talking ... talking about water pollution or what. Air pollution. That's all. | knowledge | repetition |
| 73 | JL | Okay! How many pollution can you think of? | knowledge | clarification |
| 74 | WC | What do you mean by how many pollution? | knowledge | clarification |
| 75 | JL | How many different forms? Because you need at least to find three problems to write about. | knowledge | elaboration |
| 76 | WC | There's a lot of that kind of pollution <i>what</i> . Water, air, land, nuclear. | knowledge | repetition |
| 77 | JL | Examples? Concrete. | knowledge | clarification |
| 78a 78b | WC | Air, there's a lot of examples, solutions. Go to water. Industrial wastage. Land, dumping of waste, the ... the.. the... ah... radioactive.. radioactive... | knowledge | elaboration; initiation |
| 79 | JL | Can you list out then type ... write an email to me? | task | suggest |
| 80 | | <i>Laugh</i> | | |
| 81a 81b | JL | I know common sense. So how? | knowledge; mgmt | judgement; elicitation |
| 82 | JM | Go through the problems <i>lah</i> . | mgmt | focus |
| 83 | JL | Okay. Go through the problems. | mgmt | focus |
| 84 | WC | So, our thesis is <i>ah</i> .. | mgmt | focus |
| 85 | JL | WC, take out a pen, list down the problems. | mgmt | suggest |
| 86 | WC | Yes, JL. Problem number one, what's the problem number one? | knowledge | clarification |
| 87 | JL | Car exhaust. Exhaust fumes. | knowledge | repetition |
| 88 | WC | Car exhaust. Car exhaust. | knowledge | agreement |
| 89 | JL | Toxic. | knowledge | initiation |
| 90 | WC | Car exhaust. Problem two. Problem one, car exhaust then ... then the solution. The solution is catalytic converters. | knowledge | repetition |
| 91 | JM | I thought you want to cut down all the cars, the number of cars? | knowledge | initiation |
| 92 | JL | COE. | knowledge | initiation |
| 93 | WC | Ah.. COE. Singapore <i>lah</i> . Ah.. unleaded petrol. That means leaded petrol they pose a tax. But, that means one paragraph you have a lot of ..., is it? | knowledge; task | repetition; initiation; structure |
| 94 | T | How are we doing? Have you come up with a topic? | mgmt | elicitation |
| 95 | WC | Come up with a topic. | knowledge | response |
| 96 | JL | Come up with pollution. | knowledge | response |
| 97 | T | What kind of pollution? What? What kind? Water pollution? | knowledge | clarification |
| 98 | WC | Air pollution. | knowledge | repetition |
| 99 | T | Noise pollution? Air pollution? Land pollution? | knowledge | clarification |

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| 100 | WC | Air pollution. | knowledge | repetition |
| 101 | T | Okay, fine. | task | acknowledgement |
| 102 | WC | Is it okay if we write ... | social | interrupted |
| 103 | JL | Can we write on... some a bit on air, a bit on water? | knowledge | clarification |
| 104 | WC | General? | knowledge | clarification |
| 105a 105b | JL | Is it too big? I think must tone down. | knowledge | clarification; judgement |
| 106 | T | It depends on the points you have for your essay. | knowledge | response; clarification |
| 107 | WC | Actually, quite a lot. | knowledge | response |
| 108 | | <i>Laugh</i> | | |
| 109 | WC | Air pollution.. <i>ah?</i> | mgmt | repetition |
| 110 | JL | Exhaust fume, air pollution. | mgmt | agreement |
| 111 | WC | So, we must have different kinds of air pollution. I mean 3 different types of sources of air pollution. One is for exhaust. | task | structure |
| 112 | MJ | Factory. | knowledge | initiation |
| 113 | WC | All exhaust. | knowledge | summation |
| 114 | MJ | Cars, factories, <i>ah...</i> | knowledge | example |
| 115 | JL | Factory, how do you do for factory? | knowledge | clarification |
| 116 | WC | Factory .. <i>ah?</i> | social | interrupted |
| 117 | JL | Come on, the one with the common sense. | mgmt | elicitation |
| 118 | WC | Factory, you know, you know, factory. Yeah.. factory. Yes. | social | off task |
| 119 | MJ | The air near the factory. [in Mandarin] Downward of the direction of the wind. | knowledge | elaboration |
| 120 | WC | The air direction changes every | knowledge | clarification |
| 121 | MJ | No... [in Mandarin] | knowledge | disagreement |
| 122a 122b | WC | But I don't think Singapore, but I don't think Singapore will have this kind of system <i>leh</i> . Now, it's so small already. No, it's just that, some of the places right, the air, the wind will normally go from one direction to another. | knowledge | negotiation; elaboration |
| 123 | JL | No <i>what!</i> | knowledge | negotiation |
| 124 | WC | It changes from time to time because of the monsoon. | knowledge | negotiation |
| 125 | JL | You are talking about the place in her (<i>referring to MJ</i>) country (<i>i.e. China</i>) and the place in our country. | knowledge | negotiation |
| 126 | WC | My apologies. Oh shit! | social | interrupted |
| 127 | JL | Cause their place, their factories might be spread out very far apart from other places. | knowledge | negotiation |
| 128a 128b | MJ | The factory must not near the river, near the ... | knowledge | elaboration; initiation |
| 129 | JM | Then, there will be water pollution already <i>what</i> . | knowledge | disagreement |
| 130a 130b | JL | No, it must not be near the river so that it will not cause water pollution. | knowledge | negotiation; clarification |

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| 131 | JM | But now we are doing air pollution. | knowledge | search |
| 132 | JL | Because of the air pollution, we should, should pollute the water. So, it's still, so, the main idea is still air pollution <i>or what</i> . | knowledge | clarification |
| 133 | WC | Mister Jiale, would you like to write down the problem number two exactly? Okay. | mgmtl | suggest |
| 134 | JL | The pencil is not with me, so you can write. | social | off task |
| 135 | WC | Ah.. It's okay. I can pass it to you | social | off task |
| 136 | JL | So, what do we do for problem three? | mgmt | elicitation |
| 137 | WC | Up to your imagination. | knowledge | response |
| 138 | JL | Okay, problem number three. | mgmt | focus |
| 139 | JM | Up to your imagination. | knowledge | response |
| 140 | WC | Jasmine, you just come up with one point. Eh.. very hard to write <i>eh</i> . | mgmt | suggest |
| 141 | WC | Our topic sentence - pollution. Conclusion. Pollution should be ... | knowledge | repetition |
| 142 | MJ | How about if we change to water pollution? | knowledge | repetition |
| 143 | JL | Can. | knowledge | agreement |
| 144a 144b | JM | Why don't we just focus on the first one (lah)? You said, you said, the first point is there's so many cars then the solution. You use the catalytic converter. Then the second solution, you cut down the number of cars. Then the third solution, | knowledge; task | negotiation (counter propose); structure |
| 145 | WC | Oh, yeah! So our topic sentence will be air pollution caused by cars. Ah ... <i>wah-lah-way</i> | knowledge | summation |
| 146 | JL | You group leader, you know. | knowledge | agreement |
| 147a 147b | WC | <i>wah-lah-way</i> So, our topic sentence is air pollution by vehicles. | knowledge | repetition; summation |
| 148 | JL | Pollution? Vehicles? | knowledge | clarification |
| 149a 149b | WC | From vehicles. Okay then number one. Number one is ...? Number one's what? | knowledge; mgmt | agreement; elicitation |
| 150 | JM | Your catalytic converter. | knowledge | reference (internal) |
| 151 | WC | My catalytic converter. WC's catalytic converter. Second one will be JL, reducing of cars - COE. | knowledge | reference (internal) |
| 152 | JL | JL, implementing of COE. | knowledge | reference (internal) |
| 153 | JM | Then the third one is the lead thing <i>lah</i> , the lead, the fines or whatever you talk about. | knowledge | repetition |
| 154 | WC | The tax imposed on, imposed on .. | knowledge | repetition |
| 155 | JM | Is there a tax? | knowledge | clarification |
| 156 | WC | Yes, there's a lead tax. | knowledge | agreement |
| 157 | JM | It's only in Singapore or what? | knowledge | clarification |
| 158 | WC | Our contexts are all Singapore <i>what</i> . | knowledge | elaboration |
| 159 | JM | Hah! You are doing in Singapore only? | knowledge | clarification |
| 160 | WC | Pollution from vehicles in Singapore | knowledge | agreement |
| 161 | JL | COE does not exist in other countries. | knowledge | negotiation (argue) |

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| 162 | JM | Yeah! You can, you can not say COE <i>lah</i> , you can put like tariffs or what .. | knowledge | negotiation (counter propose) |
| 163 | WC | No, no. Not all countries are trying to reduce their pollution. For example, you see, | knowledge | negotiation (contrast) |
| 164 | JM | Bangkok | knowledge | elaboration |
| 165a 165b | WC | Bangkok, they have come up with a tax. | knowledge | disagreement ; negotiation (defend) |
| 166 | JM | Yeah! Then, you just put in general ... | knowledge | negotiation (counter propose) |
| 167a 167b | WC | Okay. Air pollution on Singapore. How does Singapore government try to curb air pollution from the vehicles. | knowledge | summation; repetition |
| 168 | JL | On the road. | knowledge | elaboration |
| 169 | WC | Ah... on the road <i>wah-lah-way</i> . | knowledge | agreement |
| 170 | JM | Full stop. | knowledge | agreement |
| 171 | WC | From the upper theme then the, but the catalytic converter is not something we are doing. | knowledge | clarification |
| 172 | JM | But it's a solution, it's a solution <i>what</i> | knowledge | negotiation (argue) |
| 173 | JL | Encouraged .. | social | interrupted |
| 174 | JM | It's a solution to it <i>what</i> . | knowledge | repetition |
| 175a 175b | WC | So we put it as the last one <i>ah</i> . The first one ...COE, to cut the number of vehicles on the road. Air pollution... | knowledge; task | agreement; structure |
| 176 | JL | Why not we use the pollution by cars, by vehicles on the road? Then we can come up with noise pollution | knowledge | initation |
| 177 | JM | Eh.. you are enlarging... | knowledge | disagreement |
| 178 | WC | Pollution from vehicles. | knowledge | repetition |
| 179 | JM | By the time you... If you are sure, you are sure, after that, you are like, hmm.. | social | interrupted |
| 180 | WC | Okay, so.. | mgmt | elicitation |
| 181 | JM | The solution will be very short <i>lor</i> . You, you can't write much <i>lor</i> . | task | structure |
| 182 | WC | The pollution from vehicles on the road. Water .. | knowledge | repetition |
| 183 | MJ | No water. | knowledge | disagreement |
| 184 | WC | Air ... | knowledge | repetition |
| 185 | JL | No, noise. | knowledge | negotiation (counter propose) |
| 186 | WC | Air and ... | process; knowledge | negotiation (defend) |
| 187 | JL | Noise? The vehicle crash into the river. Then pollution. | knowledge | negotiation (defend) |
| 188 | JM | No, then you can say what sulfur or don't know what. | knowledge | negotiation (counter propose) |

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| 189 | WC | Just air, from air .. | knowledge | negotiation (defend) |
| 190 | JL | Water .. | knowledge | negotiation (counter propose) |
| 191 | WC | <i>wah-lah-way</i> You cause rain <i>ah</i> . | knowledge | clarification |
| 192 | JM | Acid rain. | knowledge | agreement; elaboration |
| 193 | WC | Acid rain <i>ah</i> . | knowledge | acknowledgement |
| 194 | JL | You follow a vicious cycle. You can talk one round and round and round and go beat around the bush. | mgmt | focus |
| 195 | WC | Pollution from vehicles onwards. Air.. | knowledge | repetition |
| 196 | JM | Huh? | knowledge | clarification |
| 197 | WC | So, we are not going to adopt JL's one <i>lah</i> ? | mgmt | consensus |
| 198 | JM | at all | mgmt | focus |
| 199 | WC | We have no things to write <i>eh</i> .. | task | requirement |
| 200 | JM | Okay, okay.. what you (<i>referring to JL</i>) are saying? | task | requirement |
| 201 | JL | What did I say? | mgmt | elicitation |
| 202 | JM | Go round and round and round. | mgmt | focus |
| 203 | JL | Noise... noise .. noise pollution | knowledge | repetition |
| 204 | WC | Noise and air | knowledge | repetition |
| 205 | JL | That's why they restricted the exhaust pipes to be of a certain diameter. | knowledge | elaboration |
| 206 | WC | Decibel. | knowledge | elaboration |
| 207 | JL | Unless, unless, your, your exhaust pipe is from the original, original manufacturer. That means you must have a license to have a big exhaust pipe in Singapore. | knowledge | elaboration |
| 208 | JM | Big exhaust pipe? | knowledge | clarification |
| 209 | WC | And furthermore, your, your sound of vehicle didn't have a | social; knowledge | interrupted; elaboration |
| 210 | JL | Those sports car .. those which are | knowledge | example |
| 211 | WC | not modified | knowledge | elaboration |
| 212 | JL | not modified, right, like Ferrari and Lamborghini, their exhaust pipe will be bigger. Then those which are modified, normally the Hondas | knowledge | elaboration |
| 213 | WC | are illegals | knowledge | example |
| 214 | JL | They are big but they are illegal. | knowledge | elaboration |
| 215 | WC | Yeah, they are illegal. | knowledge | agreement |
| 216 | JM | It should be If they want it to be big also? | knowledge | clarification |
| 217 | JL | They must pay. | knowledge | elaboration |
| 218 | JM | No <i>lah</i> . I mean supposed to be big or small? | knowledge | clarification |
| 219 | JL | Supposed to be ... the size is supposed to be what your manufacturer .. | knowledge | elaboration |
| 220 | WC | No <i>lah</i> . We just say about the decibel, <i>what</i> the sound. | knowledge | disagreement |
| 221 | JM | Yeah <i>lah</i> . | knowledge | agreement |

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| 222 | JL | No, no, you know, you know, those cars can have big exhaust pipes or not? | knowledge | negotiation (defend) |
| 223 | WC | We are trying to reduce some more problems. Then you are trying to create more problems. | mgmt | focus |
| 224 | JL | That's supposed to be the way <i>what</i> . | mgmt | focus |
| 225 | WC | Then, how do we write? | mgmt | elicitation |
| 226 | JL | Air pollution, you must send for servicing. You must have <i>ah</i> .. yearly, yearly checks by..by which one <i>ha</i> ? Ciscom, is it? | knowledge | initiation |
| 227 | WC | That is provided you are .. how many years of ... your car must be of a certain age before you must ... | knowledge | elaboration |
| 228 | JL | Yes, then write it down. | mgmt | suggest |
| 229 | WC | You must come to how... how many years old <i>leh</i> ? | knowledge | clarification |
| 230 | JM | It's... it's too, too long already. Then after that you must cut. | task | requirement |
| 231 | WC | Eh.. if you want to control pollution <i>ah</i> .. | social | interrupted |
| 232 | JL | Let's say the .. | social | interrupted |
| 233 | WC | Is this just under one point or | task | structure |
| 234 | JL | You must send it for regular check, so that let's say it does not pass, you have to change your components inside. | knowledge | elaboration |
| 235 | WC | Okay, let's get back to the topic. Our focus is pollution from vehicles on the road in Singapore. | mgmt | focus |
| 236 | JL | Correct <i>lah</i> . | knowledge | agreement |
| 237 | JM | Correct <i>what</i> . | knowledge | agreement |
| 238 | JL | So, what's the solution? | mgmt | elicitation |
| 239 | WC | Then, what's the first point? | mgmt | elicitation |
| 240 | JL | The first point is <i>ah</i> ... catalytic converter. | knowledge | repetition |
| 241a 241b | JM | No <i>lah</i> . We change, we change to the service <i>one lah</i> . Then we can write more. Correct or not? | task & knowledge | negotiation (counter propose); structure |
| 242 | JL | No, service is one of the points. | knowledge | negotiation (counter propose) |
| 243 | JM | Ah..? Under the catalytic? | knowledge | clarification |
| 244 | WC | Solution <i>eh</i> . | knowledge | agreement |
| 245 | JM | Solution <i>what</i> , it's a solution, right? | knowledge | clarification |
| 246 | JL | No, you can have four, not necessarily must restrict to number three, can have four. | task | requirement |
| 247a 247b | WC | We should stop at in a few minutes' time. Do the outline then we can go back home. So, must focus. Come on. Problems of vehicles on the road in Singapore. Singapore context. First point, second point, third point, conclusion. Reduce pollution to the minimum. | mgmt; task | focus; structure |
| 248 | JL | Can have four points <i>lah</i> . Then conclusion. | task | structure |

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| 249 | JM | Three points <i>lah</i> . Why you want to write so much? | task | structure |
| 250a 250b | WC | Okay. First point, pollution from vehicles. What's the problems? Catalytic converter is not pollution. It's our solution. Okay, solution one. | knowledge; task | repetition; structure |
| 251 | JM | Then solution two, solution three. | task | structure |
| 252 | JL | Our thesis is to .. to reduce the pollution caused by vehicles on the road. Correct? | knowledge | repetition |
| 253 | JM | Yeah. | knowledge | agreement |
| 254 | JL | So, our first solution is talking about catalytic converters. | knowledge | repetition |
| 255 | WC | No, we shouldn't talk about catalytic converters because it's not compulsory in Singapore. | knowledge | disagreement |
| 256 | JM | We change to .. change to .. take public transport. | knowledge | initiation |
| 257 | WC | We introduce a system where .. | social | interrupted |
| 258 | JM | bicycles | knowledge | initiation |
| 259a 259b | WC | So, our first solution is to reduce the number of cars on the road <i>lah</i> . Bigger topic <i>lor</i> . Reduce number of .. number of cars on the road <i>lah</i> which is include COE, all these stuff <i>lor</i> . | knowledge; task | repetition |
| 260 | JL | A..ha.. COE and building a good public transport. | knowledge | repetition |
| 261 | WC | All these are under the subpoints of reducing the number of vehicles. | task | structure |
| 262 | JL | Okay. | task | structure |
| 263 | WC | Am I right to say that? | task | structure |
| 264 | JL | Correct. You are right, man. You are right. | task | structure |
| 265 | WC | Yeah, man. Then, what's the second one? | mgmt | elicitation |
| 266 | JL | Using ...using equipments to .. | knowledge | initiation |
| 267 | WC | You mean the.. the... the .. the petrol thing <i>ah</i> that you were talking about? About leaded and unleaded, right? | knowledge | clarification |
| 268 | JL | Because I thought about using equipments to limit the air pollution if you count in the catalytic converter and the unleaded petrol. | knowledge | elaboration |
| 269 | WC | That's not under equipment. That's under ... under ... | knowledge | negotiation (counter propose) |
| 270 | JL | It is equipment and better fuel. | knowledge | negotiation (defend) |
| 271 | WC | We'll think about nicer sentence <i>ah</i> . Very awkward <i>what</i> , using equipment and better fuel. | task | language |
| 272 | JL | That's why I come for English classes. If I am good, I no need to come for English classes. | task | language |
| 273 | WC | Okay, that's it for us <i>lor</i> That means, I think I've got ...Then, what's the third point? Third solution? | mgmt | focus |
| 274 | JL | The third solution. Oops! | mgmt | focus |
| 275 | WC | You mean we just combine two into one? | task | structure |
| 276 | JL | At least we've got something more to talk about per paragraph, right? | task | structure |

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| 277 | JM | Then | social | interrupted |
| 278 | WC | How intelligent. | knowledge | judgement |
| 279 | JM | Then, you are creating more problem again. | knowledge | disagreement |
| 280 | JL | Noise pollution. | knowledge | repetition |
| 281 | WC | No, this is solution and not problem. | knowledge | disagreement |
| 282 | JL | Ah.. | knowledge | acknowledgement |
| 283 | WC | Solution. Ah.. Laws. Implementation of ah.. legislative ah.. laws.. ah.. Laws | knowledge | initiation |
| 284 | JL | Regular checks, which will include regular check-ups | knowledge | initiation |
| 285 | WC | Laws, the laws include the checking of cars for | knowledge | elaboration |
| 286 | JM | Don't you think it's the same as ..? | knowledge | clarification |
| 287 | WC | No, it's different. One is using, the second one is using equipment and better fuel. | knowledge | elaboration |
| 288 | JL | Ah.. | knowledge | acknowledgement |
| 289 | T | The examples, you have not downloaded, right? | social | off task |
| 290 | JM | Ah.. Okay <i>lah</i> . | social | off task |
| 291 | JL | The law can, the law can | social | interrupted |
| 292 | WC | The law can include the .. the.. the noise level. | knowledge | elaboration |
| 293 | JL | Or you can include | social | interrupted |
| 294 | JM | But this is air. Why are you talking about that? You are talking about, you are talking about | knowledge | clarification |
| 295 | WC | We are talking about solutions. | knowledge | negotiation (defend) |
| 296 | JL | Okay. | knowledge | agreement |
| 297 | JM | It's solutions. It's solution for the air <i>what</i> . | knowledge | negotiation (argue) |
| 298 | JL | Okay, okay. She said she wants to talk about solutions about air pollution from vehicles | knowledge | acknowledgement |
| 299 | JM | No <i>lah</i> . | knowledge | disagreement |
| 300 | WC | The pollution, the cars | knowledge | repetition |
| 301 | JM | Okay <i>lah</i> . | knowledge | agreement |
| 302 | JL | You talk about laws, can have fines, can have | knowledge | repetition; initiation |
| 303 | WC | Yeah | knowledge | acknowledgement |
| 304 | JL | revoke of license. | knowledge | initiation |
| 305a 305b | JM | Yeah, fine. So you said, one family cannot have how many cars. Only have how many cars then. | knowledge | acknowledgement; initiation |
| 306 | JL | Is it, is there such a law? | knowledge | clarification |
| 307 | WC | Is there such a law <i>ah</i> ? | knowledge | clarification |
| 308 | JM | I say. | knowledge | agreement |

| | | | | |
|--------------|----|--|-----------|--|
| 309 | JL | Crap. | knowledge | judgement |
| 310a 310b | JM | Eh.. She (<i>referring to tutor</i>) said it's a solution (what). But doesn't mean it must be implemented already <i>what</i> | knowledge | negotiation (defend); reference (external) |
| 311 | JL | Proposed solution. | knowledge | agreement |
| 312 | WC | This solution, I will not agree with you. | knowledge | disagreement |
| 313 | JM | Why not? Why cannot? | knowledge | negotiation (argue) |
| 314 | JL | If I am rich, how many car I have in my house? | knowledge | negotiation (counter propose) |
| 315 | WC | Yeah. | knowledge | acknowledgement |
| 316 | JM | Okay <i>lah</i> . You only can have how many cars on the road <i>lah</i> . | knowledge | negotiation (counter propose) |
| 317a 317b | WC | Okay <i>lah</i> . Don't talk about this. Out of the point. Okay. I repeat our topic easy – pollution from the vehicles on the road, Singapore context. First one, reducing number of vehicles on the road. Second one, using equipments and better fuels. Third one will be, | knowledge | disagreement ;summation |
| 318 | JL | Using technology to improve. | knowledge | initiation |
| 319 | WC | Never mind, that one is later. | knowledge | disagreement |
| 320 | JL | No, no, I mean like equipment, that one can be using technology | knowledge | negotiation (defend) |
| 321 | WC | Using laws to ..to ... to | knowledge | repetition |
| 322 | JM | Must have service every year? | knowledge | repetition |
| 323 | WC | No <i>lah</i> . | knowledge | disagreement |
| 324 | JM | Every half a year? | knowledge | clarification |
| 325 | WC | It's not compulsory <i>what</i> . | knowledge | clarification |
| 326 | JM | Then? | knowledge | clarification |
| 327 | JL | You must check. You must send your car for regular check. | knowledge | elaboration |
| 328 | WC | Every how many years? | knowledge | clarification |
| 329 | JM | How many years? | knowledge | clarification |
| 330 | WC | Every ten years, five years? | knowledge | clarification |
| 331 | JL | No.. | knowledge | disagreement |
| 332a 332b | JM | That one you already need to scrap already <i>what</i> . | knowledge | search; clarification |
| 333 | JL | No, after every few years you must send for a check. | knowledge | negotiation (defend) |
| 334 | JM | After 10 years, you still don't | knowledge | negotiation (counter propose) |
| 335 | JL | You must check. You must check. Wait, I go and I message my friend, how .. how long must check | knowledge | negotiation (defend) |
| 336 | WC | No need. My father don't do that also | knowledge | disagreement |

| | | | | |
|--------------|----|--|--------------------|--------------------------|
| 337 | JL | My friend drives car to school. | knowledge | negotiation (argue) |
| 338 | WC | My father drive car every day. How's that? | knowledge | negotiation (defend) |
| 339 | JM | But you all don't need go service every day <i>lor</i> . | knowledge | negotiation (argue) |
| 340a 340b | WC | We don't service every day, of course <i>lah</i> . But the servicing is based on your usage of the car <i>what</i> , right? Eh.. It doesn't mean if you don't service in Singapore, you can do it in other countries. Like my father service in | knowledge | elaboration; example |
| 341 | JM | Aiyah, this... | social | interrupted |
| 342 | WC | You must go for checks, yes. But I don't think you need to go for servicing. | knowledge | elaboration |
| 343 | JL | Hmm... | social | interrupted |
| 344 | WC | Must go for checks every how many years? Check. | knowledge | clarification |
| 345 | JL | It's like a test, test of car | knowledge | elaboration |
| 346 | WC | Check. It's not every year <i>leh</i> | knowledge | negotiation (argue) |
| 347 | JL | It's check your parts. | knowledge | negotiation (defend) |
| 348 | WC | Then check the.. the.. whether .. the | social | interrupted |
| 349 | JL | Have you modified your parts, have you what, have you .. have you done anything to the car. | knowledge | elaboration |
| 350 | WC | It's not every year <i>lor</i> , not every year <i>loh</i> | knowledge | negotiation (defend) |
| 351 | JL | Whether you produce this, whether it's safe for the car to run on the Road. Must pass the test. | knowledge | negotiation (defend) |
| 352 | WC | Every ten years <i>ah</i> , or every five years <i>ah</i> . If suppose, it's every year, then nobody will modify their car already. | knowledge | negotiation (argue) |
| 353 | JM | Okay <i>lah</i> . Finish. | mgmt | focus |
| 354 | WC | Finish <i>lah</i> . Okay <i>ha</i> ? | mgmt | focus |
| 355 | MJ | What's the topic sentence? | mgmt | elicitation |
| 356a 356b | WC | Our main topic sentence will be pollution of vehicles on the road. Or if you want to change to air pollution, it's okay. Solution number one is to reduce the number of vehicles on the road. Okay. Reduce, how to reduce? We have the COE, and we have the sharing cab, no the car park. What's the car park called <i>ah</i> ? You know, there's a car park where you park and then you take public transport. | knowledge; task | summation; repetition |
| 357 | JM | Park N Ride. | knowledge | elaboration |
| 358 | WC | Ah.. Park N Ride. | knowledge | search |
| 359 | JM | Don't know. | knowledge | response |
| 360 | WC | Ride N Park. Park.. park | knowledge | elaboration |
| 361 | JM | Park N Ride <i>lah</i> . Park N Ride sounds right. | knowledge | agreement |
| 362 | MJ | Park N Ride. | knowledge | agreement |

| | | | | |
|--------------|----|--|--------------------|-------------------------|
| 363 | JM | Is it? | knowledge | clarification |
| 364 | WC | Is it? Park N Ride. | knowledge | clarification |
| 365 | JL | Okay. Park N Ride. Park N Ride. | knowledge | agreement |
| 366a 366b | WC | You are right, man. So, there are two main points, enough already <i>lah</i> . Then, solution number two. Solution number two, you need ..ah.. technology to help, technology or whatever equipments whatever <i>lah hor</i> . For example. Topic sentence you think of it yourself. The examples are the catalytic converters and also the.. the... the fuel, unleaded fuel. The fuel you can talk about lead fuel and the tax in Singapore. So, if you want to use lead petrol, right, you must pay a tax. Yes, confirmed. Taxi drivers must pay a tax. But in the long run, the taxi drivers feel it's more worth it because they use it every day. | knowledge; task | summation; structure |
| 367 | JL | Does Ms Lee drive a car? If she does drive a car ... | knowledge | reference (external) |
| 368 | JM | Taxi drivers use diesel <i>lor</i> . | knowledge | example |
| 369 | WC | Leaded petrol. | knowledge | agreement |
| 370 | JM | They don't use petrol. | knowledge | negotiation (argue) |
| 371 | WC | Oh, shit man! Then.... | social | interrupted |
| 372 | JM | They don't use petrol <i>lor</i> | knowledge | agreement |
| 373 | WC | Okay <i>lah</i> , diesel <i>lah</i> , diesel, diesel. Yeah, it's still same <i>what</i> . We are trying to restrict those, those, those petrol, those are petroleum that can give out harmful particles. For example, diesel. How do we do that? We impose tax? So, issue number three we lost. Legislative actions. | knowledge | elaboration |
| 374 | JL | Like we have fines, we have bans. | knowledge | initiation |
| 375 | WC | Bans on what? | knowledge | clarification |
| 376 | JL | Let's say, let's say your car | knowledge | elaboration |
| 377 | WC | speeding | knowledge | example |
| 378 | JL | No, produce exhaust fumes on the road | knowledge | elaboration |
| 379 | WC | A lot of exhaust then you get fine. | knowledge | example |
| 380 | JL | Then the traffic police go pass. If they see, they'll ask your car to sign up for a test. If let's say you are tested | knowledge | example |
| 381 | WC | fail | knowledge | elaboration |
| 382 | JL | it doesn't pass, right, you are fined. | knowledge | elaboration |
| 383 | WC | And furthermore, the sound from your car have, must be between a certain level, must be between a certain level. If not then you have to ... | knowledge | elaboration |
| 384 | JL | Oh! My friend say it's up... must send the car on the third year then yearly after the third year. | knowledge | reference (external) |
| 385 | WC | Check. | knowledge | elaboration |
| 386 | JL | Check. | knowledge | agreement |

| | | | | |
|--------------|----|---|-----------|----------------------|
| 387 | JM | <i>Wah..</i> | knowledge | acknowledgement |
| 388 | JL | After the, from the third year onwards, it's yearly. That means, you first year, second year no need to, no need to send for checks. Third year must send for check after that. | knowledge | elaboration |
| 389 | WC | third year no <i>what?</i> | knowledge | clarification |
| 390 | JL | He's driving a car. | knowledge | negotiation (defend) |
| 391 | WC | So? | knowledge | negotiation (argue) |
| 392 | JL | His father is also driving a car. | knowledge | negotiation (defend) |
| 393 | WC | So? Okay <i>lah.</i> | knowledge | agreement |
| 394 | JL | Okay <i>lor.</i> Okay <i>lor.</i> | knowledge | acknowledgement |
| 395a 395b | WC | Then the conclusion will be ... What's the conclusion? You think of it yourself. I think we should stop now. Stop, stop. | mgmt | focus; suggest |
| 396 | WC | Now we stop. | mgmt | suggest |
| 397 | JL | WC... | social | interrupted |
| 398 | WC | JL, stop staring at JM. | social | off task |

Chat scripts of main study

Chat 1

| Turn | Std | Utterances | Category | Subcategory |
|------|------|---|----------|-------------|
| 1 | ML: | hey.. | mgmt | contact |
| 2 | Joy: | hello who r u | mgmt | contact |
| 3 | ML: | haa..u guess... | mgmt | contact |
| 4 | Joy: | wat r we supposed to do? | task | requirement |
| 5 | ML: | read the articles given to us and then we'll discuss....after that we attempt to do the writing task. | task | requirement |
| 6 | Joy: | i went to the oab juz now... thot we r hafing lessons over dere | social | off task |
| 7 | ML: | opps...really...u must hv gone a long way.... | social | off task |
| 8 | ML: | eh..u know who am i already??? | social | off task |
| 9 | Joy: | of course...not... any hints?*** | social | off task |
| 10 | ML: | hmmmm...no clues yet.better not blow my cover...oka lah, one clue only ...am working for top spy agent | social | off task |
| 11 | Joy: | mmm... u noe who i m rite? pretty obvious.... haf we worked in class b4? | social | off task |
| 12 | ML: | erm...actually no leh...i dont really know whos in my grp also.. | social | off task |
| 13 | ML: | are u another spy agent? | social | off task |
| 14 | Joy: | its up to u to find out... are we the only 2 members fr diz grp? e passage is so long... | social | off task |
| 15 | ML: | haa... no...i think we have some others...but think they slacking....did not log in....ya...still reading.. | social | off task |
| 16 | ML: | hey u finished the reading? | social | off task |
| 17 | Joy: | gimme 5 more min | social | off task |
| 18 | Joy: | so u want to discuss 1 or 2 or both? | mgmt | focus |
| 19 | ML: | hmm... | mgmt | response |
| 20 | ML: | i was thinking of qn 2 | mgmt | response |
| 21 | ML: | wat abt u | mgmt | consensus |
| 22 | Joy: | ok start wif the 1st one, we will do 2 if we haf the time | mgmt | suggest |
| 23 | ML: | oh, so u want to do both | mgmt | consensus |
| 24 | Joy: | ok. | mgmt | consensus |
| 25 | ML: | oka, factors that hv shaped family relationsho in the last decade.. | mgmt | consensus |

| | | | | |
|----|------|---|-----------|--|
| 26 | Joy: | wat r the factors? i dink they r the advancement of tech, competitiveness, globalisation... | knowledge | initiation; initiation; initiation |
| 27 | ML: | are these factors the traits in passage 1? | knowledge | clarification |
| 28 | ML: | but how r we going to link advancement in teach etc to shaping up of family relationships? | knowledge | clarification |
| 29 | Joy: | in the negative aspect, i supposed. like, spending less time wif family... | knowledge | elaboration |
| 30 | ML: | ooh....cuz i thoght the factors are those mentioned in pasage 1 | knowledge | response |
| 31 | Joy: | ok...then how? | mgmt | elicitation |
| 32 | ML: | no lah, i'm not sure too...we try to discuss wrt to the factors that u hv given, then see what other things could be said..... | mgmt | suggest |
| 33 | Joy: | wat r ur ideas? | mgmt | elicitation |
| 34 | ML: | u mean my ideas to wat the points u hv suggetsed or | mgmt | consensus |
| 35 | Joy: | ur own ideas | mgmt | response |
| 36 | ML: | erm..trying to generate now...cant think properly...mind still zzZzz | mgmt | response |
| 37 | Joy: | ok qn 1is quite tough, lets discuss 2 den k? | mgmt | focus |
| 38 | ML: | ya...i think so too | mgmt | consensus |
| 39 | ML: | wat do the mean of prevailing social and economic climate? | knowledge | clarification |
| 40 | ML: | in social does it mean more open and liberal? | knowledge | clarification |
| 41 | Joy: | yes. | knowledge | agreement |
| 42 | ML: | i would suggest more heart to heart | knowledge | initiation |
| 43 | Joy: | spending more quality time wif children | knowledge | initiation |
| 44 | Joy: | that's a bit brief, maybe we can explain how... | knowledge | clarification |
| 45 | ML: | the minds of the parents must be open...so they can practically accept anything committed by the child | knowledge | elaboration |
| 46 | ML: | hey wait...what abt economic climate? | knowledge | clarification |
| 47 | Joy: | and 1 muz build up a gd relationship wif the child at a young age. | knowledge | initiation |
| 48 | Joy: | how to stay competitive and yet not neglecting ur children | knowledge | initiation |
| 49 | ML: | for the quality time, maybe we can say that parents do take time off from work to spend quality time with the kids, let them know that despite all the workloads parents face at work, they still care for the children | knowledge | elaboration |
| 50 | Joy: | upbringing of a child for social aspects... | knowledge | elaboration |
| 51 | ML: | can u elaborate ur latest point? | knowledge | clarification |
| 52 | Joy: | in our liberal society today, we can emphasize on the impt of gd upbringing, eg moral values... | knowledge | example |

| | | | | |
|----|------|--|-----------|-------------------|
| 53 | ML: | so that it'd help them socially??? | knowledge | clarification |
| 54 | Joy: | so that they will not b corrupted in this moral declining society. | knowledge | elaboration |
| 55 | Joy: | we only mentioned abt the part on spending time, any other factors? | mgmt | elicitation |
| 56 | ML: | these are what i hv found...let me type it in | mgmt | response |
| 57 | ML: | make time to discuss problems | knowledge | elaboration |
| 58 | ML: | put ypoursef in other person's shoe | knowledge | initiation |
| 59 | ML: | when u argue, do so constructively--> maybe not to hurt ur family relations | knowledge | initiation |
| 60 | ML: | have fun together | knowledge | initiation |
| 61 | ML: | accept feelings, avoid judgement | knowledge | initiation |
| 62 | Joy: | basically, its on how to communicate effectively like being open abt the discussions? | knowledge | clarification |
| 63 | ML: | yepz.. | knowledge | response |
| 64 | Joy: | ok, i dink we can expand on the idea of effective communication den... any concluding remarks? | mgmt | agreement |
| 65 | ML: | erm...thinking... | mgmt | response |
| 66 | Joy: | also on how u shld react when ur child does smthing wrongly... | knowledge | initiation |
| 67 | Joy: | its more like a friend to friend relationship, rather than a parent to child... | knowledge | elaboration |
| 68 | Joy: | n u muz know when to be stern | knowledge | elaboration |
| 69 | ML: | ya... and also strong family realtionships can be strengthen by showing appreciation | knowledge | initiation |
| 70 | ML: | this is the concluding remark for effective communication | task | planning |
| 71 | ML: | Communication. | knowledge | initiation |
| 72 | ML: | Members of strong families work at developing good communication skills and spend a lot of time talking with each other. | knowledge | elaboration |
| 73 | ML: | They talk about the small, trivial things as well as the deep, important issues of life. | knowledge | elaboration |
| 74 | ML: | Communication is the lifeblood of relationships. | knowledge | elaboration |
| 75 | ML: | It is the way that love and other emotions are expressed. | knowledge | elaboration |
| 76 | ML: | Relationships are played out in the context of communication. | knowledge | elaboration |
| 77 | ML: | We cannot help but communicate, and it is largely up to us whether the communication in our families will be effective or ineffective. | knowledge | elaboration |
| 78 | ML: | Effective communication means | social | interrupted start |
| 79 | ML: | hey i think i know who u r...Joy right? | social | off task |
| 80 | Joy: | whoa... u r good..... how do u noe? who art thou? | social | off task |

| | | | | |
|-----|------|--|-----------|-------------|
| 81 | Joy: | i haf no idea at all | social | off task |
| 82 | Joy: | there r only the 2 of us in this grp... | social | off task |
| 83 | ML: | haa...cuz i happen to look over the other side and i saw this really huge posting of message on ur screen..no doubt that msg was the one i posted..haa | social | off task |
| 84 | ML: | i'm ML | social | off task |
| 85 | Joy: | haha shld haf guessed it... | social | off task |
| 86 | ML: | aiyoh..i think the compre and writing task kinda difficult...i cant seem to think properly now..brain am v v v v zZzZzZ | social | off task |
| 87 | Joy: | i dun feel like doing... | social | off task |
| 88 | ML: | ya...think i'll bring it back to slowly do it.... i dont want to hand up anything today... | social | off task |
| 89 | Joy: | any thing else to discuss abt the essay? | mgmt | focus |
| 90 | ML: | i need time to think...haa | mgmt | response |
| 91 | Joy: | otherwise we will juz crap | mgmt | response |
| 92 | ML: | hmm...think must give description on how prevailing we think the social and economic climate in sg is now | task | requirement |
| 93 | Joy: | prevailing means the situation we r in now, rite? | task | requirement |
| 94 | ML: | the qn now seems to me that it is difficult to have strong family relationship in this society, particularly in this kind of period | task | requirement |
| 95 | Joy: | n so, socially, we r more westernised due to globalisation. | knowledge | elaboration |
| 96 | Joy: | we haf become v open | knowledge | elaboration |
| 97 | Joy: | sorry 4 ur qn, that is why we need to give ideas on how th build a strong n..... family relationship | task | requirement |
| 98 | ML: | i think the ideas are mopre or less the same ones that can be foun <u>g</u> in the <u>p</u> asseages... | task | requirement |
| 99 | Joy: | how can we apply them in the singaporean context in terms of social and economic aspects | task | requirement |
| 100 | Joy: | i dink basically, we need to spend time communicating in this hectic society so tt our children will not be affected by the negative consequences of the morally declined society. | knowledge | elaboration |
| 101 | Joy: | ok, we r back to sq 1. | mgmt | response |
| 102 | ML: | haa...no lah...its a pt well discussed...sorry ah...din contribute much... | mgmt | response |
| 103 | ML: | but other than teh communicating part, we need to look for other ways that can strenthgen family relations | task | requirement |
| 104 | ML: | hey, i think u can try doing the qns if u wanna hand in today | social | off task |

| | | | | |
|-----|------|--|-----------|--|
| 105 | Joy: | like, spending time, hafing outings, roles of the parents in the family, | knowledge | repetition; repetition; initiation |
| 106 | Joy: | i m not handing in today, anyway, i dink i m going to hand in a hand-written piece for my compre. | social | off task |
| 107 | ML: | and i think must learn way sto develop trust in a family | knowledge | initiation |
| 108 | ML: | ooh u mean when u go back and do u wanna write on paper n not email to her? | social | off task |
| 109 | Joy: | yup, only 4 the compre. hand in on thur. | social | off task |
| 110 | Joy: | u can write 4 the essay too, but u need to photocopy another pc | social | off task |
| 111 | ML: | but i tog the deadline for compre is on thur, tat is b y wed night u hv to email her... | social | off task |
| 112 | Joy: | yup, but if u write, den u submit on thur, when we c her | social | off task |
| 113 | ML: | ooh...got a lot of deadline this wwe... | social | off task |
| 114 | ML: | maybe i'll typee...faster for m e... | social | off task |
| 115 | Joy: | do u noe wats the topic 4 diz sat's cham quiz? | social | off task |
| 116 | ML: | hey, the qn 2 right, do we have wite in causal tone? cuz its for mag\ | task | requirement |
| 117 | ML: | he din mention.... is cml 111 right? | social | off task |
| 118 | ML: | i think shd be everything...maybe soft and hard acids again | social | off task |
| 119 | Joy: | yup, also possible. | social | off task |
| 120 | Joy: | everything again? | social | off task |
| 121 | ML: | maybe the front part of the test not so much on what we have tested, rather those that wasnt tested yet... | social | off task |
| 122 | ML: | like soft n hard acids which only accounts 3 or 4 n | social | off task |
| 123 | ML: | i mean 3 or 4 qns in the previous qiz | social | off task |
| 124 | ML: | btw, do u know can get back quiz paper on sat last wvek.. | social | off task |
| 125 | Joy: | ask fr ur tutors... i guess, | social | off task |
| 126 | Joy: | dink they haf ur scores | social | off task |
| 127 | ML: | i gotten back the qiz papers le...they was giving out straight after lessons.. | social | off task |
| 128 | ML: | but not many ppl take | social | off task |
| 129 | ML: | cuz a lot of ppl left | social | off task |
| 130 | Joy: | yup, maybe they will distribute again on wed | social | off task |
| 131 | Joy: | i m logging out | social | off task |
| 132 | Joy: | bye... | social | off task |

Chat 2

| Turn | Std | Utterances | Category | Subcategory |
|------|-------|--|----------|-------------|
| 1 | T: | hello...oi | mgmt | contact |
| 2 | JieJ: | yes | mgmt | contact |
| 3 | T: | haha | mgmt | contact |
| 4 | JieJ: | wat should we do now? | mgmt | focus |
| 5 | T: | what we supposed to do | mgmt | focus |
| 6 | T: | i think we're to read the article | mgmt | focus |
| 7 | JieJ: | go n DIE!!!!!!!!!!!!!!!!!!!! | social | off task |
| 8 | JieJ: | by JieJ: | social | off task |
| 9 | T: | she can see what we're typing girl | social | off task |
| 10 | JieJ: | its G.. | social | off task |
| 11 | T: | haha | social | off task |
| 12 | JieJ: | nvm | social | off task |
| 13 | T: | yeah | social | off task |
| 14 | JieJ: | JieJ is very jio'io | social | off task |
| 15 | T: | ah? | social | off task |
| 16 | T: | ask around la | social | off task |
| 17 | JieJ: | its G again dun bother her | social | off task |
| 18 | T: | ask who 1564 is | social | off task |
| 19 | T: | you're so loud. to G | social | off task |
| 20 | JieJ: | sorry.. | social | off task |
| 21 | JieJ: | ok now we read e article izzit | mgmt | focus |
| 22 | T: | yeah | mgmt | response |
| 23 | T: | oh oh | social | off task |
| 24 | JieJ: | y? | social | off task |
| 25 | T: | can we delete this? than we can gossip haha | social | off task |
| 26 | JieJ: | dunno leh..but it seems like only 2 users | social | off task |
| 27 | T: | MT is here already here but can't see her inside the chat | social | off task |
| 28 | JieJ: | ask her in | social | off task |
| 29 | JieJ: | sorry too big font | social | off task |
| 30 | T: | how to ask? | social | off task |
| 31 | T: | hah | social | off task |
| 32 | T: | mine bigger | social | off task |
| 33 | JieJ: | whoA!!! | social | off task |
| 34 | T: | ok hope this is better | social | off task |
| 35 | T: | still trying | social | off task |
| 36 | JieJ: | okie | social | off task |
| 37 | T: | what is our previous topic? | social | off task |
| 38 | JieJ: | aaa..creativity thingy rite? | social | off task |

| | | | | |
|----|-------|--|--------|----------|
| 39 | T: | yeah. so we won't be doing the same thing right? | social | off task |
| 40 | T: | now is the family thingy | social | off task |
| 41 | JieJ: | then do we need to access e website | social | off task |
| 42 | JieJ: | MT? | mgmt | contact |
| 43 | MT: | yes | mgmt | contact |
| 44 | MT: | who is this? | mgmt | contact |
| 45 | JieJ: | hi there,ur group memer,JJie | mgmt | contact |
| 46 | MT: | ooo ic | mgmt | contact |
| 47 | JieJ: | the other is T | mgmt | contact |
| 48 | MT: | ok | mgmt | contact |
| 49 | T: | hello | mgmt | contact |
| 50 | MT: | hiiii | mgmt | contact |
| 51 | CY: | hello | mgmt | contact |
| 52 | MT: | hi...how to change the nick name? | social | off task |
| 53 | CY: | who r my group members???????????? | mgmt | contact |
| 54 | T: | this is>? | mgmt | contact |
| 55 | T: | who's ccloud? | mgmt | contact |
| 56 | CY: | huh?? caiyun | mgmt | contact |
| 57 | JieJ: | i dunno. | mgmt | contact |
| 58 | JieJ: | y u can enter? | social | off task |
| 59 | T: | how come you can enter ? | social | off task |
| 60 | CY: | all matric no.?? | social | off task |
| 61 | CY: | i m in tis gp | social | off task |
| 62 | CY: | i juz came in | social | off task |
| 63 | T: | oh..... | social | off task |
| 64 | T: | hi | mgmt | contact |
| 65 | CY: | can i have an intro??? | mgmt | contact |
| 66 | JieJ: | hmmm.. really..okie okie JieJ here | mgmt | contact |
| 67 | T: | T 01778 like prison no. | mgmt | contact |
| 68 | MT: | MT here | mgmt | contact |
| 69 | CY: | hehezzz | mgmt | contact |
| 70 | T: | how u change your nick? | social | off task |
| 71 | CY: | i duno | social | off task |
| 72 | CY: | maybe in ur profile | social | off task |
| 73 | JieJ: | hehe.. | social | off task |
| 74 | JieJ: | okie now should we start discussion? | mgmt | focus |
| 75 | CY: | ok ahich qs should we start | mgmt | focus |
| 76 | MT: | waitlet me read the paper first ;) | mgmt | response |
| 77 | T: | hello | mgmt | contact |
| 78 | T: | i'm back. hee | mgmt | contact |
| 79 | T: | went to change my nick | social | off task |
| 80 | JieJ: | can <i>ah</i> | social | off task |

| | | | | |
|-----|-------|--|--------|-----------|
| 81 | T: | yeah. go proofile. | social | off task |
| 82 | CY: | tahlaxi whu is tat | mgmt | contact |
| 83 | T: | T | mgmt | contact |
| 84 | MT: | sorry, where is the profile? | social | off task |
| 85 | JieJ: | where is profile? | social | off task |
| 86 | T: | a nick by a friend | social | off task |
| 87 | T: | on the main website by the right hand corner | social | off task |
| 88 | CY: | profile at ivle | social | off task |
| 89 | CY: | ok shall we star wif qs 1?? | mgmt | focus |
| 90 | T: | give each 1min to settle this then we discuss liao | mgmt | suggest |
| 91 | CY: | ok | mgmt | response |
| 92 | CY: | read 1st :P | mgmt | suggest |
| 93 | JieJ: | JieJ come back <i>liao</i> . | mgmt | contact |
| 94 | MT: | hii | mgmt | contact |
| 95 | JieJ: | still cannot i try again | social | off task |
| 96 | T: | i think u all haveto close this than open again. this chat | social | off task |
| 97 | JieJ: | done | social | off task |
| 98 | JieJ: | so where r u guys <i>liao</i> | mgmt | focus |
| 99 | T: | others are discussing <i>liao</i> . i think we coomence | mgmt | focus |
| 100 | JieJ: | ok sure | mgmt | response |
| 101 | T: | have you all read the article? | mgmt | consensus |
| 102 | JieJ: | not yet | mgmt | response |
| 103 | MT: | not yet | mgmt | response |
| 104 | CY: | reading | mgmt | response |
| 105 | T: | reading too | mgmt | response |
| 106 | CY: | so wat should we choose | mgmt | focus |
| 107 | JieJ: | let me c.. | mgmt | response |
| 108 | JieJ: | oh we only haf 20 mins | social | off task |
| 109 | CY: | yah which one qs 1 or 2?? | mgmt | focus |
| 110 | T: | or both | mgmt | focus |
| 111 | CY: | we r discussing the writing task rite? or both | mgmt | consensus |
| 112 | JieJ: | tt's rite | mgmt | response |
| 113 | T: | haha. but that'll be hard for the limited time | mgmt | response |
| 114 | JieJ: | writing task | mgmt | response |
| 115 | T: | yeah | mgmt | response |
| 116 | CY: | ok dokie then we juz zoom in one one | mgmt | focus |
| 117 | T: | 1 or 2 or bothe | mgmt | focus |
| 118 | JieJ: | we discuss one qn will b more practical | mgmt | suggest |
| 119 | CY: | on one yup | mgmt | response |

| | | | | |
|-----|-------|---|-----------|---------------|
| 120 | T: | which? 1 or 2 | mgmt | focus |
| 121 | T: | i think 2 | mgmt | response |
| 122 | JieJ: | anyone feels which is beta? | mgmt | consensus |
| 123 | MT: | i dunno | mgmt | response |
| 124 | MT: | both of them seem difficult | mgmt | response |
| 125 | CY: | 1st one will require some history | task | requirement |
| 126 | JieJ: | abt e same for both | mgmt | response |
| 127 | JieJ: | ya u r rite | mgmt | response |
| 128 | CY: | n i din take history :P | mgmt | response |
| 129 | T: | so 2 la | mgmt | suggest |
| 130 | JieJ: | so qn 2 any1 disagre | mgmt | consensus |
| 131 | T: | i'm ok with it. MT? | mgmt | consensus |
| 132 | CY: | me think 2 betta | mgmt | response |
| 133 | MT: | ok q2 agree | mgmt | response |
| 134 | T: | ok lets start!!!! | mgmt | focus |
| 135 | JieJ: | sure man | mgmt | response |
| 136 | JieJ: | we satrt e key pts first | mgmt | suggest |
| 137 | JieJ: | start | mgmt | suggest |
| 138 | T: | we have to identify the "prevailing social and economic climate in sing" | task | requirement |
| 139 | JieJ: | rite | task | requirement |
| 140 | JieJ: | wat r e social one 1st | mgmt | elicitation |
| 141 | CY: | resilent meaning resistant to the bad social climate etc | task | language |
| 142 | T: | is it? | task | language |
| 143 | JieJ: | rit | task | language |
| 144 | JieJ: | rite | task | language |
| 145 | T: | than what is the social climate like in singapore? | mgmt | elicitation |
| 146 | T: | can you guys change the font size to 3? | social | off task |
| 147 | JieJ: | is rape cases counted? | knowledge | clarification |
| 148 | T: | easier to read | social | off task |
| 149 | T: | sorry i mean gals | social | off task |
| 150 | MT: | yes.....what is it? please tell me.....i dunno a lot about sing | knowledge | clarification |
| 151 | T: | bad social climate..... | knowledge | initiation |
| 152 | JieJ: | ok like here there r rape cases,so it is encouraged 4 parents/family members to wait for each other b4 they sleep | knowledge | elaboration |
| 153 | CY: . | more nuclear family... both parents are working... | knowledge | elaboration |
| 154 | CY: . | maid to look after children... | knowledge | elaboration |
| 155 | CY: . | less time spent with children.. | knowledge | elaboration |
| 156 | JieJ: | or like wait at e lift to bring them back sth liddat | knowledge | clarification |
| 157 | JieJ: | i agree | knowledge | agreement |

| | | | | |
|-----|-------|---|-----------|-----------------|
| 158 | CY: | but sing is relatively safe | knowledge | nego (contrast) |
| 159 | T: | i think the one caiyun says can link to economic too | knowledge | response |
| 160 | CY: | low rape cases | knowledge | elaboration |
| 161 | JieJ: | i tink so too,coz they wan to haf beta lives | knowledge | agreement |
| 162 | CY: | ok | knowledge | acknowledgment |
| 163 | T: | both parents are working cause the society demands the money and the labours | knowledge | elaboration |
| 164 | T: | ok so that sort of fix our question based on those things | knowledge | response |
| 165 | JieJ: | i tink 2 days back there is tis article but 11 teenagers molest of rape i forgot by a man | knowledge | example |
| 166 | CY: | one man | knowledge | repetition |
| 167 | JieJ: | yes | knowledge | agreement |
| 168 | JieJ: | 1 man | knowledge | repetition |
| 169 | T: | how can we build our family? | mgmt | elicitation |
| 170 | T: | k 1 man | knowledge | repetition |
| 171 | MT: | sorry gals i can't comment a lot.....but i still follow your discussion..... | knowledge | lack |
| 172 | CY: | wow tat guy should be caned til his butt splits | knowledge | response |
| 173 | CY: | it's ok | knowledge | response |
| 174 | JieJ: | of course | knowledge | agreement |
| 175 | JieJ: | its ok MT | knowledge | response |
| 176 | T: | yeah its ok MT | knowledge | response |
| 177 | CY: | social will be more on their lifestyles?/ | knowledge | elaboration |
| 178 | CY: | mayb like hobbies | knowledge | example |
| 179 | T: | icq, internet parents have no control | knowledge | example |
| 180 | T: | esp when parents do not know how to use the comp | knowledge | elaboration |
| 181 | CY: | mayb like parents n child having diff activities | knowledge | elaboration |
| 182 | CY: | seldom together | knowledge | elaboration |
| 183 | T: | or when parents are working | knowledge | repetition |
| 184 | MT: | yeah,....of course | knowledge | acknowledgment |
| 185 | CY: | yup | knowledge | acknowledgment |
| 186 | JieJ: | if we look at tis way,since many ppl jobless,they dun haf much \$ then some ppl who r depressed go n rape ppl..hehe.. | knowledge | elaboration |
| 187 | T: | so how do we build our family. i think we're losing focus | mgmt | focus |
| 188 | CY: | generation gap in | knowledge | initiation |
| 189 | CY: | fashion .. | knowledge | elaboration |
| 190 | CY: | language ... | knowledge | elaboration |

| | | | | |
|-----|-------|--|-----------|-----------------|
| 191 | CY: | hobbies ... | knowledge | elaboration |
| 192 | T: | family? how to build our family!!!! | mgmt | focus |
| 193 | MT: | by communication | knowledge | initiation |
| 194 | CY: | dun hv \$ go rape ppl???? | knowledge | clarification |
| 195 | MT: | it s the most important | knowledge | repetition |
| 196 | JieJ: | children can bring their parents to places where they hang out | knowledge | initiation |
| 197 | CY: | should go steal mah??? | knowledge | response |
| 198 | JieJ: | they no \$ to call 'chicken'.. | knowledge | response |
| 199 | CY: | but parents mite not like it | knowledge | nego (contrast) |
| 200 | T: | you gals going excited over rapist har? | knowledge | off task |
| 201 | T: | haha | social | off task |
| 202 | CY: | lol :D | social | off task |
| 203 | JieJ: | haha..i tink its so horrible lor | social | off task |
| 204 | CY: | he should be uh hem u noe | social | off task |
| 205 | T: | haha | social | off task |
| 206 | MT: | hahahaha | social | off task |
| 207 | T: | hey hey | social | off task |
| 208 | v | ya i agree | social | off task |
| 209 | CY: | yah??? | social | off task |
| 210 | T: | back to it again? | mgmt | focus |
| 211 | JieJ: | okie lets come back | mgmt | focus |
| 212 | CY: | building come back everyone | mgmt | suggest |
| 213 | MT: | ok | mgmt | response |
| 214 | MT: | by communication between family members? | knowledge | elaboration |
| 215 | T: | yeah tat very impt | knowledge | agreement |
| 216 | T: | than? | mgmt | elicitation |
| 217 | CY: | ok like from young they should build bonds together | knowledge | initiation |
| 218 | CY: | like during wkends when parents r not working... they should go out 2gether...beach.. ktv.... playground n park even | knowledge | elaboration |
| 219 | CY: | maybe go jogging 2gether every week | knowledge | example |
| 220 | T: | yeah | knowledge | agreement |
| 221 | CY: | or play mahjong when the kids r older n chat during mahjong session | knowledge | example |
| 222 | T: | thats a nice idea | knowledge | acknowledgment |
| 223 | CY: | tas wat one of my friends did | knowledge | response |
| 224 | JieJ: | okie | knowledge | acknowledgment |
| 225 | T: | though i don't know how to play | knowledge | response |
| 226 | JieJ: | haha | knowledge | acknowledgment |
| 227 | MT: | okie | knowledge | acknowledgment |

| | | | | |
|-----|-------|--|-----------|----------------|
| 228 | JieJ: | n haf dinner at nite together | knowledge | example |
| 229 | CY: | can learn mah can stimulate ur mind juz play 4 fun dun involve \$ | social | off task |
| 230 | JieJ: | even if they haf bf/gf they can join | social | off task |
| 231 | CY: | yup | social | off task |
| 232 | T: | parents shouldn't really stick to the stiff parenting role like in the past | knowledge | initiation |
| 233 | JieJ: | ya they cshould b open to their children's thinkin | knowledge | elaboration |
| 234 | CY: | more like friend to them | knowledge | elaboration |
| 235 | CY: | so they can tell them their worries n troubles | knowledge | elaboration |
| 236 | MT: | agree gals | knowledge | agreement |
| 237 | JieJ: | at least their children share their tots wif them,parents will at least noe wats gg on | knowledge | elaboration |
| 238 | CY: | we r getting more n more efficiwnt | knowledge | acknowledgment |
| 239 | JieJ: | no pressure involved | knowledge | response |
| 240 | T: | children are also given the chance to make mistakes under the guidance of the parents | knowledge | elaboration |
| 241 | CY: | efficient :P | knowledge | repetition |
| 242 | JieJ: | ;> | knowledge | acknowledgment |
| 243 | T: | so that in the future they know how to choose bf/gf jobs | knowledge | elaboration |
| 244 | JieJ: | at least they make mistakes now then later,they can learn without punishment | knowledge | elaboration |
| 245 | CY: | yah | knowledge | agreement |
| 246 | T: | or learn with punishment so they can remember | knowledge | elaboration |
| 247 | JieJ: | but it woulntd b as painful as when they r independent rite | knowledge | elaboration |
| 248 | CY: | but lighter punishment than wat the society will do | knowledge | clarification |
| 249 | T: | yeah | knowledge | agreement |
| 250 | JieJ: | tt's wat i mean | knowledge | agreement |
| 251 | MT: | agreee ;) | knowledge | agreement |
| 252 | T: | so how many points we have now. | mgmt | focus |
| 253 | JieJ: | hmm.. | mgmt | response |
| 254 | T: | collate: 1. communication 2. bonding since young | knowledge | summation |
| 255 | T: | 3. hands-on? | knowledge | initiation |
| 256 | CY: | ya | knowledge | agreement |
| 257 | T: | how do you refine the 3rd one. the mistake thingy | knowledge | clarification |
| 258 | CY: | proper guidance | knowledge | repetition |
| 259 | MT: | i think so | knowledge | agreement |

| | | | | |
|-----|-------|--|-----------|-----------------|
| 260 | JieJ: | hands on mayb like can request if their children can come to work wif them for a day?so tt they noe how it is like | knowledge | elaboration |
| 261 | T: | or the parents can allow the children to take up leadership role. sort of an attachment | knowledge | elaboration |
| 262 | T: | like what JieJ says | knowledge | reference (int) |
| 263 | JieJ: | rite | knowledge | agreement |
| 264 | CY: | yupz ok | knowledge | agreement |
| 265 | MT: | ok | knowledge | agreement |
| 266 | T: | so we have 3 points | mgmt | focus |
| 267 | JieJ: | i tink japan they haf tis attachment thingyu | knowledge | example |
| 268 | CY: | ya end of discussion rite??? | mgmt | focus |
| 269 | T: | is it? | mgmt | focus |
| 270 | JieJ: | done | mgmt | response |
| 271 | T: | yeah!!!!!! | mgmt | response |
| 272 | T: | now gossip time. haha | social | off task |
| 273 | CY: | we can go??? huh??? need to do compre in class?? | social | off task |
| 274 | JieJ: | gd discussion gals,well done!! | social | off task |
| 275 | MT: | thank u all | social | off task |
| 276 | T: | yeah compre qns. | social | off task |
| 277 | JieJ: | applause.. | social | off task |
| 278 | T: | appluading | social | off task |
| 279 | CY: | really ok | social | off task |
| 280 | CY: | yeah yeah yeah | social | off task |
| 281 | CY: | :> | social | off task |
| 282 | JieJ: | i need to go to e ladies.. | social | off task |
| 283 | T: | me too | social | off task |
| 284 | CY: | heehe | social | off task |
| 285 | CY: | left the 2 of us | social | off task |
| 286 | MT: | yup | social | off task |
| 287 | MT: | heii.....can you mention again the three points? just to make sure | knowledge | clarification |
| 288 | CY: | scroll up the points r all there | knowledge | response |
| 289 | MT: | oo ok | knowledge | response |
| 290 | CY: | heez | mgmt | contact |
| 291 | T: | hello we're back | mgmt | contact |
| 292 | CY: | welcum back | mgmt | contact |
| 293 | JieJ: | halo..prweeties | mgmt | contact |
| 294 | JieJ: | pretties.. | mgmt | contact |
| 295 | T: | are u gals doing your compre now? | social | off task |
| 296 | JieJ: | do we need to discuss? | social | off task |
| 297 | MT: | teacher said, we are not allowed to | social | off task |

| | | | | |
|-----|-------|--|--------|----------|
| | | discuss | | |
| 298 | MT: | hehehehe;) | social | off task |
| 299 | JieJ: | okie | social | off task |
| 300 | CY: | then we chat heez | social | off task |
| 301 | T: | what happened? | social | off task |
| 302 | T: | commotion behind | social | off task |
| 303 | JieJ: | abt e story.. | social | off task |
| 304 | T: | oh, than what happened? | social | off task |
| 305 | JieJ: | juz joking abt it | social | off task |
| 306 | CY: | wat story? | social | off task |
| 307 | CY: | makes us so curious | social | off task |
| 308 | MT: | yes..... | social | off task |
| 309 | T: | are we allowed to spread them around? | social | off task |
| 310 | T: | haha | social | off task |
| 311 | T: | that is so tempting | social | off task |
| 312 | T: | ;> | social | off task |
| 313 | JieJ: | i dunno | social | off task |
| 314 | T: | haha | social | off task |
| 315 | T: | they're going to kill us. CY and MT | social | off task |
| 316 | CY: | :P | social | off task |
| 317 | CY: | nvm loh :< heez | social | off task |
| 318 | T: | later | social | off task |
| 319 | T: | :P in case | social | off task |
| 320 | T: | i think can say. now julin knows too | social | off task |
| 321 | JieJ: | really,she beside Jan izzit | social | off task |
| 322 | T: | yeah | social | off task |
| 323 | T: | ok la. its bout this guy A and gal A | social | off task |
| 324 | T: | one is the mummy and the other is the daddy | social | off task |
| 325 | JieJ: | tt's a gd idea to say liddat | social | off task |
| 326 | T: | than they are about to marry. talking abt red packets liao. from what i know | social | off task |
| 327 | T: | names later than tell you al | social | off task |
| 328 | T: | CY MT are u all still there | social | off task |
| 329 | MT: | yes... | social | off task |
| 330 | T: | wow, really spreding around. news spread very fast | social | off task |
| 331 | T: | CY? | social | off task |
| 332 | JieJ: | spread like wild fire | social | off task |
| 333 | CY: | huh? | social | off task |
| 334 | T: | did you hear the story about galA n guyA? | social | off task |
| 335 | CY: | yah i think i noe who it is | social | off task |
| 336 | CY: | who they r... | social | off task |

| | | | | |
|-----|-------|--|--------|----------|
| 337 | T: | the one behind u | social | off task |
| 338 | T: | get it? | social | off task |
| 339 | CY: | whooh | social | off task |
| 340 | MT: | nooo | social | off task |
| 341 | T: | the one beside you MT | social | off task |
| 342 | T: | sorry MT | social | off task |
| 343 | CY: | n the gal is the blushing gal | social | off task |
| 344 | JieJ: | its all crap,so juz haf a laugh then tt's it k | social | off task |
| 345 | JieJ: | hehe | social | off task |
| 346 | T: | haha | social | off task |
| 347 | T: | she blushing har? | social | off task |
| 348 | JieJ: | caiyun.. | social | off task |
| 349 | T: | jie jing. how come now change to CY liao? | social | off task |
| 350 | JieJ: | no lah,i calling her | social | off task |
| 351 | T: | oh. | social | off task |
| 352 | JieJ: | she so engross wif her work she dunno i callin her | social | off task |
| 353 | T: | she very focussed on her work | social | off task |
| 354 | T: | i cannot access to the website | social | off task |
| 355 | JieJ: | which website? | social | off task |
| 356 | CY: | huh | social | off task |
| 357 | CY: | how cum i m involve?? | social | off task |
| 358 | JieJ: | i callin u | social | off task |
| 359 | CY: | yah??? | social | off task |
| 360 | JieJ: | juz wanna ask u wat u doin | social | off task |
| 361 | CY: | can i help? | social | off task |
| 362 | JieJ: | r u typin? | social | off task |
| 363 | JieJ: | u seem to haf a page full of words | social | off task |
| 364 | CY: | nope reading some websites | social | off task |
| 365 | JieJ: | icic | social | off task |
| 366 | T: | what u doing now? working on compre har? | social | off task |
| 367 | CY: | yup go msn search 4 info mah then send later | social | off task |
| 368 | JieJ: | grace ask u ruoin cut n paste hw | social | off task |
| 369 | JieJ: | doing | social | off task |
| 370 | JieJ: | so hardworkin | social | off task |
| 371 | T: | what is ruoin? | social | off task |
| 372 | JieJ: | doing | social | off task |
| 373 | JieJ: | typo error | social | off task |
| 374 | CY: | yup | social | off task |
| 375 | CY: | no time so mz do noe | social | off task |
| 376 | CY: | me working at expo noe | social | off task |

| | | | | |
|-----|-------|--|--------|----------|
| 377 | CY: | now | social | off task |
| 378 | JieJ: | y? | social | off task |
| 379 | JieJ: | i living near there <i>leh</i> | social | off task |
| 380 | JieJ: | u workin for e food fare ? | social | off task |
| 381 | CY: | yup | social | off task |
| 382 | T: | hows the pay? | social | off task |
| 383 | CY: | 4 a few days oni.... 4 my ex company | social | off task |
| 384 | CY: | \$10/hr | social | off task |
| 385 | JieJ: | gd pay | social | off task |
| 386 | JieJ: | i went joggin then my mum say i cant run to expo coz go lots of cars.. | social | off task |
| 387 | CY: | yah | social | off task |
| 388 | CY: | did u go there | social | off task |
| 389 | CY: | sat n sun was like so many pple | social | off task |
| 390 | JieJ: | my mum when there,i tink she wanted to buy e abalone | social | off task |
| 391 | CY: | stand until my legs going to break | social | off task |
| 392 | JieJ: | poor thing | social | off task |
| 393 | JieJ: | taoday u still gg? | social | off task |
| 394 | CY: | 4 the ske of the money :P | social | off task |
| 395 | CY: | yup last day | social | off task |
| 396 | JieJ: | but its a v gd pay | social | off task |
| 397 | JieJ: | take gd care k | social | off task |
| 398 | T: | yeah take good care | social | off task |
| 399 | JieJ: | i loggin off | social | off task |
| 400 | MT: | ok.. ia m logging off tooo | social | off task |
| 401 | MT: | cya | social | off task |
| 402 | CY: | yah me tooo... | social | off task |

Chat 3

| Turn | Std | Utterances | Category | Subcategory |
|------|--------------|---|----------|-------------|
| 1 | Teck(Joker): | moshi moshi | mgmt | contact |
| 2 | Peng(TatZz): | u are ? | mgmt | contact |
| 3 | Teck(Joker): | hehe | mgmt | contact |
| 4 | Teck(Joker): | hi | mgmt | contact |
| 5 | Peng(TatZz): | hi ! | mgmt | contact |
| 6 | Peng(TatZz): | hi everyone ! | mgmt | contact |
| 7 | Peng(TatZz): | good morning on a MONDAY morning ! | mgmt | contact |
| 8 | Teck(Joker): | hihi :) | mgmt | contact |
| 9 | Peng(TatZz): | Teck(Joker) - u re ? | mgmt | contact |
| 10 | Teck(Joker): | mon blues | mgmt | contact |
| 11 | Teck(Joker): | aiaiaia | mgmt | contact |
| 12 | Teck(Joker): | u r? | mgmt | contact |
| 13 | Peng(TatZz): | peng tat here | mgmt | contact |
| 14 | Teck(Joker): | Me Teck(Joker) | mgmt | contact |
| 15 | Peng(TatZz): | nice to meet u ! | mgmt | contact |
| 16 | Peng(TatZz): | haha... | mgmt | contact |
| 17 | Teck(Joker): | same here too | mgmt | contact |
| 18 | Peng(TatZz): | then who is R | mgmt | contact |
| 19 | Teck(Joker): | don't know | mgmt | contact |
| 20 | Peng(TatZz): | no need read the article <i>la</i> | task | requirement |
| 21 | Teck(Joker): | intro pls | mgmt | elicitation |
| 22 | R: | How do I change the name? | social | off task |
| 23 | R: | I dun want a number name | social | off task |
| 24 | Peng(TatZz): | same here <i>leh</i> | social | off task |
| 25 | Teck(Joker): | go to profile | social | off task |
| 26 | Teck(Joker): | in your ivle | social | off task |
| 27 | Peng(TatZz): | teach us <i>leh</i> , teck(Joker) ... | social | off task |
| 28 | Peng(TatZz): | i think chen xiao cannot wake up again | social | off task |
| 29 | Teck(Joker): | then change the nick <i>lo</i> | social | off task |
| 30 | Teck(Joker): | haha | social | off task |
| 31 | Teck(Joker): | <i>ZZZzzzzz</i> | social | off task |
| 32 | Ting(lim): | Err who is who <i>ah?</i> | mgmt | contact |
| 33 | Peng(TatZz): | Peng(TatZz) | mgmt | contact |
| 34 | Teck(Joker): | come on, every 1 change nick <i>leh</i> | social | off task |
| 35 | Peng(TatZz): | how to ??? | social | off task |
| 36 | Peng(TatZz): | teach me pls | social | off task |
| 37 | Teck(Joker): | go to workspace | social | off task |
| 38 | Ting(lim): | yah <i>lor</i> | social | off task |

| | | | | |
|----|--------------|---|--------|-------------|
| 39 | Teck(Joker): | then go to the top right corner | social | off task |
| 40 | Teck(Joker): | got a profile | social | off task |
| 41 | Teck(Joker): | then inside got option to change your nick | social | off task |
| 42 | Teck(Joker): | ok? | social | off task |
| 43 | R: | why is my nick still the same? | social | off task |
| 44 | Teck(Joker): | try going out then come in again? | social | off task |
| 45 | Teck(Joker): | y got 2 Teck(Joker)? | social | off task |
| 46 | Teck(Joker): | Hey I am back | social | off task |
| 47 | Peng(TatZz): | haha... my nick is changed | social | off task |
| 48 | Ting(lim): | same here | social | off task |
| 49 | Teck(Joker): | y..... | social | off task |
| 50 | Peng(TatZz): | Teck(Joker) x 2 | social | off task |
| 51 | Teck(Joker): | :(| social | off task |
| 52 | Teck(Joker): | :) | social | off task |
| 53 | Peng(TatZz): | :0) | social | off task |
| 54 | Ting(lim): | then how do we differentiate?? | social | off task |
| 55 | Teck(Joker): | i am the real Teck(Joker)... he is an impostor | social | off task |
| 56 | Ting(lim): | And you are? | mgmt | contact |
| 57 | Peng(TatZz): | i am Peng(TatZz_ | mgmt | contact |
| 58 | Teck(Joker): | I am Teck(Joker) | mgmt | contact |
| 59 | Ting(lim): | No i mean real name? | mgmt | contact |
| 60 | Teck(Joker): | is it???? | social | off task |
| 61 | Teck(Joker): | sorry | social | off task |
| 62 | Teck(Joker): | sorry | social | off task |
| 63 | Teck(Joker): | got too falme up | social | off task |
| 64 | Teck(Joker): | flame* | social | off task |
| 65 | Teck(Joker): | flame* | social | off task |
| 66 | Teck(Joker): | Let's start on the project | mgmt | focus |
| 67 | Ting(lim): | i agree | mgmt | consensus |
| 68 | Peng(TatZz): | why got 2 Teck(Joker)s ? | mgmt | contact |
| 69 | Peng(TatZz): | who are u 2 ? | mgmt | contact |
| 70 | Teck(Joker): | One is a Teck(Joker) and the other is his shadow. | mgmt | contact |
| 71 | Ting(lim): | i don't quite get what you mean. | mgmt | response |
| 72 | Teck(Joker): | all muz tpye out is it | task | requirement |
| 73 | Peng(TatZz): | i think so | task | requirement |
| 74 | Teck(Joker): | type* | task | requirement |
| 75 | Teck(Joker): | which topic you guys wanna do? | mgmt | elicitation |

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|-----|--------------|--|-----------|-------------|
| 76 | Teck(Joker): | i haven't read the essay yet | mgmt | response |
| 77 | Teck(Joker): | Let's read it now | mgmt | suggest |
| 78 | Teck(Joker): | i will do qn 2 <i>lo</i> | mgmt | response |
| 79 | Teck(Joker): | ok 10min later come to discuss again | social | off task |
| 80 | Peng(TatZz): | readin stil | social | off task |
| 81 | Ting(lim): | same here | social | off task |
| 82 | Teck(Joker): | kk | social | off task |
| 83 | Peng(TatZz): | is it graded ? | social | off task |
| 84 | Teck(Joker): | don't know | social | off task |
| 85 | Teck(Joker): | u go ask <i>lo</i> | social | off task |
| 86 | Peng(TatZz): | haha... | social | off task |
| 87 | Peng(TatZz): | i think qn2 is beter | mgmt | response |
| 88 | Teck(Joker): | yup | mgmt | consensus |
| 89 | Peng(TatZz): | what abt the pre-writing questions | task | requirement |
| 90 | Peng(TatZz): | we must answer the 2 of them ? | task | requirement |
| 91 | Teck(Joker): | yes | task | requirement |
| 92 | Peng(TatZz): | then chose 1 more of the 2 writing task ? | task | requirement |
| 93 | Teck(Joker): | i think | task | requirement |
| 94 | Teck(Joker): | the draft is typr out the whole essay? | task | requirement |
| 95 | Teck(Joker): | yup | task | requirement |
| 96 | Peng(TatZz): | sian <i>leh</i> , so many things to do already , english still give me more homework | social | off task |
| 97 | Teck(Joker): | <i>ya lo</i> | social | off task |
| 98 | Teck(Joker): | sux | social | off task |
| 99 | Peng(TatZz): | <i>jia lat</i> | social | off task |
| 100 | Peng(TatZz): | lets discuss ? | mgmt | focus |
| 101 | Teck(Joker): | see teh otehr ready or not | social | off task |
| 102 | Teck(Joker): | other* | social | off task |
| 103 | Teck(Joker): | my typing sux | social | off task |
| 104 | Peng(TatZz): | sian leh ideas ... | social | off task |
| 105 | Peng(TatZz): | wat are the important factors to determine strong family bonds | mgmt | elicitation |
| 106 | Peng(TatZz): | i think thats wat the qn mean rite ? | mgmt | consensus |
| 107 | Teck(Joker): | yup | mgmt | response |
| 108 | Peng(TatZz): | in the mist of the economic downturn , both parents are usually workin | knowledge | initiation |
| 109 | Peng(TatZz): | somemore they are workin later hrs | knowledge | elaboration |
| 110 | Peng(TatZz): | they subject ur child to the care of the maid | knowledge | elaboration |
| 111 | Teck(Joker): | we 2 discuss only is it? | mgmt | focus |
| 112 | Peng(TatZz): | i think the impt thing is to spend time with the childern , | knowledge | initiation |
| 113 | Teck(Joker): | that we can include in intro | task | planning |

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|-----|--------------|---|-----------|-------------|
| 114 | Peng(TatZz): | not just time , but quality time ... | knowledge | elaboration |
| 115 | Peng(TatZz): | can one of the Teck(Joker) change the nick ? | social | off task |
| 116 | Peng(TatZz): | then i know who i am toking to ? | social | off task |
| 117 | Teck(Joker): | i sticking to mine coz i'm the original | social | off task |
| 118 | Peng(TatZz): | anyone watch the manU and arsenal game yesterday >? | social | off task |
| 119 | Teck(Joker): | haha | social | off task |
| 120 | Teck(Joker): | nope | social | off task |
| 121 | Teck(Joker): | not me | social | off task |
| 122 | Peng(TatZz): | nearly go into brawl ... | social | off task |
| 123 | Peng(TatZz): | haha... | social | off task |
| 124 | Teck(Joker): | we discuss can <i>laio</i> | social | off task |
| 125 | Teck(Joker): | hehe | social | off task |
| 126 | Roy(Daddy): | yes son... I am your dad | social | off task |
| 127 | Peng(TatZz): | we discuss the soccer game better | social | off task |
| 128 | Peng(TatZz): | haha.. | social | off task |
| 129 | Teck(Joker): | conclusion we going to do qn 2 if noone objects, k? | mgmt | suggest |
| 130 | Ting(lim): | ok | mgmt | consensus |
| 131 | Roy(Daddy): | ok. | mgmt | consensus |
| 132 | Teck(Joker): | let's be lazy do qn2 only | mgmt | suggest |
| 133 | Ting(lim): | so we just do qn 2 <i>lah?</i> | mgmt | consensus |
| 134 | Peng(TatZz): | confirmed | mgmt | consensus |
| 135 | Teck(Joker): | ok | mgmt | consensus |
| 136 | Ting(lim): | alright | mgmt | consensus |
| 137 | Teck(Joker): | chen xiao how? | social | off task |
| 138 | Teck(Joker): | hehe | social | off task |
| 139 | Ting(lim): | Err... can call him and access the IVLE now? | social | off task |
| 140 | Peng(TatZz): | i think he <i>ZzzZZZzz</i> | social | off task |
| 141 | Peng(TatZz): | i call him already | social | off task |
| 142 | Ting(lim): | Hmmm.... | social | off task |
| 143 | Teck(Joker): | let starts with the intro | mgmt | focus |
| 144 | Teck(Joker): | k | mgmt | consensus |
| 145 | Peng(TatZz): | no one pick up <i>leh</i> | social | off task |
| 146 | Teck(Joker): | haha | social | off task |
| 147 | Ting(lim): | ok | social | off task |
| 148 | Roy(Daddy): | where is he? | social | off task |
| 149 | Peng(TatZz): | do intro for wat >? | mgmt | consensus |
| 150 | Teck(Joker): | god knows | mgmt | response |
| 151 | Teck(Joker): | for qn2 | mgmt | response |
| 152 | Ting(lim): | Qn 2 | mgmt | consensus |
| 153 | Teck(Joker): | the background | mgmt | response |

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|-----|--------------|---|-----------|---------------|
| 154 | Peng(TatZz): | we will be doin individual essays | task | requirement |
| 155 | Peng(TatZz): | we need points for the out line ... | task | requirement |
| 156 | Teck(Joker): | the draft is type out the whole essay? | task | requirement |
| 157 | Teck(Joker): | si it? | task | requirement |
| 158 | Peng(TatZz): | i dunno <i>leh</i> | task | requirement |
| 159 | Peng(TatZz): | shld be <i>la</i> | task | requirement |
| 160 | Peng(TatZz): | somethin like tt | task | requirement |
| 161 | Teck(Joker): | kk | task | requirement |
| 162 | Teck(Joker): | but like that i type 1 actual 1 then ok <i>liao what</i> | task | requirement |
| 163 | Ting(lim): | Then we are supposed to type out the draft and the essay is it? | task | requirement |
| 164 | Teck(Joker): | come on guys, 20 min left | mgmt | focus |
| 165 | Peng(TatZz): | lets discuss | mgmt | focus |
| 166 | Teck(Joker): | draft for the next lesson i think | task | requirement |
| 167 | Peng(TatZz): | as i say , time spent with family is vety impt | knowledge | repetition |
| 168 | Teck(Joker): | then essay on next week | task | requirement |
| 169 | Peng(TatZz): | very impt | knowledge | repetition |
| 170 | Peng(TatZz): | parents shld make the effort to spend time with childern | knowledge | repetition |
| 171 | Ting(lim): | Yup quality time | knowledge | repetition |
| 172 | Peng(TatZz): | lets say they are both workin on wk days , | knowledge | elaboration |
| 173 | Roy(Daddy): | Money? | knowledge | clarification |
| 174 | Peng(TatZz): | then they shld spend time with them on wkends | knowledge | elaboration |
| 175 | Peng(TatZz): | make the effort | knowledge | repetition |
| 176 | Teck(Joker): | yup | knowledge | agreement |
| 177 | Peng(TatZz): | another pt is "strong marriage bond" | knowledge | initiation |
| 178 | Teck(Joker): | agree | knowledge | agreement |
| 179 | Ting(lim): | yes | knowledge | agreement |
| 180 | Teck(Joker): | for intro? | task | planning |
| 181 | Peng(TatZz): | if a child grown up in a broken home ... | knowledge | initiation |
| 182 | Teck(Joker): | or main pt? | task | planning |
| 183 | Peng(TatZz): | INTRO agani ???? <i>wat la !</i> | task | planning |
| 184 | Peng(TatZz): | no need intro | task | planning |
| 185 | Teck(Joker): | k | task | planning |
| 186 | Peng(TatZz): | intro , we do for ourselves in the essay ! | task | planning |
| 187 | Teck(Joker): | kk | task | planning |
| 188 | Peng(TatZz): | we have to discuss the pts now 1st ? think so | mgmt | focus |
| 189 | Teck(Joker): | ok | mgmt | consensus |
| 190 | Peng(TatZz): | i think i child fr broken home will be more subjected to crime | knowledge | elaboration |

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|-----|--------------|---|-----------|---------------|
| 191 | Peng(TatZz): | to seek attention and stuffs like ttt | knowledge | elaboration |
| 192 | Peng(TatZz): | it will be very bad for his future | knowledge | elaboration |
| 193 | Peng(TatZz): | bad impression... | knowledge | repetition |
| 194 | Teck(Joker): | k | knowledge | agreement |
| 195 | Ting(lim): | think communication is also impt | knowledge | initiation |
| 196 | Peng(TatZz): | definitely | knowledge | agreement |
| 197 | Ting(lim): | must understand how the child feels | knowledge | elaboration |
| 198 | Peng(TatZz): | i think the asian culture , there is a lack of communication btw the child and the parents | knowledge | initiation |
| 199 | Teck(Joker): | ya | knowledge | agreement |
| 200 | Peng(TatZz): | due to "generation gap" | knowledge | elaboration |
| 201 | Ting(lim): | i think so | knowledge | agreement |
| 202 | Peng(TatZz): | but less prominent in the western culture | knowledge | elaboration |
| 203 | Ting(lim): | that's true | knowledge | agreement |
| 204 | Peng(TatZz): | i think talking about problems , understandin how each family member feels is very impt | knowledge | elaboration |
| 205 | Peng(TatZz): | wat abt family warmth and support.... | knowledge | elaboration |
| 206 | Ting(lim): | i think they are more open in the sense that they are willing to share their ideas that's why | knowledge | elaboration |
| 207 | Peng(TatZz): | i think the role of the family is to provide support to each family member , whenever the need arises | knowledge | elaboration |
| 208 | Ting(lim): | you mean care and concern instead of material love/ | knowledge | clarification |
| 209 | Teck(Joker): | nothing to contribute, me | mgmt | response |
| 210 | R: | me too... | mgmt | response |
| 211 | Peng(TatZz): | i think so | knowledge | agreement |
| 212 | Peng(TatZz): | ideas pls ... | mgmt | elicitation |
| 213 | Teck(Joker): | how to bulid stong bonds? | mgmt | elicitation |
| 214 | Teck(Joker): | participate in activities | knowledge | initiation |
| 215 | Teck(Joker): | like marathon? | knowledge | example |
| 216 | Teck(Joker): | bbq? | knowledge | example |
| 217 | Peng(TatZz): | family outings and activities | knowledge | elaboration |
| 218 | Peng(TatZz): | doing things together | knowledge | elaboration |
| 219 | Peng(TatZz): | gather than say , somethings are meant for older pple | knowledge | elaboration |
| 220 | Peng(TatZz): | or somethings are meant for the younger pple | knowledge | elaboration |
| 221 | Teck(Joker): | treat each other like friends? | knowledge | elaboration |
| 222 | R: | yup, and having dinner together as a family is very impt too | knowledge | elaboration |
| 223 | Peng(TatZz): | there must be a willingless to try out the activities | knowledge | elaboration |

| | | | | |
|-----|--------------|---|-----------|-------------------|
| 224 | Teck(Joker): | find common activites | knowledge | elaboration |
| 225 | Teck(Joker): | like bowling? | knowledge | example |
| 226 | Peng(TatZz): | maybe... | knowledge | response |
| 227 | Teck(Joker): | pinic? | knowledge | example |
| 228 | Peng(TatZz): | i mean healthy activities ... | knowledge | elaboration |
| 229 | Ting(lim): | i think the parents have to join in some of the activities that the young likes | knowledge | elaboration |
| 230 | Teck(Joker): | movies | knowledge | example |
| 231 | Peng(TatZz): | not like askin my dad to go clubbnig ... | knowledge | example |
| 232 | Peng(TatZz): | yes yes, | knowledge | consensus |
| 233 | Teck(Joker): | hehe | knowledge | response |
| 234 | Peng(TatZz): | only when they join in , they will understand how we feel | knowledge | elaboration |
| 235 | Ting(lim): | no really but i am referring to some sports | knowledge | elaboration |
| 236 | Peng(TatZz): | and y we like to do the activiteis ... i think so ... | knowledge | repetition |
| 237 | Peng(TatZz): | sport is gd | knowledge | agreement |
| 238 | Peng(TatZz): | another pt is respect for each other | knowledge | initiation |
| 239 | Teck(Joker): | more interactive | knowledge | initiation |
| 240 | R: | they should learn to open up more too... in terms of emotions | knowledge | initiation |
| 241 | Peng(TatZz): | the child must respect the parents ... | knowledge | elaboration |
| 242 | Teck(Joker): | freedom? | knowledge | initiation |
| 243 | Peng(TatZz): | and the parent must gain the respect of the child | knowledge | elaboration |
| 244 | Peng(TatZz): | by being a gd role model | knowledge | elaboration |
| 245 | R: | what is a good role model? | knowledge | clarification |
| 246 | Peng(TatZz): | not indulging in bad activities ? | knowledge | example |
| 247 | Teck(Joker): | abide teh moral values? | knowledge | example |
| 248 | Peng(TatZz): | ya y a | knowledge | agreement |
| 249 | Teck(Joker): | 3 shu 4 jie? | knowledge | example |
| 250 | Ting(lim): | think they must learn to respect each other | knowledge | repetition |
| 251 | Ting(lim): | and sometimes willing to accept their mistakes when they are in the wrong | knowledge | elaboration |
| 252 | Peng(TatZz): | usually when a child grows up | social | interrupted start |
| 253 | R: | few parents do that in front of their child though.... dignity haha | knowledge | elaboration |
| 254 | Teck(Joker): | muz explain tehir actions too | knowledge | elaboration |
| 255 | Peng(TatZz): | he looks for role models ... | knowledge | elaboration |
| 256 | Peng(TatZz): | tts when the parents come in ... | knowledge | elaboration |
| 257 | R: | how many child these days treat their parents as role models? | knowledge | clarification |

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|-----|--------------|---|-----------|-----------------|
| 258 | Ting(lim): | that's how the child can learn the correct moral valus | knowledge | repetition |
| 259 | Teck(Joker): | none | knowledge | response |
| 260 | Peng(TatZz): | and be the "hero" the child wish for ! | knowledge | elaboration |
| 261 | Ting(lim): | values i mean | knowledge | repetition |
| 262 | Teck(Joker): | 0.00000001%? | knowledge | response |
| 263 | Peng(TatZz): | hmm.... | knowledge | acknowledgment |
| 264 | R: | my sis treat F4 ... 5566 as role models | knowledge | example |
| 265 | Ting(lim): | wat? | knowledge | clarification |
| 266 | Teck(Joker): | haha | knowledge | response |
| 267 | Peng(TatZz): | rather than hav the child to look externally for role models | knowledge | elaboration |
| 268 | Teck(Joker): | try to be 1 urself? | knowledge | clarification |
| 269 | Peng(TatZz): | they shld hav the role at home.../ | knowledge | elaboration |
| 270 | Ting(lim): | you mean distinct roles | knowledge | clarification |
| 271 | Peng(TatZz): | be someone the child can be proud of | knowledge | elaboration |
| 272 | R: | yes... but how do you control the child's thinking? | knowledge | clarification |
| 273 | Peng(TatZz): | we cannot control | knowledge | response |
| 274 | Peng(TatZz): | but we can influence | knowledge | elaboration |
| 275 | R: | they may be proud of you but they aspire to be someone else | knowledge | nego (contrast) |
| 276 | Ting(lim): | i think we can't control but rather teach them to think correctly | knowledge | elaboration |
| 277 | R: | would a 15 year old girl treat her mum as her role model and aspire to be a good housewife? | knowledge | elaboration |
| 278 | Teck(Joker): | appropriate control | knowledge | agreement |
| 279 | R: | i dun think so | knowledge | response |
| 280 | Teck(Joker): | of them | knowledge | elaboration |
| 281 | Teck(Joker): | not too tight? | knowledge | elaboration |
| 282 | R: | sometimes children can be rather rebellious | knowledge | nego (contrast) |
| 283 | Teck(Joker): | mental block | knowledge | elaboration |
| 284 | Peng(TatZz): | not too tight | knowledge | agreement |
| 285 | Teck(Joker): | for that age period | knowledge | elaboration |
| 286 | R: | dun forget ... they dun stay at home everyday... they meet friends outside. | knowledge | nego (contrast) |
| 287 | Teck(Joker): | i agree | knowledge | agreement |
| 288 | Peng(TatZz): | patience is the key | knowledge | initiation |
| 289 | Teck(Joker): | ? | knowledge | clarification |
| 290 | Teck(Joker): | y? | knowledge | clarification |
| 291 | Teck(Joker): | care to explain? | knowledge | clarification |
| 292 | R: | We have to contrl the friends they mix with as well... | knowledge | elaboration |
| 293 | Teck(Joker): | liek this i hate my parents | knowledge | disagreement |

| | | | | |
|-----|--------------|--|-----------|-------------------|
| 294 | Teck(Joker): | like* | social | interrupted start |
| 295 | Peng(TatZz): | the child is like a spirit , u cannot go after it , but if u wait patiently , they will come back to u , when they are tired | knowledge | elaboration |
| 296 | Ting(lim): | Hmmm. How to control? | knowledge | clarification |
| 297 | Peng(TatZz): | if i rem it correctly | social | interrupted start |
| 298 | Teck(Joker): | principle of a harboue? | knowledge | clarification |
| 299 | Peng(TatZz): | dun control | knowledge | response |
| 300 | Teck(Joker): | harbour* | knowledge | repetition |
| 301 | R: | dun control? | knowledge | clarification |
| 302 | R: | what if they mix with ah bings and ruin their future? | knowledge | nego (argue) |
| 303 | Ting(lim): | care to elaborate more on it? | knowledge | clarification |
| 304 | R: | take drugs and stuff? | knowledge | example |
| 305 | Teck(Joker): | actually this is evry hard to control | knowledge | search |
| 306 | Teck(Joker): | parnets don't folow their kids to school | knowledge | elaboration |
| 307 | R: | not say control...make the extra effort to know at least their friends and who they mix with | knowledge | elaboration |
| 308 | R: | at least you care | knowledge | repetition |
| 309 | Teck(Joker): | so they don't know what they get into if teh kid don't want to tell until the things happen | knowledge | nego (contrast) |
| 310 | R: | explain to them | knowledge | elaboration |
| 311 | Peng(TatZz): | so we must be patient ... | knowledge | repetition |
| 312 | Teck(Joker): | if yuor parents ask u something abt your friends, i think u think they nagging | knowledge | nego (counter) |
| 313 | Peng(TatZz): | the "iron hand" method will not work | knowledge | agreement |
| 314 | R: | dun wait for things to happen before you take any actions | knowledge | elaboration |
| 315 | Peng(TatZz): | therefore , from the start , the parent must com with the child | knowledge | repetition |
| 316 | Teck(Joker): | from baby | knowledge | elaboration |
| 317 | R: | from a sperm and egg | knowledge | elaboration |
| 318 | Ting(lim): | Maybe ask in a more casual way. over dinner? | knowledge | example |
| 319 | Teck(Joker): | u muz listen to me | knowledge | example |
| 320 | Teck(Joker): | hynotism...haha | knowledge | example |
| 321 | R: | haha.... ok | knowledge | response |
| 322 | Peng(TatZz): | hahaha | knowledge | response |
| 323 | Teck(Joker): | muz br filial to me | knowledge | example |
| 324 | Ting(lim): | ha | knowledge | response |
| 325 | Teck(Joker): | so case close ... later then see how lo | mgmt | focus |
| 326 | Teck(Joker): | bye | mgmt | contact |

Chat 4

| Turn | Std | Utterances | Category | Subcategory |
|------|-------|--|----------|-------------|
| 1 | G: | HEY!!!!!!!!!!!! where's everybody??? | mgmt | contact |
| 2 | Jan: | yo babies!!!! | mgmt | contact |
| 3 | G: | Jan!!!!!!!!!!!!11 | mgmt | contact |
| 4 | Jan: | hahaha... yesh? wat can i do for u? | mgmt | contact |
| 5 | G: | read the article i gues | mgmt | suggest |
| 6 | Jan: | wat a nice colour i've got... | social | off task |
| 7 | G: | mine's better | social | off task |
| 8 | G: | big n clear | social | off task |
| 9 | Jan: | ha... i cant download e article leh,... my workbin got problem | social | off task |
| 10 | G: | hello! take the article from the teacher | social | off task |
| 11 | Jan: | wah piang... kk.. got it... letme read first | social | off task |
| 12 | G: | u r copy cat | social | off task |
| 13 | Jan: | haha... nono.. mine's bigger | social | off task |
| 14 | G: | u want to die | social | off task |
| 15 | G: | the teacher can see what u type | social | off task |
| 16 | Char: | hihi | social | off task |
| 17 | Char: | pai say | social | off task |
| 18 | G: | charmant is so slow | social | off task |
| 19 | Char: | wau kau | social | off task |
| 20 | Char: | tt's big!! | social | off task |
| 21 | Jan: | ya lor.. so slow | social | off task |
| 22 | Jan: | want to slack isit? | social | off task |
| 23 | Char: | no lar | social | off task |
| 24 | Char: | the pc slow man | social | off task |
| 25 | G: | excuses | social | off task |
| 26 | Char: | wad are we suppose todo ? | task | requirement |
| 27 | G: | wonder what u doing at the back of the lab | social | off task |
| 28 | Char: | whu is whu huh? | social | off task |
| 29 | Jan: | y late... u owe us a drink.... | social | off task |
| 30 | G: | READ THE ARTICLE | mgmt | suggest |
| 31 | Char: | ic | mgmt | response |
| 32 | G: | drink not enough | social | off task |
| 33 | G: | LUNCH!!!!!!!!!!!!!!!!!!!! | social | off task |
| 34 | Jan: | hav ya got e article fr teacher? | social | off task |
| 35 | Char: | wau i give up!!!! | social | off task |

| | | | | |
|----|-------|---|--------|-------------|
| 36 | Char: | yup | social | off task |
| 37 | Char: | whu is whu? | social | off task |
| 38 | G: | janice | social | off task |
| 39 | Char: | ic | social | off task |
| 40 | G: | not everyone as dumb as u | social | off task |
| 41 | Jan: | grace | social | off task |
| 42 | Jan: | wats ur prob? | social | off task |
| 43 | Char: | now my turn!!! | social | off task |
| 44 | Jan: | cant u be nicer to her? | social | off task |
| 45 | Char: | big enuf? | social | off task |
| 46 | G: | nope! | social | off task |
| 47 | G: | haha | social | off task |
| 48 | G: | copy my colour | social | off task |
| 49 | Char: | fine! | social | off task |
| 50 | G: | your colour sux | social | off task |
| 51 | G: | like energyless | social | off task |
| 52 | Jan: | same thots here | social | off task |
| 53 | G: | yeah! | social | off task |
| 54 | Char: | wau | social | off task |
| 55 | Char: | bad day man | social | off task |
| 56 | G: | u really full of excuses | social | off task |
| 57 | Char: | hey | social | off task |
| 58 | Char: | k i giv up | social | off task |
| 59 | Jan: | y so no determination? | social | off task |
| 60 | G: | exactly | social | off task |
| 61 | Jan: | giv up so easily? | social | off task |
| 62 | G: | young pple nowadays... sigh | social | off task |
| 63 | Jan: | how to make it big like dat? | social | off task |
| 64 | G: | exactly.... | social | off task |
| 65 | Jan: | ehh,,, y so quiet? | social | off task |
| 66 | Char: | hold on | social | off task |
| 67 | Jan: | something puzzled... r we suppose to discuss n do individual work/? | task | requirement |
| 68 | G: | yes | task | requirement |
| 69 | Char: | yup | task | requirement |
| 70 | Char: | i'm reading | task | requirement |
| 71 | G: | read finish already??? | social | off task |
| 72 | Jan: | last page | social | off task |
| 73 | Char: | yup | social | off task |
| 74 | G: | k | social | off task |
| 75 | Char: | done | social | off task |
| 76 | G: | so which writing task do u all want ot discuss? | mgmt | focus |

| | | | | |
|-----|-------|--|--------|-------------|
| 77 | Char: | so wad are we suppose to discuss | mgmt | focus |
| 78 | Jan: | pointers | mgmt | response |
| 79 | G: | i think like brainstorm for the writing task | mgmt | focus |
| 80 | Char: | okiez | mgmt | response |
| 81 | Char: | clarify wz her | mgmt | suggest |
| 82 | G: | she is saying now... | mgmt | response |
| 83 | Char: | wau monday blues man | social | off task |
| 84 | Char: | cant concentrate | social | off task |
| 85 | G: | haha.... | social | off task |
| 86 | G: | i feel slack | social | off task |
| 87 | Char: | yup | social | off task |
| 88 | G: | since we can bring it home n do | social | off task |
| 89 | Char: | me too | social | off task |
| 90 | Jan: | sama sama | social | off task |
| 91 | Char: | so we are suppose to discuss writing task 1 or | mgmt | focus |
| 92 | Jan: | din u hear in class? | social | off task |
| 93 | G: | let's decide 1 or 2 now | mgmt | focus |
| 94 | Char: | yup i noe | mgmt | consensus |
| 95 | G: | we do one enough | mgmt | suggest |
| 96 | Jan: | kk | mgmt | consensus |
| 97 | Char: | tt's y i ask to discuss or 2? | mgmt | focus |
| 98 | G: | fine... | mgmt | response |
| 99 | Char: | 1 or 2 i mean | mgmt | consensus |
| 100 | G: | hmm... | mgmt | response |
| 101 | G: | take a vote? | mgmt | suggest |
| 102 | Char: | yup think 1 is easier | mgmt | response |
| 103 | G: | ok 1 then | mgmt | consensus |
| 104 | Char: | any objections? calling once...calling twice | mgmt | consensus |
| 105 | Jan: | k | mgmt | consensus |
| 106 | G: | what are the factors that have shaped family relationships in singapore? | mgmt | elicitation |
| 107 | Char: | deal, let's discuss 1 | mgmt | focus |
| 108 | Char: | hey think change font lar, if not so big... | social | off task |
| 109 | G: | good what | social | off task |
| 110 | Char: | okiez | social | off task |
| 111 | G: | big n clear | social | off task |
| 112 | G: | haha | social | off task |
| 113 | Char: | let's start our discussion | mgmt | focus |
| 114 | G: | yup! | mgmt | consensus |
| 115 | Jan: | ya... G cannot read well | social | off task |
| 116 | Char: | hahahha | social | off task |

| | | | | |
|-----|-------|---|-----------|----------------|
| 117 | G: | no... it's cannot see well | social | off task |
| 118 | G: | haha | social | off task |
| 119 | Char: | haha | social | off task |
| 120 | Jan: | eyesight prob | social | off task |
| 121 | Char: | oic | social | off task |
| 122 | Char: | pai say | social | off task |
| 123 | G: | better than u janice | social | off task |
| 124 | Jan: | old liao | social | off task |
| 125 | G: | brain prob | social | off task |
| 126 | Char: | big enuf? | social | off task |
| 127 | G: | erm.. NO! | social | off task |
| 128 | G: | haha | social | off task |
| 129 | Jan: | hmm.. how u know i got brain prob? | social | off task |
| 130 | Char: | so discuss? | mgmt | focus |
| 131 | Char: | so stupid lor to dicuss here | social | off task |
| 132 | Jan: | okok.. grace! dun side track | social | off task |
| 133 | Char: | meaninglss | social | off task |
| 134 | Char: | yaya | social | off task |
| 135 | Char: | get back | mgmt | focus |
| 136 | Char: | let's starts | mgmt | focus |
| 137 | Char: | 10.45 already | social | off task |
| 138 | G: | alright.. i think one of the factors is the whether the parents work or not | knowledge | initiation |
| 139 | Jan: | ok..interaction time wif e children matters | knowledge | elaboration |
| 140 | Char: | hmmm | knowledge | acknowledgment |
| 141 | G: | yar... | knowledge | acknowledgment |
| 142 | Char: | ya | knowledge | acknowledgment |
| 143 | G: | some children nowadays bond better with maids lor | knowledge | initiation |
| 144 | Jan: | so r u one of dem/? | knowledge | clarification |
| 145 | G: | erm.. no | knowledge | response |
| 146 | Char: | hahaa i bond with myself | knowledge | response |
| 147 | Char: | alrite, wad shud i sae | mgmt | elicitation |
| 148 | Jan: | haha... self lover | knowledge | response |
| 149 | G: | ionic bond some more | knowledge | response |
| 150 | Char: | haha madness | knowledge | response |
| 151 | Jan: | wahh... so chem huh | knowledge | response |
| 152 | G: | yes! | knowledge | response |
| 153 | G: | ok.. next factor now | mgmt | focus |
| 154 | Char: | wad abt parents divorce? | knowledge | initiation |
| 155 | G: | i think that also affects] | knowledge | agreement |
| 156 | Char: | it determines alot | knowledge | agreement |
| 157 | G: | single sided family | knowledge | elaboration |

| | | | | |
|-----|-------|--|-----------|----------------|
| 158 | Char: | yup | knowledge | acknowledgment |
| 159 | Jan: | yup... gd pt | knowledge | agreement |
| 160 | Char: | wad else hmmm | mgmt | elicitation |
| 161 | G: | characters of parents | knowledge | initiation |
| 162 | Char: | yup | knowledge | acknowledgment |
| 163 | G: | bad habits of parents? | knowledge | elaboration |
| 164 | G: | like alcoholic | knowledge | example |
| 165 | Char: | tt's under character and behaviour rite? | knowledge | clarification |
| 166 | G: | i think so... | knowledge | agreement |
| 167 | Char: | ya | knowledge | agreement |
| 168 | G: | bad role models apparantly | knowledge | elaboration |
| 169 | G: | where's Jan???? | mgmt | consensus |
| 170 | Char: | you noe roy's nick is DADDY!!!!!! | social | off task |
| 171 | G: | MY GOD!!!!!!!!!!!!!!!!!!!! | social | off task |
| 172 | Char: | madness | social | off task |
| 173 | G: | siao.. he wants to get married after reading the article izit? | social | off task |
| 174 | Char: | tot he will put mr popularity!~!!! | social | off task |
| 175 | G: | no.. i mean give birth | social | off task |
| 176 | Jan: | ha | social | off task |
| 177 | G: | i thought he will put mr macho | social | off task |
| 178 | Char: | whahaha | social | off task |
| 179 | Char: | he's sitting at ur role lor | social | off task |
| 180 | Char: | haha | social | off task |
| 181 | Jan: | so is he lookin for e mummy now? | social | off task |
| 182 | Char: | haha | social | off task |
| 183 | Char: | okiez.. get back | mgmt | focus |
| 184 | Char: | hmmm | social | off task |
| 185 | Char: | there? | social | off task |
| 186 | G: | char: u can offer yourself | social | off task |
| 187 | G: | haha | social | off task |
| 188 | Char: | gosh | social | off task |
| 189 | Char: | no tks | social | off task |
| 190 | Jan: | crazy... | social | off task |
| 191 | Char: | not my type | social | off task |
| 192 | Char: | hahaha | social | off task |
| 193 | G: | haha | social | off task |
| 194 | Jan: | who wants him/ | social | off task |
| 195 | Char: | i dun like MARCHO guys | social | off task |
| 196 | Char: | haha | social | off task |
| 197 | G: | i see that char has even considered... | social | off task |
| 198 | Char: | oh gosh | social | off task |
| 199 | Char: | pls | social | off task |

| | | | | |
|-----|-------|--|--------|-------------|
| 200 | Jan: | wow | social | off task |
| 201 | Char: | not ks | social | off task |
| 202 | Char: | no tks | social | off task |
| 203 | G: | haha... | social | off task |
| 204 | Char: | k get back! | mgmt | focus |
| 205 | Char: | wad else? | mgmt | elicitation |
| 206 | G: | yes! | mgmt | response |
| 207 | Jan: | type also type wrongly | social | off task |
| 208 | Jan: | nervous huh | social | off task |
| 209 | Jan: | we guess ur thots isit? | social | off task |
| 210 | Char: | you refering to whu? | social | off task |
| 211 | G: | hi! | social | off task |
| 212 | Jan: | mommy char? | social | off task |
| 213 | Char: | when did i type wrongly? | social | off task |
| 214 | Char: | gosh | social | off task |
| 215 | G: | mummy char sounds good | social | off task |
| 216 | Char: | stop that | social | off task |
| 217 | G: | haha... | social | off task |
| 218 | G: | u r getting excited ar... char | social | off task |
| 219 | G: | i can hear u know | social | off task |
| 220 | Char: | stop that babes!!!! | social | off task |
| 221 | Jan: | ya ya | social | off task |
| 222 | Char: | let's get down | mgmt | focus |
| 223 | G: | to where? | mgmt | focus |
| 224 | Char: | to work!!!! | mgmt | focus |
| 225 | G: | oh..... k | mgmt | consensus |
| 226 | Jan: | y so <i>gan chiong</i> ? | social | off task |
| 227 | G: | exactly | social | off task |
| 228 | Char: | no <i>lar</i> | social | off task |
| 229 | G: | later we cannot control our mouths then u die! | social | off task |
| 230 | Char: | i was chattin wz Peng(TatZz) | social | off task |
| 231 | G: | dont fake fake <i>ar</i> | social | off task |
| 232 | Char: | tt's y was luffing | social | off task |
| 233 | Char: | seriously | social | off task |
| 234 | Jan: | wow... two timing huh | social | off task |
| 235 | Char: | <i>wau kau</i> | social | off task |
| 236 | G: | chatting about R i think | social | off task |
| 237 | Char: | so off track get back pls !!!! | mgmt | focus |
| 238 | Char: | left 5mins | mgmt | response |
| 239 | G: | char u die <i>liao</i> | social | off task |
| 240 | G: | everyone around me knows abt ur scandal | social | off task |

| | | | | |
|-----|-------|--|-----------|---------------|
| 241 | Char: | well wadever | social | off task |
| 242 | Char: | gosh | social | off task |
| 243 | G: | cos our fonts too big!!!!!!!!!!!!!!!!!!!! | social | off task |
| 244 | Jan: | haha.. still so cool... | social | off task |
| 245 | G: | haha | social | off task |
| 246 | Char: | hahahha | social | off task |
| 247 | Char: | precisely | social | off task |
| 248 | G: | hey char | social | off task |
| 249 | G: | change ur nick to mummy | social | off task |
| 250 | G: | then can meet with ur daddy | social | off task |
| 251 | Char: | no way | social | off task |
| 252 | G: | haha | social | off task |
| 253 | Jan: | gd idea | social | off task |
| 254 | Char: | hey seriously, we shud get back now | mgmt | focus |
| 255 | G: | we r very serious too! | social | off task |
| 256 | G: | =) | social | off task |
| 257 | Char: | peng tat n grp chatted so many things on tt subject | social | off task |
| 258 | Jan: | k lar... any more pters? | mgmt | elicitation |
| 259 | Char: | and we are like pts | social | off task |
| 260 | Char: | hmmm | social | off task |
| 261 | G: | the guys all very kiasu wan wad | social | off task |
| 262 | Char: | thinking | social | off task |
| 263 | Jan: | communication | knowledge | initiation |
| 264 | G: | i think the extent of the family has a part too | knowledge | initiation |
| 265 | Char: | yup | knowledge | agreement |
| 266 | Char: | anfd the quality time spend... | knowledge | elaboration |
| 267 | Jan: | if cannot commu... den diff to know e thots | knowledge | elaboration |
| 268 | G: | TRUE | knowledge | agreement |
| 269 | Jan: | den geration gap caqn llead to many probs | knowledge | elaboration |
| 270 | G: | i think that those family with more generations are closer too | knowledge | elaboration |
| 271 | G: | erm.. that's true | knowledge | agreement |
| 272 | Char: | ya | knowledge | agreement |
| 273 | Jan: | not really... bif family many conflicts | knowledge | disagreement |
| 274 | G: | so HOW? | knowledge | clarification |
| 275 | Char: | bif? | knowledge | clarification |
| 276 | G: | big | knowledge | response |
| 277 | Char: | wad's tt word? | knowledge | clarification |
| 278 | G: | u v slow | social | off task |
| 279 | Char: | oh ic | social | off task |

| | | | | |
|-----|-------|--|-----------|---------------|
| 280 | G: | i am hungry... | social | off task |
| 281 | Char: | hey refer back to the qns, the factors tt shape family can be bad and gd pts rite? | mgmt | focus |
| 282 | Jan: | ask dad roy to buy u food den | social | off task |
| 283 | G: | i am not mum u know | social | off task |
| 284 | Char: | oh ya man Jan | social | off task |
| 285 | G: | haha | social | off task |
| 286 | G: | only charmant has the power | social | off task |
| 287 | Char: | gosh | social | off task |
| 288 | Char: | pls | social | off task |
| 289 | Char: | he's not my cup of tea | social | off task |
| 290 | Char: | ! | social | off task |
| 291 | G: | haha... | social | off task |
| 292 | G: | u r getting excited <i>huh</i> | social | off task |
| 293 | Jan: | but ur cup of coffee rite? | social | off task |
| 294 | G: | HAHA | social | off task |
| 295 | Char: | no <i>lar</i> | social | off task |
| 296 | G: | good one Jan! | social | off task |
| 297 | Char: | hey you guys haven ans my qns | social | off task |
| 298 | Jan: | thank u | social | off task |
| 299 | G: | imagine we copy all these into the guy's chat... | social | off task |
| 300 | G: | haha | social | off task |
| 301 | Jan: | wat qn? | mgmt | focus |
| 302 | Jan: | whetjer u n him compatible? | social | off task |
| 303 | G: | gd/bad pts? | social | off task |
| 304 | G: | haha | social | off task |
| 305 | Char: | gosh | social | off task |
| 306 | G: | janice.. u r realli fantastic | social | off task |
| 307 | Char: | pls | social | off task |
| 308 | Char: | hey refer back to the qns, the factors tt shape family can be bad and gd pts rite? | mgmt | focus |
| 309 | Char: | not tt R!! !!!!!!!!!!!! | social | off task |
| 310 | Jan: | yeah | social | off task |
| 311 | G: | but i think we just need to talk abt factors specifically | task | requirement |
| 312 | Jan: | both can b considered | task | requirement |
| 313 | Char: | so the relationship can be bad and gd ones rite? | knowledge | clarification |
| 314 | Jan: | yup | knowledge | agreement |
| 315 | G: | yupz | knowledge | agreement |
| 316 | Char: | like comparing broken families? | knowledge | clarification |
| 317 | Char: | can? | knowledge | clarification |

| | | | | |
|-----|-------|---|-----------|----------------|
| 318 | Jan: | its e factors we r focusin on | knowledge | disagreement |
| 319 | G: | can,,... but think it is not the empahsis | knowledge | nego (argue) |
| 320 | Char: | ic | knowledge | acknowledgment |
| 321 | Char: | so wad else? | mgmt | elicitation |
| 322 | Jan: | so u can compare e diff inpact of complete family n brokrn one | knowledge | elaboration |
| 323 | G: | hmm.... | knowledge | acknowledgment |
| 324 | Char: | ya think can...for certain pts loer | knowledge | agreement |
| 325 | Jan: | having a set of rules in e family help | knowledge | initiation |
| 326 | Char: | yup family rules | knowledge | agreement |
| 327 | Jan: | but muz be flxible too | knowledge | elaboration |
| 328 | Char: | ya man | knowledge | agreement |
| 329 | G: | yes! | knowledge | agreement |
| 330 | Char: | and mutual respect | knowledge | elaboration |
| 331 | G: | understanding | knowledge | elaboration |
| 332 | G: | etc.. all the family values | knowledge | elaboration |
| 333 | Char: | yup | knowledge | agreement |
| 334 | Char: | ya | knowledge | agreement |
| 335 | G: | <i>sian</i> | social | off task |
| 336 | G: | chat time up | social | off task |
| 337 | Jan: | yeah,,, mom char... quickly set ur rules wif dad R | social | off task |
| 338 | G: | haha | social | off task |
| 339 | G: | yes! | social | off task |
| 340 | Char: | madness | social | off task |
| 341 | Char: | me very hungry man | social | off task |
| 342 | G: | ask dad R to get some food for u | social | off task |
| 343 | G: | so i can benefit too | social | off task |
| 344 | Char: | hey the draft rite, we type and email her or? | task | requirement |
| 345 | G: | if u cannot finish by oday | task | requirement |
| 346 | G: | today | task | requirement |
| 347 | Char: | so pai say | social | off task |
| 348 | Jan: | type n email | task | requirement |
| 349 | G: | charmant.. | social | off task |
| 350 | G: | take ur husband into control | social | off task |
| 351 | G: | he just ask if we write on paper | social | off task |
| 352 | G: | like duh! | social | off task |
| 353 | Char: | gosh | social | off task |
| 354 | Char: | pls | social | off task |
| 355 | Jan: | dun blame him | social | off task |
| 356 | Jan: | his mind all abt char | social | off task |
| 357 | G: | tat;s true | social | off task |
| 358 | G: | madly in love | social | off task |

| | | | | |
|-----|-------|---|--------|----------|
| 359 | Jan: | so din hear wat teacher say | social | off task |
| 360 | G: | brb | social | off task |
| 361 | G: | toilet break\ | social | off task |
| 362 | Char: | gosh | social | off task |
| 363 | Char: | dun spoilt my reputation man | social | off task |
| 364 | G: | u dun have one to start with | social | off task |
| 365 | Char: | haha.... | social | off task |
| 366 | Char: | tt's bad | social | off task |
| 367 | G: | yes!!!!!!!!!!!!11111 | social | off task |
| 368 | Char: | R | social | off task |
| 369 | Char: | enuf | social | off task |
| 370 | Char: | i wasnt the one who type | social | off task |
| 371 | G: | hug from dad R? | social | off task |
| 372 | Char: | enuf!!!! | social | off task |
| 373 | Char: | so cold down here | social | off task |
| 374 | G: | u very popular | social | off task |
| 375 | G: | u r on all the chats now | social | off task |
| 376 | Char: | gosh | social | off task |
| 377 | Char: | pls | social | off task |
| 378 | G: | u wanna read? | social | off task |
| 379 | Char: | serious <i>lor</i> | social | off task |
| 380 | G: | i am serious | social | off task |
| 381 | Char: | it' will be so damn <i>pai say lor</i> | social | off task |
| 382 | G: | everyone paying me 100 bucks each to kow ur story | social | off task |
| 383 | G: | they say they are tempted n curious | social | off task |
| 384 | G: | oh no! | social | off task |
| 385 | G: | they are asking if they can spread it around | social | off task |
| 386 | Char: | might as well use the projector screen tolet everyone read! | social | off task |
| 387 | Char: | no way man | social | off task |
| 388 | G: | ok | social | off task |
| 389 | G: | i will do it | social | off task |
| 390 | Char: | pls | social | off task |
| 391 | Jan: | sigh | social | off task |
| 392 | Jan: | juz admit it <i>lar</i> | social | off task |
| 393 | Char: | goddness sake, he's not yandao, he not marcho.... | social | off task |
| 394 | Char: | okiez | social | off task |
| 395 | G: | but he is just yours? | social | off task |
| 396 | Char: | let's get down to do compre | social | off task |
| 397 | G: | whaha.. escapism | social | off task |
| 398 | Jan: | haha | social | off task |

| | | | | |
|-----|-------|---|--------|----------|
| 399 | Jan: | of cos u say al things bad abt him | social | off task |
| 400 | G: | ta shi ai, ma shi teng | social | off task |
| 401 | Jan: | cos u wan save him for urself | social | off task |
| 402 | G: | char is in love with him so madly | social | off task |
| 403 | Char: | hey | social | off task |
| 404 | G: | peng tat: dont busybody | social | off task |
| 405 | Char: | stop it man | social | off task |
| 406 | G: | this is private gals' chat | social | off task |
| 407 | G: | unless u wanna help n be matchmaker | social | off task |
| 408 | Char: | no tks | social | off task |
| 409 | G: | hey thta's for Peng(TatZz) not u | social | off task |
| 410 | Char: | :((| social | off task |
| 411 | Jan: | yahaha | social | off task |
| 412 | G: | SO PENG(TATZZ) WANNA BE MATCHMAKER>? | social | off task |
| 413 | Jan: | pt.... u migjt get a big red packet | social | off task |
| 414 | Jan: | fr char after e whole thing | social | off task |
| 415 | Jan: | cos now she paiseh | social | off task |
| 416 | G: | haha.. true | social | off task |
| 417 | Jan: | char actually very happy within | social | off task |
| 418 | G: | Peng(TatZz) agreed! | social | off task |
| 419 | Char: | ya rite | social | off task |
| 420 | G: | haha | social | off task |
| 421 | Char: | hey k lar... after this session, forget about wad we have sae k!! | social | off task |
| 422 | Jan: | where got such thing | social | off task |
| 423 | Jan: | its real | social | off task |
| 424 | Jan: | so muz share | social | off task |
| 425 | G: | exactly | social | off task |
| 426 | G: | we must spread it! | social | off task |
| 427 | Char: | gosh | social | off task |
| 428 | Char: | cannot, later like sars.... | social | off task |
| 429 | Jan: | char,,, isint dat wat u wan? | social | off task |
| 430 | Char: | nope | social | off task |
| 431 | Jan: | to be well sprad like sars? | social | off task |
| 432 | Char: | I NEVER SAY ANYTHING! | social | off task |
| 433 | G: | there is already a template of char's story going around in class | social | off task |
| 434 | Jan: | haha... u already bing in sars issue | social | off task |
| 435 | Jan: | bring in | social | off task |
| 436 | Jan: | so i guess u want it dat way | social | off task |
| 437 | Jan: | come on G | social | off task |
| 438 | G: | yeah! | social | off task |
| 439 | Jan: | its time to help ur friend | social | off task |

| | | | | |
|-----|-------|---|--------|----------|
| 440 | G: | actually pple around me already know liao | social | off task |
| 441 | G: | cos we type so big | social | off task |
| 442 | Jan: | spread!!!! | social | off task |
| 443 | G: | char just give us a treat once everything is done | social | off task |
| 444 | Char: | heybabes, when can we leave huh? | social | off task |
| 445 | Char: | so hungry | social | off task |

Chat 5

| Turn | Std | Utterances | Category | Subcategory |
|------|------|---|-----------|----------------|
| 1 | Mad: | hi ppl | mgmt | contact |
| 2 | Jul: | hi..who are u all? | mgmt | contact |
| 3 | Mad: | ya who's who huh | mgmt | contact |
| 4 | Jul: | Jul | mgmt | contact |
| 5 | Mad: | Mad | mgmt | contact |
| 6 | Jul: | hihi | mgmt | contact |
| 7 | BL: | harlow... | mgmt | contact |
| 8 | Mad: | intro :P | social | off task |
| 9 | Jul: | ahahahahaha | social | off task |
| 10 | BL: | v crap <i>leh</i> | social | off task |
| 11 | Mad: | hehe | social | off task |
| 12 | Mad: | read first read first | social | off task |
| 13 | Jul: | i want to sleep already | social | off task |
| 14 | Mad: | mi too...soooooooooooooooooo sianz | social | off task |
| 15 | Mad: | but unfortunately got one nosiy grace sitting beside mi full of craps.... | social | off task |
| 16 | Jul: | haha.... then more fun.. | social | off task |
| 17 | Jul: | who is 0301765? | mgmt | contact |
| 18 | BL: | BL..haha | mgmt | response |
| 19 | BL: | wad r we suppose to do!!! | task | requirement |
| 20 | Jul: | is it individual? | task | requirement |
| 21 | Mad: | think discuss one of the qn rite | task | requirement |
| 22 | Jul: | think so.. i haven read... | task | requirement |
| 23 | Jul: | don know how to get the ball rolling | mgmt | focus |
| 24 | Mad: | which qn we wan to do? | mgmt | focus |
| 25 | BL: | choose any qn <i>la</i> ...all e same to mi | mgmt | response |
| 26 | Mad: | i would go for 2...hw abt u guys? | mgmt | consensus |
| 27 | Jul: | anything loh | mgmt | response |
| 28 | BL: | ok | mgmt | consensus |
| 29 | Jul: | then two | mgmt | consensus |
| 30 | BL: | so now wad? | mgmt | focus |
| 31 | Mad: | so hw to build :p | mgmt | elicitation |
| 32 | Mad: | is it should have more communication? | knowledge | initiation |
| 33 | BL: | ya...haha | knowledge | agreement |
| 34 | Jul: | anything <i>la</i> hehe | knowledge | acknowledgment |
| 35 | Mad: | this is our first main pt | task | planning |
| 36 | Mad: | so wat r the sub points to it | mgmt | elicitation |
| 37 | BL: | can understand each other beta? | knowledge | elaboration |
| 38 | Jul: | ? | knowledge | clarification |
| 39 | BL: | as in within e family | knowledge | elaboration |

| | | | | |
|----|------|--|-----------|-----------------|
| 40 | Mad: | ya | knowledge | acknowledgment |
| 41 | BL: | actually i tink can take fr e article she gave...haha | knowledge | reference (ext) |
| 42 | BL: | den jus take e points n rephrase a bit lo...haha | knowledge | response |
| 43 | Jul: | oh ya thry have alot of study one | knowledge | reference (ext) |
| 44 | Mad: | huh wat study? | knowledge | clarification |
| 45 | BL: | suddenly realize our grp only got 3 ppl..haha | social | off task |
| 46 | Mad: | pathetic rite....hehe | social | off task |
| 47 | Jul: | like alot of studies proven by researchers loh | knowledge | elaboration |
| 48 | Jul: | think around there | social | off task |
| 49 | Jul: | janice grp also got three pp | social | off task |
| 50 | Mad: | ohhhhh.....coz i onli glimpse thru nv reali go read ;p | social | off task |
| 51 | Jul: | so headache man | social | off task |
| 52 | Jul: | read n read' | social | off task |
| 53 | Mad: | AGREE , so <i>sianz</i> .. | social | off task |
| 54 | BL: | haiz... | social | off task |
| 55 | BL: | finish dicussing stil mus go hm write ar? | task | requirement |
| 56 | Mad: | ya | task | requirement |
| 57 | Jul: | <i>ya loh</i> | task | requirement |
| 58 | BL: | super <i>sian</i> !! | social | off task |
| 59 | Jul: | but can do our work here then save it loh | social | off task |
| 60 | Mad: | muz write esaay some more :(| social | off task |
| 61 | BL: | kk..faster den.. | mgmt | focus |
| 62 | Jul: | super <i>sian</i> | social | off task |
| 63 | Mad: | no mood to do | social | off task |
| 64 | Jul: | <i>ya loh</i> | social | off task |
| 65 | BL: | hahaa... | social | off task |
| 66 | Jul: | hehe but no choice | social | off task |
| 67 | BL: | we gotta chat here til lesson end izit? | social | off task |
| 68 | Mad: | eh not reali | social | off task |
| 69 | BL: | den? | social | off task |
| 70 | Mad: | but stay here for the whole lesson | social | off task |
| 71 | Jul: | i think up to us loh when we are done we can start doing our work | social | off task |
| 72 | Mad: | BINGO | social | off task |
| 73 | Jul: | haha better than climb up to 5th floor | social | off task |
| 74 | BL: | pengz..so many thg to do | social | off task |
| 75 | Jul: | the passage like very funny lei the child like no mother ..everytime also father | knowledge | reference (ext) |
| 76 | Mad: | which one? | knowledge | clarification |

| | | | | |
|-----|------|---|-----------|-----------------|
| 77 | Jul: | ya loh.. then she need to mark so many.. | social | off task |
| 78 | BL: | i only browse thru..so lazy to read..haha | social | off task |
| 79 | Jul: | the second one | knowledge | response (to M) |
| 80 | Mad: | same here | social | off task |
| 81 | Mad: | issit becoz focus on father | knowledge | response |
| 82 | Jul: | haha use as argument then | knowledge | response |
| 83 | BL: | ya i tink so | knowledge | agreement |
| 84 | Jul: | since so one sided | knowledge | response |
| 85 | Mad: | wat argument? | knowledge | clarification |
| 86 | BL: | how to argue? | knowledge | clarification |
| 87 | BL: | as our 2nd point? | task | planning |
| 88 | Jul: | the compre.. not suppose to discuss one | task | requirement |
| 89 | BL: | chey... | task | requirement |
| 90 | Jul: | haha | task | requirement |
| 91 | Mad: | faling asleep soon..... | social | off task |
| 92 | Jul: | haha same | social | off task |
| 93 | BL: | wad to do | mgmt | focus |
| 94 | Jul: | we just add in the points k..? | mgmt | suggest |
| 95 | BL: | okok | mgmt | consensus |
| 96 | Jul: | you all want to discuss like the pp starting fr young os something? | knowledge | initiation |
| 97 | BL: | eh...u r at wad qn?essay ar? | mgmt | focus |
| 98 | Mad: | mi blur too | mgmt | response |
| 99 | Jul: | the essay | mgmt | response |
| 100 | Mad: | okok | mgmt | consensus |
| 101 | Jul: | i mean start with the children fr young | knowledge | repetition |
| 102 | BL: | ya... | knowledge | acknowledgment |
| 103 | Jul: | ??i blur too haha | knowledge | response |
| 104 | Mad: | y muz start from young? | knowledge | clarification |
| 105 | Jul: | like build closer relationship loh | knowledge | elaboration |
| 106 | BL: | haha...erm....educate e children fr young tt family is v impt..haha | knowledge | elaboration |
| 107 | Jul: | oh ya.. think intro better describe the social and economic climate of sg | knowledge | initiation |
| 108 | Mad: | quite true i think dat would be a good intro | knowledge | agreement |
| 109 | BL: | agree | knowledge | agreement |
| 110 | Jul: | but i don know singapore hehe | knowledge | lack |
| 111 | BL: | now bad economy lo | knowledge | elaboration |
| 112 | BL: | gt tis feelin by e end of e lesson nothin much wil b done..haha | social | off task |
| 113 | Jul: | like losing of jobs thing rite? | knowledge | example |
| 114 | Jul: | haha.. thin k so but three brains better than one | social | off task |

| | | | | |
|-----|---------|--|-----------|----------------|
| 115 | Mad: | ya economy is unstable lots of retrenchment so family realtionship is also stressed and tense up | knowledge | elaboration |
| 116 | Jul: | gd gd we are getting somewhere | knowledge | acknowledgment |
| 117 | Mad: | hehe...if family not supportive den | knowledge | elaboration |
| 118 | BL: | but can say e children oso try to stay hm more as dey no money to go out? | knowledge | elaboration |
| 119 | Jul: | haha later bored to death how? | knowledge | elaboration |
| 120 | BL: | haha..pls <i>la...</i> | knowledge | disagreement |
| 121 | Jul: | can save alot of money | knowledge | elaboration |
| 122 | Mad: | try to be more thrifty | knowledge | elaboration |
| 123 | Jul: | sure.. | knowledge | acknowledgment |
| 124 | Jul: | then if mum or dad get retrenched then can stay hm to communicate more | knowledge | elaboration |
| 125 | Mad: | huh dun think they want this type of communication time ;p | knowledge | disagreement |
| 126 | BL: | haha..den dey wil quarrel at hm over money <i>leh</i> | knowledge | elaboration |
| 127 | Mad: | ya | knowledge | acknowledgment |
| 128 | Mad: | eh u all want change to our name anot | social | off task |
| 129 | BL: | how to? | social | off task |
| 130 | Mad: | the nick instead of using our matric no | social | off task |
| 131 | Jul: | haha ya loh later even worse man | social | off task |
| 132 | Mad: | go profile den type nick | social | off task |
| 133 | BL: | okok | social | off task |
| 134 | Mad: | go profile den edit | social | off task |
| 135 | Jul: | testing | social | off task |
| 136 | Jul: | still cannot | social | off task |
| 137 | BL: | wher is profile? | social | off task |
| 138 | Mad: | the main page of workspace | social | off task |
| 139 | Mad: | top right hand corner | social | off task |
| 140 | Jul: | i change already <i>liao</i> | social | off task |
| 141 | Mad: | u muz close the old one first den come in again | social | off task |
| 142 | BL: | no wonder..haha | social | off task |
| 143 | Mad: | haha | social | off task |
| 144 | bilian: | yeah! | social | off task |
| 145 | Mad: | jul quick | social | off task |
| 146 | Jul: | / | social | off task |
| 147 | bilian: | pengz...got time limit one | social | off task |
| 148 | Jul: | haha i be the odd one out here | social | off task |
| 149 | Mad: | okok | social | off task |
| 150 | Mad: | haha | social | off task |
| 151 | Jul: | think she scared we talk crap | social | off task |

| | | | | |
|-----|---------|--|-----------|-----------------|
| 152 | Mad: | one point is that kids seem to have better relationship with maid nowadays | knowledge | initiation |
| 153 | bilian: | ya | knowledge | acknowledgment |
| 154 | bilian: | so sack e maid? <i>hah</i> | knowledge | elaboration |
| 155 | Mad: | no <i>lah</i> | knowledge | disagreement |
| 156 | Mad: | the social climate | knowledge | repetition |
| 157 | Mad: | so parent muz spent quality with with children | knowledge | initiation |
| 158 | Jul: | haha... shld not hire maid | knowledge | elaboration |
| 159 | Jul: | ya <i>loh</i> | knowledge | agreement |
| 160 | bilian: | juleen ur words a bit small <i>le</i> | social | off task |
| 161 | Jul: | social climate? | knowledge | clarification |
| 162 | bilian: | haha...okok.. | social | off task |
| 163 | Mad: | if they working den reali <i>bo bian</i> also | knowledge | nego (contrast) |
| 164 | Jul: | haha don know <i>lei</i> | knowledge | response |
| 165 | Mad: | means family ties not as close compared to the past | knowledge | elaboration |
| 166 | bilian: | at least aft work can go hm n accompany e children? | knowledge | nego (contrast) |
| 167 | Jul: | then die die also squeeze in time <i>loh</i> | knowledge | elaboration |
| 168 | bilian: | more family outings.. | knowledge | elaboration |
| 169 | Jul: | ya.. then weekends go for some picnic or something | knowledge | elaboration |
| 170 | Mad: | but sometime thay bring their work prob back to hm | knowledge | initiation |
| 171 | Jul: | ya loh then poor child get scolded instead | knowledge | elaboration |
| 172 | bilian: | den ask e parents to work only aft their child go slp <i>lo</i> | knowledge | elaboration |
| 173 | Mad: | den spent time also no use in terms is psychologically...they bad mood den take it oput on child | knowledge | nego (contrast) |
| 174 | Mad: | out i mean | knowledge | repetition |
| 175 | Jul: | haha ya <i>loh</i> | knowledge | agreement |
| 176 | Jul: | maybe too tired ti scold also | knowledge | agreement |
| 177 | bilian: | hmm...den how can dey spend quality time? | knowledge | clarification |
| 178 | Jul: | tto scold | knowledge | repetition |
| 179 | Jul: | try to restrain temper <i>loh</i> | knowledge | initiation |
| 180 | Mad: | parent learn to separate work matter from hm | knowledge | initiation |
| 181 | Jul: | maybe employer can don put so much stress on the employee | knowledge | initiation |
| 182 | Mad: | think quite hard also | knowledge | nego (contrast) |
| 183 | Jul: | yep esp during bad times | knowledge | elaboration |
| 184 | Mad: | ya <i>lor</i> | knowledge | agreement |
| 185 | bilian: | so everythg ask e parents to start first <i>la</i> | knowledge | initiation |
| 186 | Jul: | maybe it really depends on the | knowledge | nego (contrast) |

| | | | | |
|-----|---------|---|-----------|-------------------|
| | | individual | | |
| 187 | Mad: | quite true | knowledge | agreement |
| 188 | Jul: | haah ya they more mature | knowledge | elaboration |
| 189 | Mad: | set example :P | knowledge | elaboration |
| 190 | bilian: | but kids oso play quite a big part leh | knowledge | elaboration |
| 191 | Mad: | it takes 2 hands to clap | knowledge | agreement |
| 192 | Jul: | ya...cooperation then essay more balanced | knowledge | agreement |
| 193 | bilian: | den..kids shdhai dono la..haha | social | interrupted start |
| 194 | Jul: | think almost all pts there liao rite except the thrifty part | knowledge | response |
| 195 | Jul: | haha..anything <i>la</i> | knowledge | response |
| 196 | Mad: | so we're almost done :) | mgmt | focus |
| 197 | bilian: | anw time's up rite... | mgmt | focus |
| 198 | Jul: | yap | mgmt | response |
| 199 | Jul: | i will be sufing net now..anyone closing ? i will still open this win | social | off task |
| 200 | Mad: | mi too | social | off task |
| 201 | bilian: | ok | social | off task |
| 202 | Mad: | i logging off :) | social | off task |

Chat 6

| Turn | Std | Utterances | Category | Subcategory |
|------|-------|---|----------|-------------|
| 1 | SY: | morning | mgmt | contact |
| 2 | PLX: | afternoon!!!! | mgmt | contact |
| 3 | SY: | ????? | mgmt | contact |
| 4 | PLX: | haha | mgmt | contact |
| 5 | SY: | i like to confirm what are we going to do? | mgmt | focus |
| 6 | PLX: | discuss lar read first | mgmt | suggest |
| 7 | SY: | we do the pre-writing qns at home right? | task | requirement |
| 8 | PLX: | yes | task | requirement |
| 9 | SY: | then we discuss the writing task together for idea right? | task | requirement |
| 10 | PLX: | yes | task | requirement |
| 11 | PLX: | you ah dreaming is it? :p | social | off task |
| 12 | SY: | i understand why she didn't want us to sit together... | social | off task |
| 13 | PLX: | yeah lor. like that more fun | social | off task |
| 14 | SY: | i think we chat too much!! read now | mgmt | suggest |
| 15 | PLX: | yes | mgmt | consensus |
| 16 | SY: | read already | mgmt | response |
| 17 | SY: | i think the first qn is more related to this text. | task | response |
| 18 | SY: | second qn need to look at other alternative-cloning. more diff to do. | task | requirement |
| 19 | SY: | u? | mgmt | elicitation |
| 20 | PLX: | wait!!!! | mgmt | response |
| 21 | SY: | hehe, ok | mgmt | response |
| 22 | PLX: | ok finish | mgmt | response |
| 23 | SY: | hello who is that princess? | mgmt | contact |
| 24 | PLX: | IM | mgmt | response |
| 25 | Huey: | Type Your Message Hereits me!! Huey! | mgmt | contact |
| 26 | SY: | why my name is not special!! | social | off task |
| 27 | Huey: | opps Huey! | social | off task |
| 28 | PLX: | how to change your name one? | social | off task |
| 29 | SY: | here come IM | social | off task |
| 30 | SY: | i think we are going out of point. | mgmt | focus |
| 31 | IM: | ya...i very blur...what are we suppose to do? | mgmt | focus |
| 32 | PLX: | read then discuss | mgmt | focus |
| 33 | IM: | discuss and write down main points and writes an essay today ? | task | requirement |
| 34 | Huey: | still reading <i>la!</i> | mgmt | response |
| 35 | SY: | teach me!! | social | off task |
| 36 | Huey: | its under the messaging system under ivle!!! | social | off task |
| 37 | Huey: | whoahaha! | social | off task |

| | | | | |
|----|-------|---|-----------|---------------|
| 38 | SY: | ok. i m too slow | social | off task |
| 39 | SY: | thanks | social | off task |
| 40 | SY: | are everyone done? | mgmt | focus |
| 41 | IM: | nooooooooooooooooo | mgmt | response |
| 42 | PLX: | where is the messaging system? | social | off task |
| 43 | SY: | let's explore now | social | off task |
| 44 | IM: | ya where where | social | off task |
| 45 | Huey: | on the left side once u log in | social | off task |
| 46 | SY: | is active messaging? | social | off task |
| 47 | Huey: | oops soory..its under ur profile! top right hand corner then go to edit | social | off task |
| 48 | IM: | yeapeap | mgmt | response |
| 49 | PLX: | ok thanks | social | off task |
| 50 | Huey: | done huh> then we can start lesson proper! | mgmt | focus |
| 51 | SY: | i can't fing any word on messaging. | social | off task |
| 52 | IM: | HeLoOoO | social | off task |
| 53 | SY: | pls change clour to indicate. | social | off task |
| 54 | Huey: | its at ur top right hand corner | social | off task |
| 55 | IM: | hahaha | social | off task |
| 56 | Huey: | tiredwho | social | off task |
| 57 | SY: | who is our new member? | social | off task |
| 58 | IM: | i changed <i>lia</i> | social | off task |
| 59 | Huey: | nah! IM right? | social | off task |
| 60 | IM: | :P | social | off task |
| 61 | Huey: | haha! i am smart | social | off task |
| 62 | PLX: | want to discuss now? | mgmt | focus |
| 63 | SY: | have too. chat too much!!!!!!!!!! | mgmt | response |
| 64 | Huey: | yeah yeah qn 1 or 2 to discuss? | mgmt | consensus |
| 65 | SY: | i prefer qn 1 | mgmt | response |
| 66 | Huey: | same easier | mgmt | response |
| 67 | PLX: | me too | mgmt | response |
| 68 | SY: | let's starts!! | mgmt | suggest |
| 69 | SY: | spelled wrongly | task | language |
| 70 | Huey: | hmm.... | task | language |
| 71 | SY: | do u think \$\$\$\$ can solve all problems? | mgmt | elicitation |
| 72 | PLX: | no <i>lar</i> | knowledge | response |
| 73 | Huey: | i dun not support the idea of using \$ | knowledge | initiation |
| 74 | SY: | why? | knowledge | clarification |
| 75 | SY: | everyone pls contribute | mgmt | elicitation |
| 76 | Huey: | human body is sacred to us..not a commodity for sale! | knowledge | initiation |
| 77 | IM: | am still reading | mgmt | response |
| 78 | PLX: | human being cannot be weighed by | knowledge | initiation |

| | | | | |
|-----|-------|--|-----------|-----------------|
| | | money | | |
| 79 | SY: | i think many people would abuse the organs for \$\$\$sake. | knowledge | initiation |
| 80 | PLX: | not really | knowledge | disagreement |
| 81 | PLX: | if some ppl really need the money? | knowledge | clarification |
| 82 | Huey: | then sell their house car clothes l | knowledge | response |
| 83 | SY: | that's my point. they would abuse it. | knowledge | repetition |
| 84 | Huey: | not their organs | knowledge | repetition |
| 85 | PLX: | but the money may really help ppl | knowledge | repetition |
| 86 | Huey: | so we all dun support the idea | mgmt | consensus |
| 87 | PLX: | i support <i>leh</i> on some point | knowledge | initiation |
| 88 | SY: | we state first that we consider the other pt of view. | mgmt | suggest |
| 89 | Huey: | then urs is to a large extent? | knowledge | clarification |
| 90 | Huey: | then difficult to write <i>leh</i> | knowledge | judgment |
| 91 | SY: | we stand to one side for simplicity sake. | knowledge | response |
| 92 | PLX: | ok lor then all disagree <i>lor</i> | knowledge | agreement |
| 93 | Huey: | mui ah mui! ready not? | mgmt | contact |
| 94 | SY: | let's provide at least 3 main pts to support our stand. | task | requirement |
| 95 | SY: | she is still ready.let's wait for her. | mgmt | suggest |
| 96 | PLX: | she is not ready is it? | mgmt | consensus |
| 97 | IM: | here...just came...so need time to read but am done | mgmt | response |
| 98 | SY: | u are really tired!! | social | off task |
| 99 | IM: | yeap | social | off task |
| 100 | SY: | we are against \$\$\$\$ for transplant. | knowledge | repetition |
| 101 | IM: | i agree to donate organs if only the patients are brain-dead | knowledge | initiation |
| 102 | SY: | not for\$\$\$ sake right? | knowledge | clarification |
| 103 | IM: | but i would fully discourfae if organs donate are from live body unless.....the person is willingly and on legal procedures... | knowledge | elaboration |
| 104 | IM: | like the liver case of Andrea DE cRUZ? | knowledge | example |
| 105 | Huey: | cant the first point be that financial incentives will widen the gap between the rich and poor as the rich has the previlage to enjoy the benefits of the organs | knowledge | initiation |
| 106 | SY: | i agree!!! | knowledge | agreement |
| 107 | PLX: | but the money is given by govt not given by donator by receiver | knowledge | nego (contrast) |
| 108 | SY: | gov have to have the people again | knowledge | nego (defend) |
| 109 | Huey: | ? | knowledge | clarification |
| 110 | SY: | write wrongly agai.. | knowledge | lack knowledge |
| 111 | Huey: | oh is it from the govt? | knowledge | clarification |

| | | | | |
|-----|-------|--|-----------|-----------------|
| 112 | Huey: | nv read properly | knowledge | lack knowledge |
| 113 | PLX: | yes the incentive is from the govt | knowledge | repetition |
| 114 | SY: | i thought the people pay for it? | knowledge | clarification |
| 115 | Huey: | i tot so too | knowledge | agreement |
| 116 | IM: | i guess if it is to save people, it is ok...but there must be strict rules to be implemented to prevent abuse | knowledge | elaboration |
| 117 | SY: | rich is more fortunate | knowledge | response |
| 118 | SY: | let's us against the idea of nonetary rewards | knowledge | repetition |
| 119 | Huey: | whoever wants it he pay for it | knowledge | elaboration |
| 120 | PLX: | but page two paragraph 4 state govt pay for it | knowledge | reference (ext) |
| 121 | SY: | there is no first come first serve basis. just judge on the amt of \$\$\$ | knowledge | elaboration |
| 122 | Huey: | huh/? | knowledge | clarification |
| 123 | SY: | i think that's is the incentive to thanks them ofr public service. the person have to pay ofr what he wnats. | knowledge | elaboration |
| 124 | Huey: | perhaps he govt will pay for the poor while the rich pay for them? | knowledge | elaboration |
| 125 | SY: | govt would v busy and spend money for little returns.. | knowledge | nego (contrast) |
| 126 | Huey: | agree with SY | knowledge | agreement |
| 127 | PLX: | so stil lwant e 1st pt? | mgmt | consensus |
| 128 | Huey: | which one? | mgmt | consensus |
| 129 | PLX: | rich get more chance to have organs | knowledge | repetition |
| 130 | SY: | let's put this pt to support why we are against it. | task | planning |
| 131 | IM: | it is very emotional as it would show that people actually go all out and cut themselves up and donate their organs to for that sum of money, | knowledge | elaboration |
| 132 | IM: | it is like huting urself...and it is like if u have a choice, there's no way u would like to donate organs unless that victims is someone u know.. | knowledge | elaboration |
| 133 | IM: | and the thing is that espically poor pple, they dont think too much, all they want is \$\$\$\$\$\$, and even if deterioate their body, they still donate!!!! | knowledge | elaboration |
| 134 | Huey: | hmmn..that depends on how much u agree wirth this pt | knowledge | response |
| 135 | Huey: | thne ur pt is that? | knowledge | clarification |
| 136 | PLX: | enmui, the person is dead leh how to feel pain? | knowledge | clarification |
| 137 | SY: | ithought is living? | knowledge | clarification |
| 138 | IM: | page 1, paragraph 6 | knowledge | reference (ext) |
| 139 | PLX: | ok | knowledge | acknowledgment |

| | | | | |
|-----|-------|--|-----------|-----------------|
| 140 | Huey: | person donating is dead or living? | knowledge | clarification |
| 141 | PLX: | but that is illegal still so it is trafficking | knowledge | nego (contrast) |
| 142 | IM: | so the person is dead....and the thing is that, people will tend to get the poor people to be their target izzit ? | knowledge | elaboration |
| 143 | SY: | the law in spore, dead people can donate their if their family agree. those who are living, would have to donate their organ if they want but not for\$\$\$. | knowledge | elaboration |
| 144 | Huey: | hmm?is it? | knowledge | clarification |
| 145 | PLX: | is it? | knowledge | clarification |
| 146 | Huey: | not sure abt that | knowledge | judgment |
| 147 | SY: | there is no trade and agreement to use \$\$\$\$. | knowledge | repetition |
| 148 | IM: | ya...in singapore only | knowledge | agreement |
| 149 | PLX: | ok | knowledge | acknowledgment |
| 150 | SY: | i think we are too far away. | mgmt | focus |
| 151 | Huey: | then lets move on to 2nd pt? | mgmt | focus |
| 152 | SY: | ok which 2nd part? | mgmt | focus |
| 153 | IM: | but they have appealed greatly to singaporeans to sign up to pledge their organs if they are dead | knowledge | elaboration |
| 154 | SY: | good! but not for \$\$\$ sake | knowledge | repetition |
| 155 | IM: | yeap... | knowledge | acknowledgment |
| 156 | PLX: | yeah but now the world is considering using money | knowledge | nego (contrast) |
| 157 | IM: | singapore government dont encourage \$\$\$\$\$\$ agreement | knowledge | repetition |
| 158 | IM: | USSSS...becis their country too big! too many people....as compared to singapore | knowledge | example |
| 159 | SY: | so let's state our v own ideas against the use of \$\$\$ | task | planning |
| 160 | PLX: | why don't we say that some may not be moved by the \$ | knowledge | initiation |
| 161 | SY: | 3 at least!! | task | requirement |
| 162 | Huey: | move on..... | mgmt | focus |
| 163 | PLX: | and give reason why they wil not be moved | task | requirement |
| 164 | PLX: | die | task | requirement |
| 165 | SY: | diff to do this way.. | task | requirement |
| 166 | PLX: | yeah <i>lor</i> | task | requirement |
| 167 | SY: | there are alot of view fro and against \$\$ | knowledge | response |
| 168 | PLX: | we read the article in the website first <i>lor</i> ... i think it helps | mgmt | suggest |
| 169 | SY: | i m v hungrey now. can't continue.. | social | off task |
| 170 | SY: | spelled wrongly again.... | social | off task |
| 171 | PLX: | we copy the points in the article <i>lar</i> | social | off task |

| | | | | |
|-----|------|---|-----------|---------------|
| 172 | SY: | the black market trade | knowledge | initiation |
| 173 | SY: | would there be black market? | knowledge | clarification |
| 174 | PLX: | first point be greed lar? | knowledge | repetition |
| 175 | IM: | *yawn* | social | off task |
| 176 | PLX: | sleepy head! | social | off task |
| 177 | PLX: | must pass up today! | task | requirement |
| 178 | IM: | outline is roughly right ? | task | requirement |
| 179 | IM: | we have come up with 3 pts ? | task | requirement |
| 180 | PLX: | yes | task | requirement |
| 181 | IM: | ok | task | requirement |
| 182 | PLX: | first pt greed ok? | knowledge | repetition |
| 183 | IM: | so 1st point, we dont agree in using Money ? | knowledge | clarification |
| 184 | SY: | 1)Unhealthy Greed 2) Devaluing Human Life 3) The Black Market Trade 4)Preferential Treatment? | knowledge | summation |
| 185 | PLX: | i agree with SY | knowledge | agreement |
| 186 | IM: | ok.. | knowledge | agreement |
| 187 | PLX: | we have one more point that say why some ppl really cannot donate | knowledge | initiation |
| 188 | PLX: | like for religious reason | knowledge | elaboration |
| 189 | SY: | uslim can't donate muslim they can receive but not donate. | knowledge | elaboration |
| 190 | IM : | ya...due to their muslim laws... | knowledge | agreement |

Chat 7

| Turn | Std | Utterances | Category | Subcategory |
|------|-------------|--|-----------|-----------------|
| 1 | WP: | hallo | mgmt | contact |
| 2 | SL: | hello all | mgmt | contact |
| 3 | sWt_drEaMz: | hello~ | mgmt | contact |
| 4 | WP: | hi | mgmt | contact |
| 5 | sWt_drEaMz: | u all wanna discuss both qns or wat..?!~~ | mgmt | focus |
| 6 | SL: | any ideas? | mgmt | elicitation |
| 7 | WP: | I think we do one firs | mgmt | suggest |
| 8 | SL: | k which one | mgmt | focus |
| 9 | WP: | so which Q? | mgmt | focus |
| 10 | sWt_drEaMz: | do qn 1 first lorz.. | mgmt | suggest |
| 11 | WP: | what about Q2 | mgmt | suggest |
| 12 | WP: | ok | mgmt | response |
| 13 | WP: | wait a minute, we are discussing on the writting task, not the pre-writting | mgmt | focus |
| 14 | WP: | so do Q1? | mgmt | suggest |
| 15 | sWt_drEaMz: | yeaPz..~ do qn1 first ba..~ | mgmt | response |
| 16 | sWt_drEaMz: | or u gonna do q2?~~ | mgmt | focus |
| 17 | WP: | by the way, who is sWt? | social | off task |
| 18 | sWt_drEaMz: | sitting beside ya lorz.. i tink beri funni~~ =P | social | off task |
| 19 | WP: | so Q1 | mgmt | focus |
| 20 | sWt_drEaMz: | okiEz..~~ | mgmt | response |
| 21 | sWt_drEaMz: | eHhz.. i'm more of a sitting on the fence.. | knowledge | initiation |
| 22 | sWt_drEaMz: | can discuss like medical issue, ethical issue, moral issue.. | mgmt | suggest |
| 23 | sWt_drEaMz: | 1 para each..~~ | task | planning |
| 24 | WP: | I think it depends on how the program is carry out | knowledge | elaboration |
| 25 | WP: | the way the US did it is quite reasonable to me | knowledge | reference (ext) |
| 26 | WP: | as the rewards only offered to those brain dead patient no incentives are offered to those live donors | knowledge | elaboration |
| 27 | sWt_drEaMz: | its e government pay or e receiver of the organs pay..?~~ | knowledge | clarification |
| 28 | WP: | 3rd paragraph pg page 2 | knowledge | reference (ext) |
| 29 | WP: | so healthy people cannot "make" business by "selling" organs | knowledge | elaboration |
| 30 | WP: | so basically the pool of donors that will be given the rewards is limited | knowledge | elaboration |
| 31 | sWt_drEaMz: | hmm... buden.. maybe its others using e dead people organs make money..?! cant they..?~~ | knowledge | nego (contrast) |

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|----|-------------|---|-----------|-------------------|
| 32 | WP: | to brain dead patient for the US case, they won't be given the money I mean normal people | knowledge | repetition |
| 33 | sWt_drEaMz: | uh-huhz..~~~ yaya.. i noe..~~~ buden e money given to the deceased family woOoz.. | social | interrupted start |
| 34 | WP: | so we have to decide whether is it morally correct for the brain dead patient's family to decide wether to end their life or not, by donating the organs | knowledge | elaboration |
| 35 | WP: | is brain dead patient considered dead? | knowledge | clarification |
| 36 | WP: | is there any chance at all for them to recover? | knowledge | clarification |
| 37 | sWt_drEaMz: | eHhz.. brain dead ppl = vege pplz.. tink dead ba... | knowledge | response |
| 38 | sWt_drEaMz: | ya.. tink is how e program works.. Federal law prohibits payment for organs; lawmakers feared organ trafficking. But the American Medical Association and the United Network for Organ Sharing say carefully controlled financial incentives for organ donation should be studied..~~ | knowledge | reference (ext) |
| 39 | WP: | Federal law prohibits payment for organs; lawmakers feared organ trafficking. But the American Medical Association and the United Network for Organ Sharing say carefully controlled financial incentives for organ donation should be studied..~~ | knowledge | repetition |
| 40 | sWt_drEaMz: | yalarz.. buden not all ppl tink tis way.. | knowledge | response |
| 41 | sWt_drEaMz: | or else also wont need tis program..~ | knowledge | response |
| 42 | sWt_drEaMz: | hmmm.. ms lee says.. e reward can be paid by e receiver family or government.. | knowledge | reference (ext) |
| 43 | sWt_drEaMz: | den it means tt thry can buy organs..? | knowledge | clarification |
| 44 | WP: | den it means tt thry can buy organs.. | knowledge | agreement |
| 45 | sWt_drEaMz: | eHhz.. in a more "legal" way.. | knowledge | elaboration |
| 46 | sWt_drEaMz: | doesnt it contradicts with the law set up earlier.. aiyoOo!! | knowledge | clarification |
| 47 | WP: | sort of, but up to personal interpretation. It can be compensation, appreciation, or just payment for the organ | knowledge | elaboration |
| 48 | WP: | what law? | knowledge | clarification |
| 49 | sWt_drEaMz: | got a law says tt cannot sell or buy organs ma.. | knowledge | response |
| 50 | sWt_drEaMz: | illegal to do so.. | knowledge | response |
| 51 | WP: | oh, ok | knowledge | acknowledgment |

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|----|-------------|--|-----------|-----------------|
| 52 | sWt_drEaMz: | hmm.. nvm.. discuss lor.. den see how u wanna write e essay ba.. | mgmt | suggest |
| 53 | sWt_drEaMz: | eHhz.. den e medical wise... its good to haf tis program.. | knowledge | initiation |
| 54 | sWt_drEaMz: | can help save lifes ma... | knowledge | elaboration |
| 55 | WP: | TRUE | knowledge | agreement |
| 56 | sWt_drEaMz: | ethical is eHhz... towards e not agree side... | knowledge | initiation |
| 57 | WP: | yah | knowledge | agreement |
| 58 | sWt_drEaMz: | den.. moral.. haha.. means ethical ma..?!~ | knowledge | initiation |
| 59 | WP: | always like this | knowledge | response |
| 60 | sWt_drEaMz: | aiyoo.. sci also in opposition wif ethics or moral de la.. | knowledge | elaboration |
| 61 | sWt_drEaMz: | e pushing of donating organs izzit beri active..?!~ e one to sign a wat card to donate ur organs when u die tt one..?!~ | knowledge | initiation |
| 62 | WP: | that one very slow, good people who are generous to donate all thier organs when they die usually lives longer | knowledge | elaboration |
| 63 | WP: | the article says the gap is keep on increasing | knowledge | reference (ext) |
| 64 | sWt_drEaMz: | anyway.. u intend da do q1 or q2..?~~ | social | off task |
| 65 | WP: | Q2, perhaps | social | off task |
| 66 | WP: | stem cell organ clonning, xeno-transplant | knowledge | initiation |
| 67 | sWt_drEaMz: | okiE.. den discuss la..~~ | mgmt | suggest |
| 68 | WP: | so first , we can use stem cell to clone organ for replacement | knowledge | elaboration |
| 69 | sWt_drEaMz: | yeaPz yeaPz... | knowledge | agreement |
| 70 | WP: | now the ethical issue is not using money to buy organ is whether embryonic stem cell a life? | knowledge | elaboration |
| 71 | sWt_drEaMz: | hiaKz..~ tink e cell used b4 dunno how many wks is not considered a life.. | knowledge | elaboration |
| 72 | sWt_drEaMz: | ohhx.. okie.. but at least it is a law.. tt means agreed by majority..?!~ den scientists use e cells also eHhz.. lesser issues la..~ | knowledge | elaboration |
| 73 | sWt_drEaMz: | a human embryo that (i) was created in vitro in an assisted reproduction procedure, (ii) remained in storage after completion of all intrauterine transfers requested by the mother, and (iii) has departed parental control according to instructions to the attending physician that the embryo shall be given to research and that there shall not occur any transfer to a uterus, or ex vivo nurture beyond a number of weeks specified in the | knowledge | elaboration |

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|----|-------------|--|-----------|-------------------|
| | | instructions, of either the embryo or any totipotent cell taken from the embryo. | | |
| 74 | WP: | then it should be fine to use this method | knowledge | response |
| 75 | sWt_drEaMz: | can agree la.. not sae fine.. ^^ | knowledge | agreement |
| 76 | sWt_drEaMz: | den eHhz.. xenotransplantation.. | knowledge | repetition |
| 77 | sWt_drEaMz: | e muslims ba.. more towards NO! | knowledge | elaboration |
| 78 | sWt_drEaMz: | coz e animals dey use are like pigs la.... | knowledge | elaboration |
| 79 | WP: | can use other animal | knowledge | nego (contrast) |
| 80 | sWt_drEaMz: | also got cross species.. | knowledge | elaboration |
| 81 | sWt_drEaMz: | ehhz.. wat's e word arz...aiyoo.. virus can pass from animal to human... | social | interrupted start |
| 82 | WP: | if you want to life, you have no choice | knowledge | response |
| 83 | WP: | of course proper screening will be done before transplantaion | knowledge | elaboration |
| 84 | sWt_drEaMz: | eHhz.. whu can guarantee...see how u wanna put it lorz.. juz sae out mi views.. ^^ | knowledge | response |
| 85 | sWt_drEaMz: | yeaPpz.. anymore..?~~ | mgmt | elicitation |
| 86 | WP: | artificial organ | knowledge | initiation |
| 87 | WP: | we got artificial heart, | knowledge | example |
| 88 | sWt_drEaMz: | ya.. 1 more.. e putiing of small gadgets arz... dunno use rite word not.. into ur body.. tt functions like ur organ..ya correct correct...~~ | knowledge | example |
| 89 | WP: | so this one is clear from any ethical issue? | knowledge | elaboration |
| 90 | WP: | but it is not so efficient, it is the limitation of current medical technology | knowledge | elaboration |
| 91 | sWt_drEaMz: | can la..~~ quite limited..~ | knowledge | agreement |
| 92 | WP: | ya | knowledge | acknowledgment |
| 93 | sWt_drEaMz: | no more <i>liaOz horz</i> ..~~ | mgmt | focus |
| 94 | sWt_drEaMz: | i go out finD infO le..!!~ | mgmt | response |
| 95 | sWt_drEaMz: | ^^ byE! | mgmt | contact |
| 96 | WP: | ok | mgmt | contact |

Chat 8

| Turn | Std | Utterances | Category | Subcategory |
|------|--------|---|----------|-------------|
| 1 | JJ: | morning | mgmt | contact |
| 2 | Sirin: | so... which topic we are discusssing? qns 1 or 2? | mgmt | focus |
| 3 | CL: | let"s finish reading it first? | mgmt | suggest |
| 4 | JJ: | k | mgmt | consensus |
| 5 | Sirin: | kk. i'm done... | mgmt | contact |
| 6 | JJ: | i haven't finished yet | mgmt | response |
| 7 | Jes: | maybe we have more to write about on qn2 | mgmt | response |
| 8 | Sirin: | i'm more on for qns one.....dunnnoe what to write 4 q 2.... | mgmt | response |
| 9 | Jes: | why? i think for qns1 it is more or less the same as the article | mgmt | response |
| 10 | CL: | why is the font so small | social | off task |
| 11 | Jes: | sorry | social | off task |
| 12 | CL: | omg | social | off task |
| 13 | JJ: | but i think that q2 is much easier | mgmt | response |
| 14 | Sirin: | haha...u guys really think alike.... | social | off task |
| 15 | JJ: | it can incolve q1 Involve | mgmt | response |
| 16 | Sirin: | oh... ok, i'll go with the majority... | mgmt | response |
| 17 | CL: | me too | mgmt | response |
| 18 | Jes: | no, we had better treat each question separately | mgmt | suggest |
| 19 | Sirin: | will overlap in some pt one lah....i think.... | mgmt | response |
| 20 | Jes: | ok, i agree | mgmt | response |
| 21 | Sirin: | em.... what font size are u guys using... | social | off task |
| 22 | JJ: | Jes? | mgmt | contact |
| 23 | Jes: | 2 | social | off task |
| 24 | CL: | ya | mgmt | response |
| 25 | Sirin: | kk... | social | off task |
| 26 | CL: | my font size 1 | social | off task |
| 27 | Jes: | yes | mgmt | response |
| 28 | JJ: | ft | social | off task |
| 29 | Sirin: | also this big... | social | off task |
| 30 | JJ: | how to change you nickname | social | off task |
| 31 | Sirin: | yaya. teach me.. | social | off task |
| 32 | Jes: | is this color better | social | off task |
| 33 | JJ: | no | social | off task |
| 34 | Sirin: | no | social | off task |
| 35 | Jes: | wait for a while | social | off task |
| 36 | Jes: | i'll go and find out | social | off task |
| 37 | JJ: | ft | social | off task |
| 38 | Sirin: | who is the 2 square boxes ah??? | mgmt | contact |
| 39 | CL: | u just go to IVLE 's profile | social | off task |
| 40 | JJ: | JJ | mgmt | contact |
| 41 | CL: | then edit it | social | off task |

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|----|--------|--|-----------|-----------------|
| 42 | Jes: | on the homepage of ivle | social | off task |
| 43 | Sirin: | haha, ok. | social | off task |
| 44 | JJ: | then? | social | off task |
| 45 | CL: | edit | social | off task |
| 46 | Jes: | then you type your nickname | social | off task |
| 47 | JJ: | can | social | off task |
| 48 | Sirin: | ok, can | social | off task |
| 49 | JJ: | no still can not | social | off task |
| 50 | Sirin: | ya loh... | social | off task |
| 51 | CL: | so we are on question 2 right? | mgmt | focus |
| 52 | JJ: | is kaiqin the one in th | social | off task |
| 53 | Jes: | then how can you change your name to two boxes? | social | off task |
| 54 | JJ: | dunno | social | off task |
| 55 | Jes: | i guess that is two chinese characters | social | off task |
| 56 | CL: | type some wrong code | social | off task |
| 57 | Sirin: | haha..... try triangles...hee\ | social | off task |
| 58 | CL: | not only chinese characters | social | off task |
| 59 | Jes: | now we are on qns 2? | mgmt | focus |
| 60 | JJ: | i think so yes | mgmt | response |
| 61 | Sirin: | ya... since most of us think it is easier... | mgmt | response |
| 62 | JJ: | yout idea? | mgmt | consensus |
| 63 | Sirin: | not mine...\ | mgmt | response |
| 64 | JJ: | ok | mgmt | response |
| 65 | JJ: | can i have your man, msn, as well as bichonglei | social | off task |
| 66 | Jes: | we'd better first decide which one is more suitable | mgmt | focus |
| 67 | Sirin: | great, i want urs too. | social | off task |
| 68 | CL: | bichonglei@yahoo.com.sg | social | off task |
| 69 | JJ: | i choose q2 | mgmt | response |
| 70 | Sirin: | kaiqin18@hotmail.com | social | off task |
| 71 | Jes: | hongyuan05@hotmail.com | social | off task |
| 72 | JJ: | cjjason@hotmail.com | social | off task |
| 73 | JJ: | can yahoo email address be used as ms | social | off task |
| 74 | Sirin: | can. | social | off task |
| 75 | JJ: | ok | social | off task |
| 76 | Sirin: | em. abt qns 2..... if huma transplant is not the best n only solution now, what can be done? | mgmt | elicitation |
| 77 | JJ: | we can talk more about q2 | mgmt | suggest |
| 78 | Jes: | cloning human organs | knowledge | initiation |
| 79 | Sirin: | i mean, when something in ur body is not functioning laao, u much replace mah... | knowledge | elaboration |
| 80 | Jes: | laao? | knowledge | clarification |
| 81 | CL: | liao? | knowledge | clarification |
| 82 | Sirin: | but NOW, clonning is not accessible yet... | knowledge | nego (contrast) |
| 83 | Sirin: | liao. | knowledge | response |
| 84 | JJ: | what about animal alternatives | knowledge | initiation |

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|-----|--------|---|-----------|-------------------|
| 85 | Jes: | human system might reject animal organs that is more dangerous | knowledge | nego (contrast) |
| 86 | JJ: | but people are trying to use | social | interrupted start |
| 87 | Sirin: | besides pig, there is no more better choices... | knowledge | elaboration |
| 88 | CL: | i dun agree to let money involved | knowledge | initiation |
| 89 | JJ: | me too, it may cause many problems | knowledge | agreement |
| 90 | CL: | that only helps the rich ppl | knowledge | initiation |
| 91 | Sirin: | ya...so i think qns 2 is a bit narrow... unless u guys can think of smth else... | knowledge | response |
| 92 | Jes: | i think money could be use as an incentive | knowledge | initiation |
| 93 | Sirin: | tt's qns 1... | knowledge | response |
| 94 | Sirin: | i dun agree...tt's selling...like go market... | knowledge | disagreement |
| 95 | JJ: | wo can also mantion q1 in q2. that ia why i choose q2 | knowledge | response |
| 96 | Jes: | economics principles seem to work quite well nearly everywhere | knowledge | initiation |
| 97 | CL: | i havn't take eco modules... | knowledge | lack knowledge |
| 98 | Sirin: | true... but to the extent of trading organs!!!??? | knowledge | clarification |
| 99 | JJ: | it may lead to some black trading | knowledge | elaboration |
| 100 | Sirin: | then there may be cases tt plp will just threat or kill for them... better still dun need to pay... | knowledge | elaboration |
| 101 | Jes: | the fund will not be given to live donors, only as an incentive to the dead's relatives | knowledge | elaboration |
| 102 | Sirin: | the families what...u see <i>lah</i> , husband can even kill wife 4 insurance money... | knowledge | example |
| 103 | Jes: | that is rare case | knowledge | response |
| 104 | JJ: | scaring | knowledge | response |
| 105 | CL: | thats one problem | knowledge | response |
| 106 | Sirin: | if u are dying, n ur wish is to donate...then it shouldn't involve money, cos donate means free giving. | knowledge | initiation |
| 107 | Sirin: | money is one evil root tt will lead to more complicated problems... | knowledge | elaboration |
| 108 | Sirin: | such as , relatives will have to fight for money... | knowledge | example |
| 109 | CL: | maybe we should investigate the percentage of dying ppl who are able and wish to donate | knowledge | elaboration |
| 110 | Jes: | the gap exist cos now many ppl still can change their mind ...sorry, cannot | knowledge | disagreement |
| 111 | Sirin: | u see, sometimes even siblings fight for the inherritance even before their parents die... | knowledge | example |
| 112 | Sirin: | morally, that's degraion for human dignity... | knowledge | elaboration |
| 113 | Jes: | we should provide suitable incentives to promote donating | knowledge | initiation |

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|-----|--------|---|-----------|---------------------|
| 114 | JJ: | i think government can report those who donate their orga | knowledge | elaboration |
| 115 | Sirin: | ethically, come plp still hold bias to difference race n religions... | knowledge | initiation |
| 116 | Jes: | that is very urgent, many ppl are dying | knowledge | response |
| 117 | Sirin: | these can be a problem too... | knowledge | repetition |
| 118 | CL: | what is plp, kaiqin? | knowledge | clarification |
| 119 | Sirin: | plp means people.. | knowledge | response |
| 120 | JJ: | we can start from those high educated | knowledge | elaboration |
| 121 | Jes: | now human dignity should be put at the second plac | knowledge | response |
| 122 | Sirin: | em... then those down level ones will complains of unfairness.... | knowledge | nego (contrast) |
| 123 | JJ: | i mean persuade then to donate. sorry | knowledge | repetition |
| 124 | Jes: | it is not that we have mastered the techniquis, it is a matter of changing ppl's mind | knowledge | elaboration |
| 125 | Sirin: | then those famous n rich plp will be sort of force to donate cos they wants the "name" | knowledge | elaboration |
| 126 | Jes: | the money is given by the federal government ... | knowledge | nego (contrast) |
| 127 | Jes: | i don't quite understand they want to name, so they donate? | knowledge | clarification |
| 128 | Jes: | i think poor ppl will get more incentives if money is provided | knowledge | elaboration |
| 129 | Sirin: | i mean i can accept the incentives if it comes fr the receiver n family cos that's how they want to show their gratitude... | knowledge | elaboration |
| 130 | JJ: | then they are for money | knowledge | nego (argue) |
| 131 | Sirin: | but not the extent of stating this as a REWARD! | knowledge | nego (defend) |
| 132 | JJ: | it is the same as those for name | knowledge | nego (argue) |
| 133 | Jes: | no, i still insist the money is given by the federal public | knowledge | repetition |
| 134 | Sirin: | like i will apect gifts fr friends but bot money for helping them... | knowledge | repetition |
| 135 | Jes: | federal government | knowledge | repetition |
| 136 | CL: | u mean to pay the donate family? | knowledge | clarification |
| 137 | Sirin: | the meaning is not the same..... | social | interrupted start |
| 138 | Jes: | yes | knowledge | agreement (with CL) |
| 139 | JJ: | there is no difference from given by government | knowledge | nego (argue) |
| 140 | Sirin: | yes....for government, tt's a rule, a procedure.... | knowledge | elaboration |
| 141 | Jes: | it remind me now that we can now cloning human insulin so human organs are not far away | knowledge | initiation |
| 142 | JJ: | hehe the animal one | knowledge | response |
| 143 | Sirin: | ya, maybe an other 10 years to be out of testing period... | knowledge | response |

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|-----|--------|--|-----------|----------------|
| 144 | Sirin: | animal....em.... u mean can try to improvise the pig's organ to fit human's ? | knowledge | clarification |
| 145 | CL: | Disease-free pigs would provide most of the organs. | knowledge | elaboration |
| 146 | CL: | Raised in sterile environments, they would be genetically altered with human DNA so that the chance of rejection is greatly reduced. | knowledge | elaboration |
| 147 | Sirin: | JJ , u sleeping ah?haha, roger... | mgmt | contact |
| 148 | JJ: | ? | mgmt | response |
| 149 | Sirin: | in some poor countries, plp sell their organs to provide for their families..... | knowledge | elaboration |
| 150 | JJ: | where are you > | social | off task |
| 151 | Sirin: | me... | social | off task |
| 152 | CL: | ?? | social | off task |
| 153 | JJ: | i can not find you | social | off task |
| 154 | Sirin: | in a corner... | social | off task |
| 155 | JJ: | yea | social | off task |
| 156 | JJ: | in red? | social | off task |
| 157 | Sirin: | wearing bright red.... | social | off task |
| 158 | JJ: | ok | social | off task |
| 159 | Sirin: | haha, | social | off task |
| 160 | JJ: | i se | social | off task |
| 161 | CL: | Although many researchers believe it is slight, one legitimate concern is that animal diseases will be transmitted into the human population | knowledge | elaboration |
| 162 | Jes: | if money shouldn't be involved, we should figure out another incentive | knowledge | response |
| 163 | Sirin: | what's the world coming to..... | knowledge | response |
| 164 | Jes: | to fulfill the huge gap, public education? does that work? | knowledge | elaboration |
| 165 | Sirin: | w/o money involve officially , there is always black market, if money is involve, the situation will be worse!@!! | knowledge | repetition |
| 166 | CL: | kaiqin...what is w/o | knowledge | clarification |
| 167 | JJ: | without | knowledge | response |
| 168 | CL: | o | knowledge | acknowledgment |
| 169 | JJ: | without | knowledge | repetition |
| 170 | Sirin: | sorry guys, think i'm poluting the air with my bandage....=P sprained my ankle.... | social | off task |
| 171 | JJ: | ok, we may talk about q2, and we talk about other possible alternatives as well as their disab=dcantages disadvantage | mgmt | focus |
| 172 | CL: | i am over-burdened... | social | off task |
| 173 | Sirin: | anyother alt tt u can think of? let's hear them... | mgmt | elicitation |
| 174 | JJ: | some man-made organs ...it is already used right? | knowledge | initiation |
| 175 | Sirin: | hahqa, that's is water fr far, can't same the fire next door... | knowledge | off task |

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|-----|--------|---|-----------|----------------|
| 176 | Sirin: | no, still in clinical experimental period.... | knowledge | elaboration |
| 177 | JJ: | ????????? i cannot under stand your words | knowledge | clarification |
| 178 | Sirin: | only the heart is used.... | knowledge | elaboration |
| 179 | CL: | T_T | knowledge | acknowledgment |
| 180 | Sirin: | i mean they are still in testing... | knowledge | repetition |
| 181 | JJ: | ok ok i know what you type just now | knowledge | acknowledgment |
| 182 | CL: | Genetic engineering is the next step in battling organ rejection. | knowledge | initiation |
| 183 | Sirin: | only man made heart, ear drum, maybe conear.... but other organs such as lungs, kidneys, liver...all these are not even in experienment..... | knowledge | example |
| 184 | JJ: | that is what we are talking about after point out the idea ...it is medical problems | knowledge | repetition |
| 185 | Sirin: | yaya, but human is still trying to understand genes,.... | knowledge | elaboration |
| 186 | Jes: | see, money can do an instant work ...other methods are too far away | knowledge | response |
| 187 | JJ: | wo can first say that human organ transplant is the best way, then there still problems, such as ...then we talk about other alternatives | task | planning |
| 188 | Sirin: | meaning, they are still in the process of trying to discover stuff, not toi the extent tt we can manupulate or create anything...but then we must see it's more beneficial or more harm.... | knowledge | elaboration |
| 189 | Sirin: | what are the altenatives u are saying???? | mgmt | consensus |
| 190 | Jes: | we have to test, test,test..... for the cloning one | knowledge | elaboration |
| 191 | JJ: | just as we discussed just now ...animal alternatives, man made | knowledge | repetition |
| 192 | Sirin: | ok... besides that? | mgmt | elicitation |
| 193 | JJ: | emmmmmmm | knowledge | response |
| 194 | Sirin: | these are the most common.... | knowledge | response |
| 195 | Jes: | if financial incentive is set up as a bill, then it could be well-regulated | knowledge | initiation |
| 196 | Sirin: | or i can say there is no other alternatives besides these two....? | knowledge | response |
| 197 | Sirin: | in certain countries...but do u think abt the 3rd world countries???? | knowledge | clarification |
| 198 | Jes: | but things are always like that, isn't it | knowledge | response |
| 199 | Sirin: | they rather give birth to more children n then sell them..... | knowledge | elaboration |
| 200 | CL: | its only for the rich... | knowledge | repetition |
| 201 | Jes: | always certain countries | knowledge | repetition |
| 202 | Sirin: | when money is involve..... n the world in under globalisation now.... | knowledge | elaboration |
| 203 | Jes: | don't forget we allow donating blood for money | knowledge | clarification |

| | | | | |
|-----|--------|---|-----------|-----------------|
| 204 | JJ: | in 3ed world, they even cannot manage their lives, how can they think about their organ transplant | knowledge | nego (contrast) |
| 205 | Jes: | blood is already tissue, from tissue to organ, just one step | knowledge | elaboration |
| 206 | JJ: | that is sellin blood | knowledge | nego (argue) |
| 207 | CL: | but hugh difference in technique.. | knowledge | nego (defend) |
| 208 | Sirin: | u are wrong, i mean they can sell their children to the rich in developed countried, for their organs....in a way, kill own children for money..... | knowledge | repetition |
| 209 | Sirin: | no...u are in life sci...if so easy...then we dun need to study so much... | knowledge | disagreement |
| 210 | Jes: | Serene, don't use rare case, in 3rd world country, for money ppl can do everything | knowledge | nego (argue) |
| 211 | Jes: | what's wrong with me ...i think the technique for human organ transplant is well mastered for quite a long time | knowledge | response |
| 212 | Sirin: | Another thing that's wrong with buying and selling organs is that it devalues human beings and turns them into commodities or products. | knowledge | initiation |
| 213 | Sirin: | The value of the individual person might be forgotten if something else of high value can be gained. | knowledge | elaboration |
| 214 | CL: | really? | knowledge | clarification |
| 215 | Jes: | doctors and patients are all waiting | knowledge | nego (contrast) |
| 216 | Sirin: | really....then this suggestion dun even need to surface.... | knowledge | response |
| 217 | Jes: | without organs what can they do ...they dun have much time to wait....em, waiting to die loh..... | knowledge | elaboration |
| 218 | Jes: | there are no organs ... ppl don't donate ...oh, dear | knowledge | repetition |
| 219 | CL: | In India, some impoverished people sell a kidney or a cornea in order to provide their family with basic needs. | knowledge | example |
| 220 | CL: | In China, officials sell the organs of executed prisoners | knowledge | example |
| 221 | Sirin: | i think we can promote more in terms of campaings of smth... ask plp to be donors if they die in acidents,.. | knowledge | initiation |
| 222 | Jes: | yes, yes, but cannot you see it don't work effectively | knowledge | nego (argue) |
| 223 | Sirin: | we can try to change their mindset on their religion beliefs on having die as a full body.... | knowledge | elaboration |
| 224 | Jes: | ppl are willing to donate blood now, because medical usage of blood is already in its maturity not for organs, it needs time for them to change their mindset | knowledge | repetition |

| | | | | |
|-----|--------|--|-----------|-------------------|
| 225 | JJ: | so we can suggest that we can start from hugh-educated ppl, they may accept the idea of donating their organ | knowledge | elaboration |
| 226 | CL: | another issue was about the criminal gangs...they "Criminal gangs are already known to have kidnapped children for their organs in Russia and South America."3 What's to prevent them from conducting the same kind of horrifying operations here? | knowledge | initiation |
| 227 | JJ: | it is not about the rewards | knowledge | elaboration |
| 228 | Sirin: | agree.... | knowledge | agreement |
| 229 | Jes: | but we cannot wait.....we have to provide instant incentives..... | knowledge | nego (contrast) |
| 230 | Sirin: | it is... when it comes to money, ... | knowledge | interrupted start |
| 231 | JJ: | whether rewards or not, there always crime | knowledge | response |
| 232 | Jes: | i agree there are many limitations | knowledge | response |
| 233 | Sirin: | many plp will think of ways to gain ... | knowledge | response |
| 234 | JJ: | ok i think we go to q1 already | mgmt | focus |
| 235 | Jes: | but we could see if enough organs are provided, many ppl's lives will be saved | knowledge | nego (contrast) |
| 236 | Sirin: | there wouldn't be enough.... there is always unending of demand n supply | knowledge | nego (argue) |
| 237 | JJ: | there are already more than enough ppl in the earth ...just a joke | knowledge | nego (contrast) |
| 238 | Jes: | as long as we can narrow the gap, it works | knowledge | nego (defend) |
| 239 | Sirin: | try asking more ppl not to smoke, drink n do unhealthy stuff to themselves... | knowledge | response |
| 240 | Jes: | if not, we could at least figure out another method | knowledge | response |
| 241 | Sirin: | anyway, i agree with jinjin. | knowledge | agreement |
| 242 | JJ: | i think we go out of our topic | mgmt | focus |
| 243 | Sirin: | if no ppl die, then the world will be over populated.... | knowledge | elaboration |
| 244 | JJ: | it is not about alternatives already | knowledge | response |
| 245 | Sirin: | a big problem also..... | knowledge | response |
| 246 | JJ: | we are arguing in whether save ppl or not? | knowledge | clarification |
| 247 | Sirin: | em, another alt is not to do anything....haha | knowledge | response |
| 248 | Jes: | oh dear!!! you guys want a 3rd world war to happen? :(| social | off task |
| 249 | JJ: | we can talk about this in our article | social | off task |
| 250 | Sirin: | do also wrong, dun do then wouldn't wrong...haha/.... | social | off task |
| 251 | Sirin: | jes, are u dreaming abt war movie... | social | off task |
| 252 | CL: | i am confused already... for god 's sake | mgmt | response |
| 253 | Sirin: | or ur dream lover is hitler...haha | social | off task |
| 254 | JJ: | we just ignore these, and focus on our idea first | mgmt | focus |
| 255 | CL: | confused | mgmt | response |

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|-----|--------|--|-----------|-----------------|
| 256 | JJ: | ok | mgmt | response |
| 257 | Jes: | don't make fun of me, i am concerned about ppl's life . not like you, worrying about the overwhleming population | social | off task |
| 258 | JJ: | i experienced that what we say one woman equals to 500 ducks, and now we have 1000 | social | off task |
| 259 | Sirin: | haha, aiay, fate lah, when u time is up, u will die mah.. | social | off task |
| 260 | JJ: | don't kill me | social | off task |
| 261 | CL: | get other's organs to survive plz | social | off task |
| 262 | Jes: | i don't want to have lunch today | social | off task |
| 263 | Sirin: | so jes, u want to sell me ur skin??? | social | off task |
| 264 | JJ: | because of so many ducks? | social | off task |
| 265 | Sirin: | i think ur complexion is vvv gd <i>leh...haha</i> | social | off task |
| 266 | JJ: | ok | social | off task |
| 267 | CL: | it depends on her healthy condition and family conditions... | social | off task |
| 268 | JJ: | let's fucos | mgmt | focus |
| 269 | Sirin: | em, kk, what ideas u still have? | mgmt | elicitation |
| 270 | Jes: | what does the duck mean | social | off task |
| 271 | Sirin: | u name them, i elaborate...omg.... | social | off task |
| 272 | CL: | this naive girl still dun noe she is being make fun of.... | social | off task |
| 273 | Sirin: | haha.... | social | off task |
| 274 | JJ: | ok | social | off task |
| 275 | Jes: | i don't know | social | off task |
| 276 | CL: | i duno either | social | off task |
| 277 | JJ: | can pass my plot | social | off task |
| 278 | Sirin: | jinjin, u should tell jokes sometimes, frequently....i dun noe, but is not smth complimentary <i>lah</i> | social | off task |
| 279 | JJ: | and see if it is suitable to our topic | social | off task |
| 280 | Jes: | ok, which question are we on now? | mgmt | focus |
| 281 | Sirin: | can we state a stand first? | mgmt | focus |
| 282 | JJ: | q2 | mgmt | response |
| 283 | Sirin: | qns 2.first part of qns..what is our stand? | mgmt | elicitation |
| 284 | Jes: | then it is more about alternatives | knowledge | response |
| 285 | Sirin: | is this the best =n ONLY solution??? | knowledge | clarification |
| 286 | JJ: | it is teh best way | knowledge | response |
| 287 | CL: | best but not onli | knowledge | response |
| 288 | Jes: | we should have effective alternatives | knowledge | repetition |
| 289 | Sirin: | ok, | knowledge | agreement |
| 290 | Jes: | not those ones that will work in ten years | knowledge | elaboration |
| 291 | JJ: | there is no really effective ways | knowledge | nego (contrast) |
| 292 | Sirin: | such as clone a human like u n haverst the organ | knowledge | example |
| 293 | CL: | like matrix..\ | knowledge | example |
| 294 | Jes: | then we'd better decide who shall we clone | knowledge | response |
| 295 | JJ: | so whatever we talk about, there are | knowledge | response |

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|-----|--------|--|-----------|-----------------|
| | | disadvantages | | |
| 296 | Sirin: | i think now, it is easier to clone a human rather a individual organs... | knowledge | elaboration |
| 297 | Jes: | en, idon't agree | knowledge | disagreement |
| 298 | Sirin: | cloning og human is in practise now... | knowledge | elaboration |
| 299 | JJ: | then it will involve the problem of cloning | knowledge | nego (contrast) |
| 300 | Sirin: | clonning can be another alternaltive... | knowledge | repetition |
| 301 | JJ: | let's leave now , since we can not get a common idea | mgmt | suggest |
| 302 | Sirin: | if we can man make the organs, | knowledge | repetition |
| 303 | Sirin: | then we can discuss it after class | mgmt | response |
| 304 | JJ: | then we can discuss it after class | mgmt | response |
| 305 | Sirin: | kk. | mgmt | response |
| 306 | Jes: | end | mgmt | focus |
| 307 | CL: | i think we must sychronize | social | off task |
| 308 | Jes: | we are the only four here | social | off task |
| 309 | Sirin: | ok... so... | social | off task |
| 310 | JJ: | for example at night since we all live in halll | social | off task |
| 311 | Sirin: | can we use mouth....i'm a slow typer... | social | off task |
| 312 | Jes: | agree ..stop typing now | social | off task |
| 313 | Sirin: | can 't think when i type... | social | off task |
| 314 | JJ: | we are in th and uh | social | off task |
| 315 | Jes: | look around | social | off task |
| 316 | Sirin: | not tt i have much brains anyway... | social | off task |
| 317 | JJ: | ok | social | off task |
| 318 | CL: | \ | social | off task |
| 319 | JJ: | ok ... see your guys tonight? | social | off task |
| 320 | Sirin: | ok..... | social | off task |
| 321 | CL: | maybe on msn? | social | off task |
| 322 | Sirin: | ja. | social | off task |
| 323 | Jes: | don't be that urgent | social | off task |
| 324 | Sirin: | msn is ok too... | social | off task |
| 325 | JJ: | at Temasek can? | social | off task |
| 326 | CL: | since hong yuan is not a temasekian | social | off task |
| 327 | JJ: | better face to face | social | off task |
| 328 | Jes: | we have got 3 weeks for this artile | social | off task |
| 329 | Sirin: | canh too. | social | off task |
| 330 | Jes: | step by step | social | off task |
| 331 | Sirin: | can invite her to th 1 mah...haha. | social | off task |
| 332 | CL: | hha | social | off task |
| 333 | JJ: | hongyuan lives in uh | social | off task |
| 334 | CL: | uh?? Eh | social | off task |
| 335 | Sirin: | eusof. | social | off task |
| 336 | Jes: | eh | social | off task |
| 337 | JJ: | | social | off task |
| 338 | Sirin: | let's go. | social | off task |

Face-to-face transcripts of main study

F2F 1

| Turn | Std | Utterances | Category | Subcategory |
|------|-----|--|-----------|----------------|
| 1 | V | So, what question do you think is more easier to do? Better approach? | mgmt | elicitation |
| 2 | SH | I think question two, <i>lor</i> . | mgmt | response |
| 3 | Z | You ask him first. | mgmt | suggest |
| 4 | V | Which question? Which question? | mgmt | consensus |
| 5 | SH | Huh? | mgmt | response |
| 6 | V | Which question? | mgmt | consensus |
| 7 | SH | Okay, question two, <i>lor</i> . | mgmt | response |
| 8 | V | So, we decide on question two, <i>lah</i> . | mgmt | focus |
| 9 | V | So, now with question two, right, we need to focus on what are the factors to strengthen family relationships in the current social and economic climate in Singapore. | mgmt | focus |
| 10 | V | So, what do you think about the factors? | mgmt | elicitation |
| 11 | Z | About what? | mgmt | focus |
| 12 | V | What focus do you think? | mgmt | elicitation |
| 13 | Z | I think we can start with what is the prevailing social economic climate in Singapore first. | knowledge | initiation |
| 14 | V | Hmmm... | knowledge | acknowledgment |
| 15 | SH | Now, people by the economic crisis so how to build, how to manage to build a strong family in this kind of situation. | knowledge | elaboration |
| 16 | Z | But I think we should say, like, because I think we should start off, like, saying something like how we ... this one is leading to factors of family breakdown. Yeah? | knowledge | initiation |
| 17 | SH | That means you are trying to say, right, in this kind of situation, it's very hard to maintain a family. | knowledge | clarification |
| 18 | Z | Yeah. From there, you, it's easier to start on your points. You have a basis of where you're starting. It's a clearer picture. | knowledge | agreement |
| 19 | SH | That means you won't veer off, won't go off course, <i>lah</i> . | knowledge | repetition |
| 20 | V | Because it's in the question and you're just extracting from the question. | knowledge | agreement |
| 21 | SH | So, I shall name the first point, which is, strong marital relationship. Strong marriage relationship, the first point. | knowledge | initiation |
| 22 | V | Oh... strong marital relationship. | knowledge | acknowledgment |
| 23 | SH | Correct. | knowledge | agreement |

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|----|---------|--|-----------|-------------------|
| 24 | V | Something like the role model of the parents. | knowledge | elaboration |
| 25 | SH | Yes and also because parents are the functional units of a community. | knowledge | elaboration |
| 26 | SH | If you want to build something, you must have the couple come together then you must have kids then you must ... | knowledge | elaboration |
| 27 | SH | so the parents are the most important thing in the family. | knowledge | elaboration |
| 28 | Z | Yeah. You must have good parents then can have good children. | knowledge | elaboration |
| 29 | Z | Without the parents, then the family is gone. | knowledge | repetition |
| 30 | Z | Then you need to add... | social | interrupted start |
| 31 | V | So, shall we move on to our second point? | mgmt | focus |
| 32 | V | Anything else you would like to ... | mgmt | elicitation |
| 33 | Z | Second point, okay. | mgmt | response |
| 34 | V | Anything to say about second point? | mgmt | elicitation |
| 35 | Z | I think communication is very important. | knowledge | initiation |
| 36 | Z | You are not communicating with parents only but also parents themselves. | knowledge | elaboration |
| 37 | SH | So communication is like everything that's not ..., right? You can just say ... | social | interrupted start |
| 38 | Z | To make a better understanding, <i>lah</i> . | knowledge | elaboration |
| 39 | V | Unhappiness we can salvage | knowledge | elaboration |
| 40 | Z | So, it should be, like, communication plus understanding, <i>lah</i> , the topic sentence? Because I think it comes together. | knowledge | summation |
| 41 | V | Anything to add? | mgmt | elicitation |
| 42 | SH | I agree with you, <i>lor</i> . | knowledge | agreement |
| 43 | Z | Third point you think about it. | mgmt | suggest |
| 44 | SH | Don't worry, <i>can</i> . | mgmt | response |
| 45 | V | You must see how many points, <i>lah</i> . | mgmt | suggest |
| 46 | SH | Yeah. Because now it's only discussion, <i>what</i> . | mgmt | response |
| 47 | SH | One thing I think is mutual respect and tolerance. | knowledge | initiation |
| 48 | Teacher | You might like to jot down the ideas that you discussed so that later you can make use of these ideas. | mgmt | suggest |
| 49 | SH | So now, I repeat, huh. The first point we way is strong marital relationship; second point is communication and information; third point will be mutual respect and tolerance because in a family, right, there are sure to be a lot of conflicts. | knowledge | summation |
| 50 | SH | One has to be able to tolerate and get on with life. | knowledge | elaboration |
| 51 | SH | Must respect both... must respect all members in the family for opinions; respect each others' opinions, <i>lah</i> . | knowledge | elaboration |

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|----|----|---|-----------|-------------------|
| 52 | Z | Okay. Any other points? | mgmt | elicitation |
| 53 | SH | Actually, understanding family needs. | knowledge | elaboration |
| 54 | Z | It's something like, I don't know, the boundaries, like that lah, you are not, you are not, ah... I don't know how to say | knowledge | elaboration |
| 55 | V | It's something like under mutual respect. | knowledge | repetition |
| 56 | Z | Yeah, something like that. | knowledge | agreement |
| 57 | V | So, do you have anymore points? | mgmt | elicitation |
| 58 | Z | Got, er... I think it's trying to spend more time with children because say economic climate in Singapore is very work based. | knowledge | initiation |
| 59 | Z | So, it's, we spend more at work and less time at home with our children. | knowledge | elaboration |
| 60 | V | So? | knowledge | clarification |
| 61 | Z | So, how would you put under the topic sentence? | knowledge | clarification |
| 62 | SH | What do you mean topic sentence? | knowledge | clarification |
| 63 | Z | You need a main topic sentence, what. | knowledge | response |
| 64 | V | Just try to enrich every time you spend together, make full use of it, fully utilize the time. | knowledge | elaboration |
| 65 | SH | Okay, actually, <i>hor</i> , the three points that I name, we can convert them back to values needed in this kind of situation like economic crisis and competitive society. | knowledge | summation |
| 66 | V | So now we are trying to say that we are combining the three points into | knowledge | clarification |
| 67 | SH | Yes, so strong marital relationship in this kind of economic climate. | knowledge | agreement |
| 68 | Z | That strong marital relationship, right, because you can say, like, in recent social climate, right, the divorce rate is getting higher because before people are getting married, just courtship, they don't really understand each other then they get married. That's why after a while, they regret and they get a divorce. | knowledge | elaboration |
| 69 | Z | So a better understanding of each other before they get married then you can have stronger marital relationship. | knowledge | elaboration |
| 70 | Z | I find that maybe that's what we can say, <i>lah</i> . | social | interrupted start |
| 71 | V | Social, I also can think of a point that the, all the while the tv shows, all these is having a bad influence on the child all this | knowledge | elaboration |
| 72 | Z | But what tv shows would you cite? | knowledge | clarification |
| 73 | V | PCK is talking a lot of Singlish. | knowledge | example |
| 74 | V | It's not very good for | social | interrupted start |
| 75 | Z | What has it got to do with relationships? | knowledge | nego (argue) |
| 76 | V | Relationships | knowledge | repetition |

| | | | | |
|----|---------|---|-----------|-------------------|
| 77 | Z | We are talking about relationships, not talking about English | knowledge | nego (argue) |
| 78 | SH | No, talking about social, right? | knowledge | clarification |
| 79 | V | Relationship is also to show role model, right? | knowledge | nego (defend) |
| 80 | SH | In some ways, it's correct, lah, right? | knowledge | agreement |
| 81 | SH | I know one thing is, computer is about society. | knowledge | elaboration |
| 82 | SH | It's all so high tech, so engrossed in computer games and not spending enough time. | knowledge | elaboration |
| 83 | SH | So, not spending enough this point, we can elaborate into a lot, a lot of parts, like, actually the most important is like there are only two points only actually, communication and time spent with family. So, from these two points, we can elaborate it. | knowledge | summation |
| 84 | Teacher | Which question are you doing? | mgmt | focus |
| 85 | Z | Question two. | mgmt | response |
| 86 | SH | Actually, like relationship, the most basic ingredient in a relationship is | social | interrupted start |
| 87 | Z | Understanding, | knowledge | repetition |
| 88 | Z | communication, | knowledge | repetition |
| 89 | Z | time | knowledge | repetition |
| 90 | SH | After that, from there we talk about strong marital relationship. You should have a strong marital relationship first. | task | planning |
| 91 | SH | So, our main topic sentence is to promote communication, understanding and time and to spend time with our family members. So, these are our three points, lah. | knowledge | repetition |
| 92 | Z | So the child-parent relationship will come under ... because it's under second point then you can get a stronger marital relationship. | task | planning |
| 93 | SH | Yeah. | task | planning |
| 94 | Z | But I think that after the strong marital relationship, you should try to write about family relationship because you are writing about family, not solely about two parents, the children? | task | planning |
| 95 | SH | You can say that once you have a strong marital relationship, normally things will work quite well with the children because now they know to respect each other, especially they know ... they also try to spend more time with their children also. | knowledge | summation |
| 96 | Z | Yeah but I think in the essay, we should still write a bit on children. | knowledge | initiation |

| | | | | |
|-----|----|---|-----------|-------------------|
| 97 | SH | Yeah, a bit, <i>lah</i> , but not as strong as the three points, <i>lah</i> , | knowledge | response |
| 98 | SH | because now in this social economic climate, the three main things that we mainly talk about – understanding, communication, time – these main things are actually getting less and less. | knowledge | nego (contrast) |
| 99 | SH | So now we must think of ways, right, to ... these three things, <i>lor</i> . So, actually, it's asking on how to build a strong family, so must name the | social | interrupted start |
| 100 | Z | So the main points are communication, understanding and time? | knowledge | clarification |
| 101 | SH | Yeah. | knowledge | agreement |
| 102 | Z | The rest are? | knowledge | clarification |
| 103 | SH | Facts. You must do something then you must have this, this. | knowledge | response |
| 104 | SH | So, how to promote communication? | mgmt | elicitation |
| 105 | V | Communication? | knowledge | clarification |
| 106 | SH | Maybe, as I say, at night we should have family gathering. | knowledge | example |
| 107 | Z | I think we should start with time then you can communicate then which leads to understanding. | task | planning |
| 108 | Z | Without time, nothing is possible. | knowledge | repetition |
| 109 | SH | But ... ways, <i>what</i> . | knowledge | response |
| 110 | Z | Say parents that work until late at night then by the time they come home, the children are asleep. | knowledge | example |
| 111 | SH | So, like, if we can find a way, like, promote these three things together. | knowledge | repetition |
| 112 | V | Most important points is time management, <i>lah</i> ? | knowledge | elaboration |
| 113 | SH | Time management of parents, <i>lah</i> . | knowledge | elaboration |
| 114 | SH | Even kids are very much in their work. | knowledge | elaboration |
| 115 | SH | That means even for husband and wife, each of them are doing their own things, right? | knowledge | elaboration |
| 116 | SH | You don't know what's the problem that revolving around them. | knowledge | elaboration |
| 117 | SH | So the first point we'll write is that to promote the three things, right, time management. | task | planning |
| 118 | V | Why don't we write it in a way that ... from the least important to the most important? | task | planning |
| 119 | Z | The problem is if you say according to importance, how can you have understanding without communication? | task | planning |
| 120 | SH | No, you don't have to write it in emphatic order. In this essay, all these three points are linked. | task | planning |

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|-----|----|--|-----------|-------------------|
| 121 | Z | You must start with one point which leads on to the rest. It's following the order. | task | planning |
| 122 | SH | So, second point is what? | task | planning |
| 123 | V | Communication? Because communication can leads to understanding. | task | planning |
| 124 | Z | Yeah, with more time, you can sit down and talk. This is communication, <i>what</i> , can always have things like | knowledge | elaboration |
| 125 | V | Family outings. | knowledge | example |
| 126 | Z | Yeah, family outings. | knowledge | agreement |
| 127 | SH | Now we are not talking about the effects. We are talking about how to build a relationship, so when you say time management, this is one way. | knowledge | nego (argue) |
| 128 | SH | Communication is under time management. | task | planning |
| 129 | SH | You have time, more time to talk to them. | knowledge | repetition |
| 130 | SH | We must think of ways to build a strong, like every Sunday, every Saturday, they are ... I mean, they don't work seven days a week, right? | knowledge | elaboration |
| 131 | SH | So family outings. | knowledge | repetition |
| 132 | SH | Maybe the third point can be have regular thrash out session. | knowledge | example |
| 133 | Z | Thrash out session? | knowledge | clarification |
| 134 | SH | Like if the children have problems or the wife, they don't keep that in the heart. They take out and discuss with each other. | knowledge | elaboration |
| 135 | SH | So, actually, they will respect each other's opinion. | knowledge | repetition |
| 136 | Z | Hmmm...can ... | knowledge | agreement |
| 137 | V | Would it be better like if we'll ... we'll talk throughout dinner time. | knowledge | example |
| 138 | SH | So, that means regularly, <i>lah</i> , having regular talks? | knowledge | repetition |
| 139 | V | Yeah. | knowledge | agreement |
| 140 | SH | This is communication. This is actually under communication. Communication is like you just talk something less important or something important also. But for this kind of regular contact, it's really talking about problem that you are facing so how am I supposed ... how can I help you, something like that. | knowledge | summation |
| 141 | Z | I just thought, is this actually one point or three points? Because you are sub-elaborating the subpoints. | task | planning |
| 142 | SH | No, what. I mean, for time management, it's that more time to | social | interrupted start |
| 143 | Z | Yeah, lah, but understanding that part is really really sub under it. | task | planning |

| | | | | |
|-----|----|---|-----------|-----------------|
| 144 | SH | So now if you think we've enough points, then you just choose, <i>lah</i> . | task | planning |
| 145 | V | Three points so we're thinking of three ways. | task | planning |
| 146 | SH | Yeah, thinking of three ways. | task | planning |
| 147 | V | Because it's first time management, secondly, it's family outing, thirdly is? | task | planning |
| 148 | SH | What I mean is thrash out. It means something like a regular meeting. | knowledge | repetition |
| 149 | V | Arguing? | knowledge | clarification |
| 150 | Z | Not really, <i>lah</i> . But I think they are examples. | knowledge | response |
| 151 | V | You are asking for ways, <i>what</i> . | knowledge | nego (argue) |
| 152 | SH | This is not examples, <i>lah</i> . | knowledge | nego (contrast) |
| 153 | V | Then, they are ways, <i>lor</i> . | knowledge | nego (argue) |
| 154 | SH | They're not really ways. They're elaboration. | knowledge | nego (countert) |
| 155 | V | But how the ways bring to mutual respect, tolerance, understanding | knowledge | nego (counter) |
| 156 | SH | So, you just list out all the points and you choose the best way. | knowledge | nego (counter) |
| 157 | V | Okay. | knowledge | agreement |
| 158 | SH | So, anymore? Anything else? | mgmt | elicitation |
| 159 | Z | Not really. | mgmt | response |
| 160 | SH | Regular talks, ur..., some more points. | knowledge | repetition |
| 161 | Z | Family sessions? | knowledge | clarification |
| 162 | SH | It's like family outings. | knowledge | repetition |
| 163 | V | Anymore things? | mgmt | elicitation |
| 164 | SH | Thinking, thinking. Think of what ways to promote, I mean what ways that we can try to build a strong resilient family relationship. | knowledge | repetition |
| 165 | Z | I think it's time management, you know. | knowledge | repetition |
| 166 | Z | It's very vague, it's very general. | knowledge | judgment |
| 167 | SH | This is actually not considered as ways. | knowledge | nego (argue) |
| 168 | SH | You must think like time management in what sense, their job scope. They shouldn't spend so much time on their job then during lunch time, you can actually go back to have lunch and dinner together. | knowledge | elaboration |
| 169 | Z | Ideal situation, <i>lah</i> , but in Singapore, I don't think so, <i>lah</i> , because most people work not say very near to the house. Then children are studying, school. School time will clash with their | knowledge | search |
| 170 | SH | I mean, I'm not saying that they must do that but they should try to do that. That's why I say time management. | knowledge | repetition |
| 171 | Z | But I think lunch is not possible, dinner. | knowledge | disagreement |
| 172 | SH | Dinner can, <i>lah</i> . Lunch probably if | knowledge | repetition |

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| | | possible. | | |
| 173 | V | Even I don't, you see, if you work overtime, then you'd be in the rush. So, you, wouldn't be possible for you to have dinner then come back. | knowledge | example |
| 174 | SH | But you possibly not working everyday O.T., <i>what</i> . | knowledge | disagreement |
| 175 | Z | Not to say everyday overtime. | knowledge | repetition |
| 176 | V | No, overtime means most professionals, mostly office work, <i>lah</i> . | knowledge | elaboration |
| 177 | Z | Yeah. What I'm trying to say is that try to be home for dinner with the family so that you can understand each other. It's not say everyday, at least a few days a week or something. It doesn't have to be everyday, <i>what</i> . I think it's more or less like that, <i>lah</i> . | knowledge | nego (contrast) |
| 178 | SH | Actually, I wonder if ever there's conflict, we should try to tolerate with each other. | knowledge | elaboration |
| 179 | Z | That's the mutual respect part. | knowledge | response |
| 180 | SH | So, what are the ways to do this? | mgmt | elicitation |
| 181 | Z | But I think it's, it's | social | interrupted start |
| 182 | V | Don't head on, <i>lor</i> . Avoid. After some time them talk about it. | knowledge | elaboration |
| 183 | SH | Actually, this can also be one of the ways, <i>right</i> ? | knowledge | clarification |
| 184 | Z | But if you say if wait, <i>right</i> , your counterpart might think you're trying to avoid. I think it'll depend on case-to-case basis, <i>lor</i> . | knowledge | nego (contrast) |
| 185 | SH | I mean, wherever there's a conflict, have to manage to try to sit down and talk but not keeping it inside the heart and try to avoid it. | knowledge | elaboration |
| 186 | V | How about in terms of education? | knowledge | initiation |
| 187 | SH | In terms of education? | knowledge | clarification |
| 188 | Z | There are courses, <i>lah</i> . I know there are course. | knowledge | example |
| 189 | SH | Yeah, can also, but I mean, you must think of the current prevailing social and economic situation. Do they have time for family courses? | knowledge | nego (contrast) |
| 190 | Z | And everyone have to work together, everyone have to make it at the same time. Opportunity cost. A lot of opportunity cost. | knowledge | elaboration |
| 191a 191b | SH | Only teaching wise. Can read from books, <i>lah</i> . All will come up to time again. | knowledge | nego (contrast); repetition |
| 192a 192b | Z | Yeah. Education doesn't ... it helps, <i>lah</i> , but in Singapore, it cannot really help to a great extent, <i>lah</i> . So, I don't think we should write this point. | knowledge; task | disagreement; planning |

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|-----|----|---|-----------|-------------------|
| 193 | Z | Can write, <i>lah</i> , but | social | interrupted start |
| 194 | SH | A little bit, <i>lor</i> . | knowledge | response |
| 195 | Z | There's not much you can write because of, in Singapore context, a lot of things are stumped. | knowledge | agreement |
| 196 | SH | Uhhh... I think basically three points, <i>lah</i> . | task | planning |

F2F 2

| Turn | Std | Utterances | Category | Subcategory |
|------|-----|---|-----------|-------------------|
| 1 | J | Okay, start. So, we're doing question one, <i>huh</i> | mgmt | focus |
| 2 | ZW | I think so. We are doing question one. | mgmt | response |
| 3 | H | Anyone writing? | mgmt | consensus |
| 4 | J | I'll write first. | mgmt | response |
| 5 | LD | What's the question? | task | requirement |
| 6 | ZW | Factors that have shaped | task | requirement |
| 7 | J | Huh.. Don't bother about that (referring to the digital recorder) put down, put down | social | off task |
| 8 | ZW | You put down, what if it can't be heard? | social | off task |
| 9 | J | Alright. That one settle later. | social | off task |
| 10 | H | Okay <i>lah</i> , it's okay. | social | off task |
| 11 | ZW | It's supposed to be an article written for the annual Ridge publication. | task | requirement |
| 12 | J | Okay, let's discuss our question about the factors that have shaped the family relationship in Singapore in the last decade. | mgmt | focus |
| 13 | ZW | Family relationship. | task | requirement |
| 14 | H | How is family relationship shaped in the last decade. | task | requirement |
| 15 | ZW | Actually, your views about how to shape family relationship. | task | requirement |
| 16 | ZW | You mean to say that it's in the last decade right? Because, it's like, ten years ago right. | task | requirement |
| 17 | ZW | It's like whereby Singapore they actually emphasized on more operation, because yeah, so they really need to cooperate so usually the family are quite small so the relationship are quite close. | knowledge | initiation |
| 18 | ZW | Is that one of the factors? | knowledge | clarification |
| 19 | J | Er.. can <i>lah</i> | knowledge | response |
| 20 | H | You mean where relationship is concerned, it's better than last time? | knowledge | clarification |
| 21 | ZW | Yeah, it's small. It's like parents and children, they are quite close to each other. | knowledge | elaboration |
| 22 | J | Smaller family doesn't mean that parents and children are closer to each other <i>what</i> . | knowledge | disagreement |
| 23 | J | It just means that you don't have the grandparents to look after the children. | knowledge | nego (contrast) |
| 24 | ZW | Hmm.. ah.. | knowledge | acknowledgment |
| 25 | J | More like a nucleus family then you... | social | interrupted start |
| 26 | J | That means the relationship, right, is only concentrated on your family only. | knowledge | elaboration |
| 27 | J | Then, your other relatives, right, they're in another family, sort of in another family, so it's more ... like... more... | knowledge | elaboration |

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| 28 | ZW | What I mean is that ... like... generally <i>lah</i> because it's like small size, right, then parents have time to actually ... | knowledge | elaboration |
| 29 | J | Pay more attention to the children | knowledge | elaboration |
| 30 | ZW | Yeah ...because there's only one or two | knowledge | agreement |
| 31 | J | Okay, okay. | knowledge | agreement |
| 32 | ZW | Yeah, generally <i>lah</i> . | knowledge | agreement |
| 33 | ZW | But also there are some cases whereby ... | social | interrupted start |
| 34 | J | I think we are talking about the same thing because I emphasize ... I quote your, your, your idea <i>lah</i> . | knowledge | agreement |
| 35 | J | Actually, can write both what. Your idea and mine. | task | planning |
| 36 | ZW | Yeah, yeah. | knowledge | acknowledgment |
| 37 | H | What idea? | knowledge | clarification |
| 38 | J | Just now I say, | social | interrupted start |
| 39 | J | never mind, write her idea first. | mgmt | suggest |
| 40 | J | So your idea is only child only or like few children like that <i>lah</i> ? | knowledge | clarification |
| 41 | ZW | Yeah, few children. | knowledge | repetition |
| 42 | ZW | Parents will tend to treat them, it's like actually pay more attention to the children, yeah. | knowledge | repetition |
| 43 | H | What's your idea? | knowledge | clarification |
| 44 | J | My idea, huh? Just now I was saying actually the relationship between relatives has come sort of distant away, like not so close together. | knowledge | repetition |
| 45 | J | They are also part of the family, right, normally you can consider very big | knowledge | elaboration |
| 46 | H | Why? | knowledge | clarification |
| 47 | J | Why, ah? Because, because it's like now the society has adopted the nucleus family type culture so it's like you won't get together so often <i>lor</i> . Not much time to get together. | knowledge | elaboration |
| 48 | J | But if they are in a immediate family, that means they live close together that means they are close together <i>lah</i> so you see almost each other almost everyday. | knowledge | elaboration |
| 49 | J | So it's like closer, it's like if you've got any problem that you can tell each other immediately. | knowledge | elaboration |
| 50 | ZW | So, you are saying, among family ... | social | interrupted start |
| 51 | J | If they stay apart ... | social | interrupted start |
| 52 | ZW | Apart from their relatives? | knowledge | clarification |
| 53 | J | Yeah | knowledge | agreement |
| 54 | H | Can we say that because of globalization then there's a lot of traveling? | knowledge | initiation |
| 55 | H | Then for the parents or the children, there's a lack of interaction | knowledge | elaboration |

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| 56 | ZW | Hmmm... globalization | knowledge | repetition |
| 57 | J | What do you mean by globalization, sorry? | knowledge | clarification |
| 58 | SF | Because if the parents are doing business abroad, right, so it's like they'll have less interaction with their family | knowledge | elaboration |
| 59 | ZW | Huh ...? | knowledge | clarification |
| 60 | SF | That means it's the parents and the children-lah. Maybe it's the children who's going abroad to study | knowledge | elaboration |
| 61 | ZW | So, because of globalization, it's recently, right, ... yeah... | social | interrupted start |
| 62 | J | Over the last decade ... but I think it's quite a minority-lah going overseas. | knowledge | nego (contrast) |
| 63 | J | It's only like the quite rich or the above-average families will go overseas. | knowledge | elaboration |
| 64 | T | So, you are coming up with the main points, right? Are you going to go through question two? | mgmt | focus |
| 65 | J | Sure. Later, later. | knowledge | response |
| 66 | J | Or you can say that because of the societal changes in Singapore, right, now the woman, the mother also has to work. | knowledge | initiation |
| 67 | J | So, it's like less time for the children | knowledge | elaboration |
| 68 | J | then it'll develop <i>what huh</i> ... latch-key children <i>what-huh</i> ... situation, right. | knowledge | elaboration |
| 69 | ZW | How do you spell? | knowledge | clarification |
| 70 | J | L-A-T-C-H? | knowledge | response |
| 71 | ZW | How do you say <i>huh</i> ? | knowledge | clarification |
| 72 | J | The mother has to work <i>lor</i> . | knowledge | repetition |
| 73 | J | Then, it's like, because last time, it's like, the society, it was that the mother had to look after the child then the father worked. But now, even the mother has to work <i>lah</i> . | knowledge | elaboration |
| 74 | ZW | Yeah ... so no time to ... | social | interrupted start |
| 75 | J | It would change, I guess, the living standard- <i>lor</i> . | knowledge | elaboration |
| 76 | ZW | Ah.. yeah... okay | knowledge | acknowledgment |
| 77 | J | Just high ... | social | interrupted start |
| 78 | ZW | So no more ... | social | interrupted start |
| 79 | SF | We are deviating from the question. | mgmt | focus |
| 80 | ZW | For the first point, I think, | social | interrupted start |
| 81 | J | No, no, no, the first point is saying because last time they had lots of children so cannot spend more time on each individual one | knowledge | summation |
| 82 | ZW | Ha? | knowledge | clarification |
| 83 | J | You don't mean that <i>meh</i> ? Then what do you mean? | knowledge | clarification |

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| 84 | ZW | No, I mean, the first point, because the family size is small, it's like, that's why family relationship is closer. That one is in the past. Then now it's globalization | knowledge | repetition |
| 85 | J | But you don't talk the past so so long ago <i>what</i> . | knowledge | disagreement |
| 86 | SF | It's also not so long ago, right? | knowledge | nego (argue) |
| 87 | ZW | Yeah...It's something like eighty, eighty ... nineteen eighty ... | knowledge | agreement |
| 88 | J | Nineteen eighty something is not last decade already. 1993 <i>ah</i> , from now. | knowledge | nego (defend) |
| 89 | ZW | Oh...oh... I am still in the past | knowledge | acknowledgment |
| 90 | J | You are living in the past | knowledge | agreement |
| 91 | SF | How about couples are more career-minded? | knowledge | initiation |
| 92 | SF | Not so ... on family | social | interrupted start |
| 93 | H | Like the middle class children. | knowledge | example |
| 94 | SF | They want to have small family. | knowledge | elaboration |
| 95 | ZW | Yeah. | knowledge | acknowledgment |
| 96 | SF | Also small family. | knowledge | repetition |
| 97 | ZW | Then we change the first point – make it career minded. So the new small family <i>lor</i> . Small, so it's like ... | task | planning |
| 98 | H | Actually, it depends, right? | task | planning |
| 99 | J | Okay, first point. | mgmt | focus |
| 100 | ZW | I think my first point, right, my emphasis is still on small size <i>lor</i> whereby the parents they actually pay more attention on their children. | knowledge | repetition |
| 101 | ZW | But also because, it's like, now, right, they are more career-minded, so they tend to have less children now. | knowledge | repetition |
| 102 | ZW | And also the parents, they are educated <i>lah</i> , so they want to give the best to their children. | knowledge | elaboration |
| 103 | ZW | So they actually limit the size, the number <i>lor</i> . | knowledge | elaboration |
| 104 | J | That one I like. | knowledge | acknowledgment |
| 105 | LD | Religion? Would that be another factor? | knowledge | initiation |
| 106 | ZW | Religion? | knowledge | clarification |
| 107 | LD | I mean, for some religion, the family tend to be larger and the family members tend to be closer at each other. | knowledge | elaboration |
| 108 | J | Roman Catholic, is it? For example, the Roman Catholic, right, they believe that they shouldn't have birth control. That's why they have more children. | knowledge | example |
| 109 | J | They only practice the what <i>huh</i> ? The what ... method. | knowledge | clarification |
| 110 | J | Because it's like their religion believe that they should not take contraceptives <i>lah</i> or other birth control method <i>lor</i> . | knowledge | elaboration |

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| 111 | J | So, it's like, they only can, there's only one method, it's the what <i>huh</i> ? I forgot what measure, method thing <i>lah</i> . | knowledge | clarification |
| 112 | J | Because the measure-factor right, because sometimes the woman cannot get the measure, right, so they try to accept it- <i>lah</i> . So it's like ... sometimes the cycle get disrupted so they get pregnant- <i>lah</i> , so the changes of getting pregnant, getting children is higher. | knowledge | elaboration |
| 113 | ZW | It's the ovulation | knowledge | elaboration |
| 114 | J | Ah... yeah | knowledge | agreement |
| 115 | ZW | Yeah. During ovulation period, they should not have any, is it? | knowledge | clarification |
| 116 | J | Ovulation, no, try not to have sex during the ovulation period. | knowledge | elaboration |
| 117 | ZW | Yeah, ah.. yeah. | knowledge | agreement |
| 118 | J | Like that- <i>lor</i> . It's natural rhythm cycle, natural rhythm, something | knowledge | elaboration |
| 119 | J | It's trying to say another factor <i>what</i> . The factor that is ... | social | interrupted start |
| 120 | H | I don't know <i>lah</i> but maybe we can write that point down but I don't think we should use it. | knowledge | disagreement |
| 121 | J | Never mind, just write first. | knowledge | response |
| 122 | ZW | Can we say that ... actually I find that we are actually talking something very general. | mgmt | focus |
| 123 | ZW | But I have another point that actually say that some family relationships actually turn sour because it's like Singapore now right, they emphasize on academic results, that's all. | knowledge | initiation |
| 124 | ZW | So, it's like, parents they tend to be very <i>kiasu</i> . They want their children to actually excel in their result, their work and so on. | knowledge | elaboration |
| 125a 125b | ZW | So, it's like, they actually force their children to work hard and then it's like there's less communication between children and parents <i>lor</i> . It's only like work, and work and work and it's like, how should I say, it's like the mother actually want the children to study hard. | knowledge | elaboration; repetition |
| 126 | LD | Is the logic correct? I mean the mother ask the child to study and study and the relationship should be weaker. | knowledge | clarification |
| 127a 127b | ZW | Yeah, it should. Because I got my friend, right, she's actually giving tuition for a kid <i>lor</i> . It's like the kid, she doesn't really like tuition <i>lor</i> . | knowledge | response; example |
| 128 | SF | Then the mother actually force | knowledge | clarification |
| 129 | ZW | Yeah. That's what I think <i>lor</i> . | knowledge | response |
| 130 | J | You mean the relationship in the past is closer; now it's not closer? | knowledge | clarification |
| 131 | ZW | Hmm..hmmn. In the past, it's closer. | knowledge | agreement |

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| 132 | J | It's closer <i>meh</i> ? I don't think it's closer <i>lor</i> . I don't know <i>lah</i> . Smaller size doesn't mean closer relationship. Okay, sorry, sorry. | knowledge | disagreement |
| 133 | ZW | No, no. It's like, I'm thinking right, this one is close, this one is not close, then which one is close? | knowledge | response |
| 134 | J | Just stick to one <i>lah</i> . | knowledge | response |
| 135 | ZW | So, we stick to is it? Can we actually | social | interrupted start |
| 136 | T | You've got five more minutes left | mgmt | focus |
| 137 | ZW | It's now the trend, right. Is family relationship is very close? | knowledge | clarification |
| 138 | J | Close <i>meh</i> ? In general | knowledge | response |
| 139 | ZW | In general ... | knowledge | clarification |
| 140 | SF | Yes <i>lah</i> . In general, more or less ... | knowledge | agreement |
| 141 | SF | There's general gap <i>lah</i> . | knowledge | initiation |
| 142 | SF | But then, I | social | interrupted start |
| 143 | J | What's the title ... | knowledge | clarification |
| 144 | ZW | Ei, we give a balanced one <i>lah</i> . Generation gap | knowledge | repetition |
| 145 | J | Okay, okay <i>loh</i> . That one can. | knowledge | agreement |
| 146 | ZW | That one can. | knowledge | agreement |
| 147 | SF | Can? | knowledge | clarification |
| 148 | J | Can. | knowledge | agreement |
| 149 | ZW | Generation gap | knowledge | repetition |
| 150a 150b | J | You just give the title generation gap then just give different views for children and parents so there's more question, so to speak. Like you always have arguments with your parents <i>lah</i> . | knowledge | elaboration; example |
| 151 | ZW | You can ... Shall we actually give a balance? | knowledge | initiation |
| 152 | ZW | something like, because in Singapore, right, relationship in Singapore, it's like some of the families are very close, some are like have problems so not close <i>loh</i> . | knowledge | elaboration |
| 153 | ZW | Shall we give some factors that contribute to the close one then some that actually contribute to not so close one. | mgmt | consensus |
| 154 | J | So what are the factors? | mgmt | elicitation |
| 155 | ZW | One is small size then another one because government actually emphasize then we got influenced <i>lah</i> . | knowledge | elaboration |
| 156 | J | Why we got small size in the first place? Because of propaganda, <i>what</i> . | knowledge | elaboration |
| 157 | ZW | Small size, small size | knowledge | repetition |
| 158 | J | Yeah- <i>loh</i> . It's like, those politicians kept on asking people to have, like, smaller families because Singapore is not big enough to accommodate all these people. | knowledge | elaboration |
| 159 | ZW | But that one is during the eighties, right? | knowledge | clarification |

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|--------------|----|---|-----------|----------------------------|
| 160 | SF | Now's the last decade, so it's starting from 1993. | knowledge | agreement |
| 161 | J | So what happens is like that ... | social | interrupted start |
| 162 | ZW | I think partly | social | interrupted start |
| 163a 163b | J | The people already get the idea that okay, have fewer children, better. Maybe it's due to the living standard. | knowledge | elaboration; initiation |
| 164 | ZW | Yeah, living standard and education | knowledge | initiation |
| 165 | J | Level. | knowledge | repetition |
| 166 | ZW | Yeah | knowledge | agreement |
| 167 | J | That is another thing that ... | social | interrupted start |
| 168a 168b | ZW | Ei, can we say that some family members are, the parents are more educated so they actually know how to treasure their children. Unlike in the past <i>lah</i> , whereby the family is quite big, it's quite great, so it's like | knowledge | elaboration; example |
| 169 | J | They don't really give more individual attention. | knowledge | elaboration |
| 170 | ZW | Ah... | knowledge | acknowledgment |
| 171 | T | Another two more minutes and then we'll go to the lab. | mgmt | focus |
| 172 | ZW | Education level, standard of living ... family relationship in Singapore. Hmm.. I say, I think I repeat again-lah, but then I think education also plays a part, right, because it's like we study moral and so on whereby a family relationship is important. This also help to contribute | knowledge | summation |
| 173 | SF | Normally education teaches family relationship | knowledge | elaboration |
| 174 | ZW | Yeah, and also in primary we study the "au-kong" | knowledge | example |
| 175 | J | So how do we write? | knowledge | clarification |
| 176 | ZW | Getting closer relationship between family, family member | knowledge | repetition |
| 177 | T | Okay, I think you can wrap up the discussion and then | mgmt | focus |

F2F 3

| Turn | Std | Utterances | Category | Subcategory |
|------|-----|--|-----------|-------------------|
| 1 | M | Right | mgmt | contact |
| 2 | M | Factors, factors that shape the relationship. | mgmt | focus |
| 3 | M | The factors ... in Singapore. | mgmt | focus |
| 4 | M | What shapes .. that shapes all the relationships like how is it, how your children | mgmt | elicitation |
| 5 | S | It's like ... it's like ... or else you have nothing to say, what. Ah... | social | interrupted start |
| 6 | M | I was thinking of factors like family time, like how much family time you spend together, | knowledge | initiation |
| 7 | M | like ... interaction, like that kind of factors rather than comparing past and present. | knowledge | initiation |
| 8 | XW | You mean quality of time that ... quality and quantity of time ... | knowledge | elaboration |
| 9 | XW | Actually, I should think we can | social | interrupted start |
| 10 | SHU | The relationship itself and then how does all this factors relate to the shaping our family relationships now. | task | requirement |
| 11 | SHU | We discuss about how the family relationships now in Singapore then ... how does all these factors. | task | planning |
| 12 | XW | You mean just give a brief introduction | mgmt | focus |
| 13 | SHU | Yeah, in introduction ... something ...family life | task | planning |
| 14 | XW | So you can start with a heading ... just an introduction | task | planning |
| 15 | SHU | Yeah. | task | planning |
| 16 | S | ... like your first paragraph. After that you'll have to have, like, all the factors about ... | task | planning |
| 17 | XW | Ah ... is that all? | task | planning |
| 18 | SHU | We just want to discuss the factors first. | mgmt | suggest |
| 19 | M | Are you just going to discuss all the points or are you going to do, like, points and introduction and conclusion then ... Yeah... intro we can write ourselves. | mgmt | focus |
| 20 | S | It's what factors actually shape family relationships. | mgmt | response |
| 21 | M | So, you all, do you all have a lot of family time? | knowledge | repetition |
| 22 | SHU | Um...? | knowledge | response |
| 23 | XW | Quite a lot, <i>lah</i> . | knowledge | response |
| 24 | M | Sunday, like, family day. | knowledge | elaboration |
| 25 | XW | Yeah. | knowledge | acknowledgment |
| 26 | S | I don't have a family day. I don't have a family day. Really. | knowledge | response |
| 27 | M | Huh? | knowledge | clarification |
| 28 | S | Oh that reminds me. That's on weekends, not on weekday | knowledge | repetition |

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|----|-----|---|-----------|-------------------|
| 29 | M | Yeah, so have a family | social | interrupted start |
| 30 | S | Okay. | knowledge | acknowledgment |
| 31 | M | Every Sunday, family day. | knowledge | repetition |
| 32 | S | Yeah. | knowledge | agreement |
| 33 | SHU | Mine is weekend. | knowledge | response |
| 34 | S | Saturday, Sunday quite busy. That's obligation. I mean, like, like, actually my family members are ... it's quite difficult to get together. It's very hard. | knowledge | response |
| 35 | SHU | My family also | knowledge | agreement |
| 36 | M | But that's like our of the norm, <i>lah</i> . | knowledge | response |
| 37 | M | It's like, three of us, like, one of the factors which she puts ... during the weekend. | social | interrupted start |
| 38 | S | So, we have the family relationship, family relationship, like | social | interrupted start |
| 39 | XW | I mean, it brings the family closer together when you go out | knowledge | elaboration |
| 40 | S | ... every, like, weekend | knowledge | example |
| 41 | S | Do you want to make it, like, the whole family get together then it's considered family time or you want, like, one-to-one thing so you get more things to write about then you can elaborate on your family time then you can, like, elaborate ... like, | knowledge | clarification |
| 42 | M | I need to ... on family bonding | knowledge | elaboration |
| 43 | S | I, it must, like, must be, like, ... I mean, do you all want to define it in such a sway that the whole family is together then it's family bonding or is it just say, like, you and your mum and that's called family bonding as well? | knowledge | clarification |
| 44 | M | Family reunion? | knowledge | elaboration |
| 45 | XW | That can also be considered as family bonding. | knowledge | agreement |
| 46 | XW | Bonding is family members and family | knowledge | elaboration |
| 47 | S | I don't count that as family. I count that as family members | knowledge | nego (contrast) |
| 48 | XW | So yours is like a whole family that get together | knowledge | clarification |
| 49 | M | Ah... | knowledge | response |
| 50 | XW | You can break it into two sections, what, family and family members | knowledge | repetition |
| 51 | S | So, like, yeah | social | interrupted start |
| 52 | M | You can break it. | knowledge | agreement |
| 53 | M | It's really ... ah ... but ... | social | interrupted start |
| 54 | S | ... like, why not , you want to break it, like | knowledge | agreement |
| 55 | M | every weekend, right, you see, you see, Orchard Road and Suntec and everywhere you walk, a lot of people. | knowledge | example |
| 56 | M | It's family time and, like, it's bonding ... | knowledge | repetition |

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| | | relationship. | | |
| 57 | M | For parent, weekends are the only time that they bond, | knowledge | elaboration |
| 58 | M | whereas for one-to-one, right, people, one-to-one, I don't think it's actually ... also, like, maybe | social | interrupted start |
| 59 | SHU | What's in Singapore, like, | knowledge | clarification |
| 60 | XW | Father works mother stay home | knowledge | response |
| 61 | SHU | All your mother stay at home? | knowledge | clarification |
| 62 | XW | No | knowledge | response |
| 63 | SHU | My mother stays at home | knowledge | response |
| 64 | S | So, I don't think that's typical these days | knowledge | response |
| 65 | XW | That's the traditional type thinking, last decade, | knowledge | elaboration |
| 66 | S | Traditional | knowledge | repetition |
| 67 | M | I think that's why women try to find job. | knowledge | response |
| 68 | M | Factors ... change ... relationship | social | interrupted start |
| 69 | M | Do you think having mothers stay at home affect family relationships? | knowledge | clarification |
| 70 | SHU | To a certain extent, to a certain extent, but depending on what mums | knowledge | response |
| 71 | XW | Mums who stay at home have more time with children compared to those who are working | knowledge | initiation |
| 72 | SHU | They are more free that they can communicate ... right? | knowledge | elaboration |
| 73 | S | It's like my friends ... it's like, like, she don't cook ... everyday going out and play. It's like pretty weird. | knowledge | example |
| 74 | XW | Do you think it's easier to talk to your mum than your dad? | knowledge | clarification |
| 75 | SHU | Yeah, maybe, like, you're closer... closer to your mum | knowledge | elaboration |
| 76 | M | But even with my brother, he's more open with my mum than someone else so, | knowledge | example |
| 77 | XW | Maybe he spends more time at home? | knowledge | clarification |
| 78 | M | Maybe. I mean, my mum works too, <i>loh</i> , like she spends more time talking | knowledge | example |
| 79 | S | Like a bridge, lah, mothers are always a bridge, what, so mum's is the bridge, dads are more ... | knowledge | example |
| 80 | XW | It's like your dad wasn't really not trying to communicate with you, something like that. So you feel closer to your mum | knowledge | elaboration |
| 81 | S | ... it's more, it's the way that has been when something has gone wrong and sit down and talk about it. | knowledge | example |
| 82 | S | Ours is, like, what's wrong with you, why don't you get this right. That kind. | knowledge | example |
| 83 | XW | My mum's like that. | knowledge | agreement |

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| 84 | S | I know. But generally, but I don't really understand what relationship ... what part of relationship | knowledge | clarification |
| 85 | SHU | Example? | knowledge | clarification |
| 86 | S | ... okay. So, weekend, Saturday thing. | knowledge | repetition |
| 87 | XW | If both parents work, then how does it affect relationship? | knowledge | clarification |
| 88 | XW | If you are, like, one weekend touch up one by one then put in general form then put in point generally, we don't go in depth. What could be one scope? But what can give you, what can give you, a lot of content? We can have two factors, like, three factors and run them down, like, | task | planning |
| 89 | T | Five minutes left. | mgmt | focus |
| 90 | SHU | This is not working. | mgmt | response |
| 91 | S | Maybe we should do the other question. I think it's easier. | mgmt | suggest |
| 92 | S | We'll come back to that one. | mgmt | suggest |
| 93 | XW | Yeah. | mgmt | response |
| 94 | S | How to build a strong, resilient family. | mgmt | elicitation |
| 95 | XW | Communication. | knowledge | initiation |
| 96 | S | I think there are many, many factors. You can't just say, like, communication. Communication is very wide, right. | knowledge | nego (contrast) |
| 97 | S | Mothers, mothers are, like, more effective. | knowledge | elaboration |
| 98 | S | Fathers always worry about their work. | knowledge | elaboration |
| 99 | S | Mummy's the one nags, nags, nags. | knowledge | response |
| 100 | XW | Nonstop. | knowledge | elaboration |
| 101 | S | Yeah ... I guess communication is | knowledge | response |
| 102 | SHU | Important | social | interrupted start |
| 103 | XW | With communication, you understand each other | knowledge | agreement |
| 104 | SHU | With the social and economic climate, you trust each other | knowledge | initiation |
| 105 | S | Yeah. | knowledge | agreement |
| 106 | SHU | So, trust and communication? | knowledge | clarification |
| 107 | XW | And bond with each other. | knowledge | initiation |
| 108 | S | I think it's like what you say. I think even if people ..., you should take the time to explain to the person why the point is not valid. Not eh... just end of story. | knowledge | elaboration |
| 109 | XW | To express what you mean. | knowledge | elaboration |
| 110 | S | Yeah. Do you guys tell your mum about stuffs? | social | off task |
| 111 | XW | Sometimes. | social | off task |
| 112 | SHU | Sometimes only. Both parents working then you go home then after dinner then I go do | social | off task |

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| | | my work and they go and do their things. | | |
| 113 | S | So, like, do you tell everything? | social | off task |
| 114 | XW | No. selective telling, selective telling. Not everything, lah, but we try to tell them some of our problems. | social | off task |
| 115 | SHU | But they know that ... | social | off task |
| 116 | M | It's really interesting. If they don't pick up that kind of ... it's, like, you are dating with this guy and they pick up and repeat. | social | off task |
| 117 | S | What do you think, like, the American system? | social | off task |
| 118 | M | They share whatever with their parents. | social | off task |
| 119 | XW | They share things. Eh ... they'd ... in this way, they are closer to their parents. | social | off task |
| 120 | M | Not really, <i>lah</i> . I feel that sometime, I mean, for American family, they don't draw the boundary. They don't define like us; they call parents by names, that kind, which I don't think is quite appropriate. I feel that ... | social | off task |
| 121 | S | But we are moving towards that side, that, you know, Americanized system. | social | off task |
| 122 | M | Okay. But there are certain things we adopt which shouldn't ... I still think, I still think we should keep some of the Asian values. It really limits, like, how much you can accept, like you know, ... | social | off task |
| 123 | S | My mum's like | social | off task |
| 124 | M | My mum's also like that. That's when she'll put down her foot, like, that's a no for me. | social | off task |
| 125 | S | My mum's, like, quite funny. She's like modern yet not modern | social | off task |
| 126 | XW | So, how? | mgmt | focus |
| 127 | M | I think we are diverting. | mgmt | focus |
| 128 | S | No, correct, what. How to build a strong, resilient family in the midst of the prevailing social ... | mgmt | consensus |
| 129 | T | Okay. You've got another two minutes or so. | mgmt | focus |
| 130 | M | Okay. | mgmt | response |
| 131 | S | Do you do things together? What do you guys do with your family during weekend? What do you do that are family? | mgmt | elicitation |
| 132 | SHU | We go out. | social | off task |
| 133 | XW | Just talk. | social | off task |
| 134 | S | Just talk? | social | off task |
| 135 | M | Not really, <i>what</i> . Not necessary go out. | social | off task |
| 136 | SHU | Go out for dinner or | social | off task |
| 137 | XW | Yeah. | social | off task |
| 138 | SHU | And talk | social | off task |
| 139 | M | Just go out for dinner, just | social | off task |
| 140 | S | You don't do that every night? | social | off task |

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| 141 | The rest | No. | social | off task |
| 142 | XW | But you just get to go out, something like that | social | off task |
| 143 | M | Going out together for dinner. | social | off task |
| 144 | XW | We go out every weekend. | social | off task |
| 145 | SHU | Can go out with my elder brother also, what. Every weekend only come back. | social | off task |
| 146 | XW | And then week days we are busy with our own things, lor. So we don't really spend time together. | social | off task |
| 147 | S | Do you used to, like, having holidays together? | social | off task |
| 148 | M | No. For my family, I mean, it doesn't mean go out. It's just have dinner. It's either, normal days it's just okay whatever, some watch tv, some what ... | social | off task |
| 149 | XW | My brother will be always, like, in front of the computer. | social | off task |
| 150 | S | My family day is like a day that we can sit down and talk about things. | social | off task |
| 151 | M | Yeah, like, catch up kind ... keep in touch with each other's life. | social | off task |
| 152 | S | I have that daily with my mum. | social | off task |
| 153 | XW | That's with family members. It's not the whole family. | social | off task |
| 154 | S | But my dad is not back. He comes back only, like, at once every two weeks kind. | social | off task |
| 155 | M | He's working. | social | off task |
| 156 | XW | But when he's back, you make it a point to get together, right? | social | off task |
| 157 | S | Then we sit together, have dinner. | knowledge | response |
| 158 | XW | Then, that's family time, lor. | social | off task |
| 159 | M | It doesn't mean that you sit together and have dinner is family time. But... | social | off task |
| 160 | XW | Sometimes, you don't communicate with each other. | social | off task |
| 161 | S | I don't communicate | social | off task |
| 162 | M | But when we have a debate, that's quite bad. | social | off task |
| 163 | XW | Then, maybe, that's considered your family time. | social | off task |
| 164 | S | Our discussion is, like, weird, man. But anyway, that's not the point. | social | off task |
| 165 | S | I think a family should share, like, share some points, talk about their views. | knowledge | repetition |
| 166 | SHU | Family values. | knowledge | elaboration |
| 167 | S | Yeah, some family values. | knowledge | agreement |
| 168 | M | Maybe it's like pre-planned one, lor, we could just | social | off task |
| 169 | S | No, it's just something, like, okay, | social | off task |
| 170 | XW | We discuss about certain issues that they see | social | off task |

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| | | or heard. | | |
| 171 | S | We don't do that. | social | off task |
| 172 | M | Very weird, I mean, these are things that I might discuss with my family, not my friends | social | off task |
| 173 | SHU | Yeah, yeah. | social | off task |
| 174 | M | Totally new, <i>leh</i> . I mean, like, | social | off task |
| 175 | XW | At least you know that what they are thinking on this issue about. | social | off task |
| 176 | M | But the thing is, right, my dad is, like, sometimes he's on this topic and he wants to win. | social | off task |
| 177 | XW | He don't care about it all? | social | off task |
| 178 | M | Sometime, there's like this stupid argument. I think I let something on for my brother to use, so, he went on this analogy, right. Imagine you have a gun, you left it on the table, someone takes it and go and kill somebody. Whose fault is it? I was, like, I mean, he was saying my brother takes the gun and go kill somebody. Whose fault is it? Of course, my brother is, like, deny and he's, like, say no, it's your fault. What the hell! Why is it my fault? You know, that kind. He insists, you know. Even my mum gets so fed up with him. Okay, that's it, forget it. After that, I was, like, so fed up. | social | off task |
| 179 | XW | Did you argue? Did you like argue your point with hi? | social | off task |
| 180 | M | I tried, I tried and then it's like no, no, it's still your fault. Okay, forget it, my fault. | social | off task |
| 181 | XW | You mean his point is, like, fixed? | social | off task |
| 182 | M | Yes, his opinion is fixed already. | social | off task |
| 183 | S | I would still argue, argue, argue. | social | off task |
| 184 | M | I tried. I did all the way from Bukit Batok to PGP. I would still argue. | social | off task |
| 185 | XW | At least he knows what you are thinking, <i>lor</i> . | social | off task |

F2F 4

| Turn | Std | Utterances | Category | Subcategory |
|------|---------|--|-----------|----------------|
| 1 | Teacher | Are you doing question one? | mgmt | focus |
| 2 | P | Yeah. | mgmt | response |
| 3 | Ena | Once in a week, have like a family day. | knowledge | initiation |
| 4 | P | Like a gathering | knowledge | example |
| 5 | N | Family gathering | knowledge | repetition |
| 6 | Ena | Just to make sure that once a week, they get together because most of the children they go out and don't really spend time at home. So, just to make sure that there's one day that they sit together. | knowledge | elaboration |
| 7 | P | Under point number one. | knowledge | clarification |
| 8 | Ena | Yeah. Need to fine tune a bit. | knowledge | response |
| 9 | P | I think for the family rules, right, they try to compromise, not too strict and not too much freedom. | knowledge | initiation |
| 10 | Ena | Yeah, like strike a good combination. | knowledge | agreement |
| 11 | N | A good combination. | knowledge | agreement |
| 12 | Ena | It's not the parents saying and the children following | knowledge | elaboration |
| 13 | P | Try to tolerate | knowledge | elaboration |
| 14 | N | To be considerate ... | knowledge | elaboration |
| 15 | N | and communication | knowledge | initiation |
| 16 | Ena | Understanding family needs also can be mentioned, <i>lah</i> . | knowledge | initiation |
| 17 | P | Level of trust. | knowledge | initiation |
| 18 | N | Time to raise children – proper time, proper age. Parents raising the children must be at proper time, proper age. | knowledge | elaboration |
| 19 | Ena | What do you mean proper time, proper age? | knowledge | clarification |
| 20 | N | The rules that they may have to come up with. | knowledge | elaboration |
| 21 | P | Yeah, I don't get it. What do you mean by proper time? | knowledge | clarification |
| 22 | N | The age of the children. | knowledge | repetition |
| 23 | P | For example? | knowledge | clarification |
| 24 | N | Like the teenagers, you have to be careful. It's different phrase, different phrase. It's a transition so you need to be careful. | knowledge | example |
| 25 | Ena | Hmmm... | knowledge | acknowledgment |
| 26 | Shirin | At what age? | knowledge | clarification |
| 27 | N | There should be a lot of counseling by the parents. | knowledge | elaboration |
| 28 | T | That's very fast, <i>huh</i> . So many ideas here. | knowledge | response |
| 29 | Ena | Can we take from the passage? | task | requirement |

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| 30 | T | If you take from the passage, you must cite them. | task | requirement |
| 31 | Shirin | Another thing I think is effective communication | knowledge | repetition |
| 32 | P | Actually, all related. | knowledge | response |
| 33 | Ena | Other points that shape the family? | mgmt | elicitation |
| 34 | P | Are we discussing the main ideas or just the sub? | mgmt | focus |
| 35 | LX | How about care about others? Care about other members. | knowledge | initiation |
| 36 | Ena | Care and concern | knowledge | repetition |
| 37 | P | Hmmm... | knowledge | acknowledgment |
| 38 | N | Parents can play with the children like if you | knowledge | initiation |
| 39 | Ena | That's a new point already. I don't know where this point fits. Basically, it's just concern. | knowledge | response |
| 40 | P | How to give concern to the children? | knowledge | clarification |
| 41 | P | Can concern we can put it maybe as giving encouragement. | knowledge | repetition |
| 42 | Ena | Maybe can branch out also. | task | planning |
| 43 | P | Can branch out. | task | planning |
| 44 | T | You have about five minutes left. | mgmt | focus |
| 45 | P | Now, question two. | mgmt | focus |
| 46 | Ena | I think this one is more or less the same. | mgmt | response |
| 47 | P | It's the same, right? About the view. | mgmt | consensus |
| 48 | Ena | But you must say, right. | mgmt | response |
| 49 | Ena | How to build a strong relationship, must be a bonding thing | knowledge | initiation |
| 50 | N | The parents should change their current mindset. | knowledge | initiation |
| 51 | P | I think we should take into account these two – the social and economic climate. | knowledge | initiation |
| 52 | Ena | Economic climate. We should ... them like | knowledge | repetition |
| 53 | P | Yeah, correct. It's like don't be | social | interrupted start |
| 54 | Ena | When the times are bad, children should learn to | social | interrupted start |
| 55 | P | Cannot neglect the family, <i>lah</i> , although you are busy with your work | knowledge | initiation |
| 56 | Ena | And like also don't ask too much from the parents | knowledge | initiation |
| 57 | P | Hmmm... understand parents' situation | knowledge | elaboration |
| 58 | Ena | Parents should not ... What's the main point? | knowledge | clarification |
| 59 | N | It's like they are ... children | social | interrupted start |
| 60 | Ena | Okay | knowledge | acknowledgment |
| 61 | N | The parental ... will influence the child's mind. | knowledge | initiation |
| 62 | Ena | Social | knowledge | repetition |

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| 63 | P | How about economic one? Social ... | knowledge | clarification |
| 64 | Ena | All these are economic, social is | social | interrupted start |
| 65 | Shirin | Relationship | knowledge | repetition |
| 66 | P | Social, is it? Try to interact with each other, I mean, family interaction among siblings or parents. | knowledge | initiation |
| 67 | Ena | Interaction | knowledge | repetition |
| 68 | P | Interaction and trust | knowledge | elaboration |
| 69 | N | interaction | knowledge | repetition |
| 70 | Ena | When you say current social climate, | social | interrupted start |
| 71 | Ena | Parents working | knowledge | elaboration |
| 72 | P | Yeah, so? | knowledge | clarification |
| 73 | Ena | So maybe you should, it seems, like, if got problems, encourage the children to tell the parents. | knowledge | initiation |
| 74 | P | So, how do you say that? Yeah, I get what you are saying | knowledge | clarification |
| 75 | N | Parents should encourage communication. | knowledge | repetition |
| 76 | Ena | I think it's interaction. | knowledge | repetition |
| 77 | P | Interaction | knowledge | repetition |
| 78 | LX | Children should be optimistic about difficulty | knowledge | elaboration |
| 79 | Ena | Should really teach them to be optimistic about what's happening | knowledge | repetition |
| 80 | N | In face of crisis | knowledge | elaboration |
| 81 | T | Okay. I think we should wrap up the discussion and go to the lab | mgmt | focus |

F2F 5

| Turn | Std | Utterances | Category | Subcategory |
|------|-------|--|-----------|-------------------|
| 1 | C | Okay, which one would you all like to discuss? First one or second one, or shall we discuss both? | mgmt | elicitation |
| 2 | PL | I think discuss both. | mgmt | response |
| 3 | C | Okay. The first one first. | mgmt | consensus |
| 4 | C | My stand is to oppose the views. I think it's not right, <i>lah</i> , to use monetary rewards. | knowledge | initiation |
| 5 | C | There's a lot of complications. Too many complications will happen. | knowledge | initiation |
| 6 | C | Like, for example, the donor of poor families, right, they actually, want, yeah, want their family members to | social | interrupted start |
| 7 | PL | Pass away fast so as to get the money. | knowledge | elaboration |
| 8 | C | Or some patients may try to put an end to their lives so that their family can get the money by donating the organ. | knowledge | elaboration |
| 9 | PL | But, come to think of it, right, if a patient die and then the family member can actually sell the organs and then get some money out of it. | knowledge | elaboration |
| 10 | W | It's a good thing to do, <i>lah</i> . | knowledge | judgment |
| 11 | C | The problem is if we think of it that way, right, then we're like trivializing the value of human body if we just take it as another entity. | knowledge | nego (contrast) |
| 12 | PL | We are actually not trivializing human body. | knowledge | disagreement |
| 13 | PL | We are also saving the other person's life, what. The other way, <i>lah</i> . | knowledge | nego (contrast) |
| 14 | C | Yeah. Probably we can consider all these points. | knowledge | acknowledgment |
| 15 | PL | We can only oppose or agree. | task | requirement |
| 16 | C | Yeah, but we don't need to agree with each other. | task | requirement |
| 17 | PL | Yeah, <i>lah</i> . | task | requirement |
| 18 | C | So, what do you think? | mgmt | elicitation |
| 19 | W | I am not sure I understand. What we say, right, if we de-value the human life. | knowledge | clarification |
| 20 | C | Yeah. There'll be a lot of complications. | knowledge | repetition |
| 21 | PL | Probably also some poor families, maybe they want to have more children and then so that they can, like, | knowledge | elaboration |
| 22 | W & C | Yeah. | knowledge | acknowledgment |
| 23 | PL | Then make them suffer and then to get, sell their organs and then | knowledge | elaboration |
| 24 | W | Not everyone will sell their children. | knowledge | disagreement |

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| 25 | PL | Yeah, not everyone will sell their own children's human organs even though they, they, they | knowledge | agreement |
| 26 | C | And I think for those family who are donating their own organs on their own accord, right, giving them money is not a very good thing to do, <i>lor</i> , because it's making their actions less noble. | knowledge | initiation |
| 27 | C | Some families just want to donate by good will so if you give them money, it's like insulting their action, that they are after the money. | knowledge | elaboration |
| 28 | PL | But if he still donates, right, like just sell it, like, if you don't want to donate, you might just sell it. | knowledge | nego (contrast) |
| 29 | PL | Sounds like this is more difficult to write. | task | requirement |
| 30 | C | It's definitely and anyway, | task | requirement |
| 31 | C | I think even if you are using financial incentives, probably another point to consider is that probably ... country the donations because basically why people don't want to donate is because of intercultural reasons, <i>lah</i> . | knowledge | initiation |
| 32 | C | That's usually, like for the Chinese, if you donate your organs, next time you'll become a ghost, not complete yourself, cannot get reincarnated, that kind. | knowledge | example |
| 33 | PL | That's true. | knowledge | agreement |
| 34 | C | So, it's probably like not very good to give so it's not a good idea to have this monetary reward. | knowledge | repetition |
| 35 | PL | Probably we should go on to the second question. | mgmt | focus |
| 36 | C | Yeah. Is there any other way, <i>ah</i> ? | mgmt | elicitation |
| 37 | C | Actually, there's zeno-transplant, right? From animals. | knowledge | initiation |
| 38 | PL | Animals. | knowledge | repetition |
| 39 | C | Yeah, there are cases of that. | knowledge | agreement |
| 40 | C | In a way, it's more easily available. | knowledge | elaboration |
| 41 | PL | Yeah. | knowledge | acknowledgment |
| 42 | C | Then, why, like, there are still so many people die of this? | knowledge | clarification |
| 43 | PL | Not compatible. | knowledge | response |
| 44 | C | Not compatible, limited also, <i>lah</i> . | knowledge | elaboration |
| 45 | C | I think there's also another way you can harvest the organs using stem cell. | knowledge | initiation |
| 46 | PL | Yeah, cloning. | knowledge | elaboration |
| 47 | C | You mean cloning the organ? | knowledge | repetition |
| 48 | PL | Is the percentage of this cloning very very successful, right? | knowledge | clarification |
| 49 | C | It's still under research. | knowledge | response |

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| 50 | C | That's why and it's a lot of other ethical issues, <i>lah</i> . | knowledge | elaboration |
| 51 | PL | The embryo because it's very fine and the | knowledge | elaboration |
| 52 | PL | Because you are taking from your own cell, right? | knowledge | clarification |
| 53 | W | Yeah. | knowledge | agreement |
| 54 | PL | To make it into an organ. | knowledge | elaboration |
| 55 | PL | So, it's definitely, it's compatible. | knowledge | elaboration |
| 56 | C | It'll solve the problem of shortage, <i>lah</i> , because it can | knowledge | elaboration |
| 57 | PL | It'll definitely, yeah, but of course, it's not ethical issues. | knowledge | agreement |
| 58 | PL | Yeah, some people are very idealistic because like the issue, actually, what is it huh? Is it you are just cloning the organ? It's not the whole human. | knowledge | elaboration |
| 59 | C | Yeah, but some people would claim that, some very ... people, they claim that organs come from the body, what, so you are in the same, you are like diminishing the value of body, you are producing, like mass production like that so it's not sacred anymore | knowledge | nego (contrast) |
| 60 | PL | Oh... organ transplant. Actually, this is a really a very good idea. | knowledge | repetition |
| 61 | PL | Is it what you call therapeutic cloning in the State, <i>ah</i> ? | knowledge | clarification |
| 62 | C | Therapeutic cloning? | knowledge | clarification |
| 63 | PL | Yeah, therapeutic cloning. | knowledge | repetition |
| 64 | PL | I read about this. | knowledge | reference (ext) |
| 65 | PL | I think it's a very good idea. | knowledge | judgment |
| 66 | PL | It's just that it's not, it's still under research, right? | knowledge | clarification |
| 67 | C | Ah... other alternatives? | mgmt | elicitation |
| 68 | PL | Animals' organs. | knowledge | repetition |
| 69 | C | Also a lot of issues, <i>lah</i> . | knowledge | response |
| 70 | C | Then people say that we are human beings. | knowledge | elaboration |
| 71 | PL | Yeah? | knowledge | clarification |
| 72 | C | Using animals that kind of thing and that we are sacrificing animals, too selfish, you know, that kind of thing. | knowledge | elaboration |
| 73 | W | We will usually use pig's | knowledge | elaboration |
| 74 | PL | What about other solutions like using man-made, man-made equipment or things like that? | knowledge | initiation |
| 75 | C | There are, actually, they are trying to. | knowledge | agreement |

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| 76 | C | I was reading a report somewhere last year that they are trying to, there's this guy who was trying to manufacture a heart. He was trying to duplicate a human heart but finally there's a lot of medical problems, lah, because our body is very dynamic, you see. | knowledge | example |
| 77 | PL | Yeah. | knowledge | acknowledgment |
| 78 | C | It's something about that ... but it's under research. | social | interrupted start |
| 79 | C | It's like a pace maker; it's a very good example. | knowledge | example |
| 80 | C | The heart pacemaker, it regulates the heart beat. | knowledge | elaboration |
| 81 | PL | Oh... | knowledge | acknowledgment |
| 82 | C | Artificial pacemaker. Just plug it in your body. | knowledge | elaboration |
| 83 | C | I think you can say, <i>lah</i> , like man-made organ, cloning, therapeutic cloning and organs from animals, <i>lor</i> . | knowledge | summation |
| 84 | PL | There are three but as you think that human transplant is still the best, <i>lah</i> . It's the best solution. | knowledge | judgment |
| 85 | C | Actually, yeah, it's the best solution from, in the sense that it is the one with the least ethical and moral issues but of course, there are medical problems, lah, because there may be rejection of the tissue by the donors' cells. | knowledge | agreement |
| 86 | PL | This is all bio | knowledge | response |
| 87 | C | Sometimes not compatible, the tissues are not compatible so it will, there are a lot of cases where people after they transfer their organs back, they actually have many medical complications and in the end they die. | knowledge | initiation |
| 88 | W | Not compatible. | knowledge | repetition |
| 89 | C | And to begin with, right, it's very hard to find a compatible organ and who wants to donate it to you. | knowledge | elaboration |
| 90 | C | It's very hard, it's very difficult. | knowledge | repetition |
| 91 | PL | It is still the best, right, because if you use animals' organs, it's still the same, <i>what</i> . | knowledge | agreement |
| 92 | C | Yeah. | knowledge | agreement |
| 93 | PL | And the issue will ... | social | interrupted start |
| 94 | C | Reject, but this is ethical issues, <i>lor</i> , because they are the persons who donate so apparently in the ideal situation, of course, you want to use a ... organ transplant but there are many other problems that exist, <i>lor</i> . | knowledge | elaboration |
| 95 | PL | That's all, I guess. | mgmt | focus |

F2F 6

| Turn | Std | Utterances | Category | Subcategory |
|------|---------|---|-----------|-------------------|
| 1 | CS | One or two? | mgmt | consensus |
| 2 | A | One-lah | mgmt | response |
| 3 | CS | Two, I think two-lah. I think two is the one | mgmt | response |
| 4 | A | Let's do one. | mgmt | response |
| 5 | FY | You can press already. | knowledge | response |
| 6 | A | Press already. | social | off task |
| 7 | FY | Huh? You press already? | social | off task |
| 8 | | <i>Laughter</i> | | |
| 9 | A | Everybody say hello. | social | off task |
| 10 | | <i>Hello!</i> | | |
| 11 | A | Do we agree or not? | mgmt | consensus |
| 12 | FY | Actually, can do for both, <i>what</i> . | mgmt | response |
| 13 | CS | Just brainstorm, lah and see what ideas do we have first. | mgmt | suggest |
| 14 | A | Then se list down the pros and cons, <i>lah</i> . | mgmt | suggest |
| 15 | CS | Ah. | social | interrupted start |
| 16 | A | So, we get more organs, <i>lah</i> . Right? | knowledge | initiation |
| 17 | CS | Hmmm... | knowledge | acknowledgment |
| 18 | FY | Get more organs. | knowledge | repetition |
| 19 | CS | Some more? (<i>referring to any other points/ideas</i>) | mgmt | elicitation |
| 20 | FY | Can help the | social | interrupted start |
| 21 | A | What are we doing? | mgmt | focus |
| 22 | CS | Whatever, <i>lah</i> . | mgmt | response |
| 23 | CS | Just that to increase the | social | interrupted start |
| 24 | Teacher | Have you decided which question you want to discuss? | mgmt | focus |
| 25 | A | One. | mgmt | response |
| 26 | CS | Number one. | mgmt | response |
| 27 | Teacher | Number one? Okay. | mgmt | response |
| 28 | CS | Yeah. | mgmt | response |
| 29 | A | It's ethically wrong also. Right? | knowledge | initiation |
| 30 | FY | For some people | knowledge | response |
| 31 | CS | Now in Singapore, if you didn't submit the form. After your death, right, they ensure they get your body. | knowledge | initiation |
| 32 | A | No, <i>lah</i> . Unless you submit your form, you will be released. | knowledge | nego (argue) |
| 33 | CS | It's, like, if you don't submit, you'll be cut. | knowledge | nego (defend) |
| 34 | FY | No, what. If you submit then won't cut, submit then you will get cut. | knowledge | nego (argue) |

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|----|----|---|-----------|-------------------|
| 35 | A | Submit then you will get cut. | knowledge | agreement |
| 36 | FY | Ah. | knowledge | acknowledgment |
| 37 | CS | No. | knowledge | disagreement |
| 38 | FY | This is for convenience sake, <i>what</i> . | knowledge | nego (argue) |
| 39 | A | You must say that you want to donate, <i>what</i> . | knowledge | repetition |
| 40 | CS | I think according to ... | social | interrupted start |
| 41 | FY | Not very sure. | knowledge | lack knowledge |
| 42 | A | But never mind, <i>lah</i> . | knowledge | response |
| 43 | A | That one ... What's the pros and cons. | mgmt | elicitation |
| 44 | A | Any ... if you donate your organs, you won't get the money, right? Your family will get it. | knowledge | initiation |
| 45 | A | Then, that could be the pros, <i>lah</i> . | task | planning |
| 46 | A | Financial help to family. | knowledge | repetition |
| 47 | FY | Financial help to family. | knowledge | repetition |
| 48 | A | Yeah, actually, ... but if you actually start selling organs, then no one will want to volunteer anymore. | knowledge | initiation |
| 49 | CS | If you have ... | social | interrupted start |
| 50 | A | No, I mean ... then because of that, right, then ... they can no longer get the organs, right? | knowledge | elaboration |
| 51 | A | I mean, of course, <i>lah</i> . There will still be some people who will donate because you ... | social | interrupted start |
| 52 | CS | Okay, <i>lah</i> . I think that will be great for | social | interrupted start |
| 53 | E | ... will be more expensive the organs | knowledge | elaboration |
| 54 | CS | Okay, <i>lah</i> . | knowledge | acknowledgment |
| 55 | A | Like wine like that. | knowledge | example |
| 56 | A | Some more? | mgmt | elicitation |
| 57 | A | Anyway, how do you actually ... | social | interrupted start |
| 58 | E | Who pays them? | knowledge | clarification |
| 59 | A | The person who wants it, right? | knowledge | response |
| 60 | FY | Seems like the government buy, one. | knowledge | elaboration |
| 61 | CS | Yeah. | knowledge | acknowledgment |
| 62 | FY | I think it's the hospital. They set .. | knowledge | elaboration |
| 63 | CS | Then they sell depending on whether the patient is poor or not. I mean, they sell it according to if the patient is poor. | knowledge | elaboration |
| 64 | A | They set a price. | knowledge | elaboration |
| 65 | CS | Yeah. For those free one must ... | social | interrupted start |
| 66 | A | I don't think they care about the people. | knowledge | disagreement |
| 67 | A | If they already bought the organs, then if you want it then you have to pay for it, <i>lor</i> . | knowledge | repetition |
| 68 | E | The government gives away for free, isn't it? | knowledge | clarification |
| 69 | CS | I mean if you are poor then it's free, <i>lah</i> . | knowledge | elaboration |

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|-----|----|---|-----------|-------------------|
| 70 | A | If the hospitals are the ones that are giving, the ones that receiving don't need to pay. It should be free, right? | knowledge | clarification |
| 71 | FY | Agree. | knowledge | agreement |
| 72 | A | Using money, unless ... | social | interrupted start |
| 73 | E | You say about .. you don't want us receiving money | knowledge | clarification |
| 74 | A | Actually, it doesn't make sense. | knowledge | response |
| 75 | CS | They didn't mention | social | interrupted start |
| 76 | A | But then again | social | interrupted start |
| 77 | E | When you give your organ, then you get money, is it? | knowledge | clarification |
| 78 | E | So, the organs will be there, <i>lah</i> for the dying person. | knowledge | elaboration |
| 79 | CS | Yeah. | knowledge | agreement |
| 80 | A | Then there won't be any ... any. | social | interrupted start |
| 81 | A | What about black market? | knowledge | initiation |
| 82 | CS | Ah... | knowledge | acknowledgment |
| 83 | E | You sell to the unauthorized organization and you get money. | knowledge | elaboration |
| 84 | A | Any more points? Even though, right, | mgmt | elicitation |
| 85 | CS | Now we can't be sure whether people will get it or not. | knowledge | elaboration |
| 86 | CS | If we want to write more, then we say ... | task | planning |
| 87 | A | How can we say that the poor get free and the rich must pay? | knowledge | clarification |
| 88 | CS | Then the cons ... we | social | interrupted start |
| 89 | FY | Maybe like this | social | interrupted start |
| 90 | CS | Those patients we say, one, discover ... | social | interrupted start |
| 91 | A | Oh... oh... oh... It means if you want to donate organs, right, you must | social | interrupted start |
| 92 | CS | Some people will bluff. | knowledge | initiation |
| 93 | A | ... to sell the organs, <i>lah</i> . You do not care whether the organs are fresh. | knowledge | elaboration |
| 94 | CS | What do you mean by that? | knowledge | clarification |
| 95 | A | If it becomes less, | social | interrupted start |
| 96 | E | We can take the examples from the article | knowledge | reference (ext) |
| 97 | CS | Yeah. | knowledge | agreement |
| 98 | A | Anyway, we do not have to say we are ..., right? | social | interrupted start |
| 99 | FY | Our views. | knowledge | elaboration |
| 100 | CS | Our views, right? | knowledge | clarification |
| 101 | CS | Based on our views then | knowledge | repetition |
| 102 | FY | The pros and cons ... Are there any | mgmt | elicitation |
| 103 | A | So our conclusion is | mgmt | elicitation |
| 104 | FY | Huh? | mgmt | response |
| 105 | A | What's our conclusion? | mgmt | elicitation |

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|--------------|---------|---|-----------|---------------------------------|
| 106 | FY | Encourage people to sell | knowledge | initiation |
| 107 | CS | It's good to save a life, <i>lah</i> . | knowledge | elaboration |
| 108 | CS | So the poor ... | social | interrupted start |
| 109 | FY | Better than wait for the organs to come | knowledge | agreement |
| 110a 110b | A | Maybe, actually, it totally depends on the country. If you take Singapore, then definitely there won't be people ..., there won't be illegal. I mean, there will only be the incentives part, <i>lah</i> . Then, maybe they can consider it, <i>lah</i> . I don't think people will ... whatever. | knowledge | elaboration; example |
| 111 | CS | China, <i>lah</i> . China definitely, <i>what</i> . | knowledge | example |
| 112 | A | Why China? | knowledge | clarification |
| 113 | CS | In any country, <i>what</i> . Now we write our own | knowledge | response |
| 114 | A | Why China? | knowledge | clarification |
| 115 | CS | Or Hong Kong, <i>lah</i> . | knowledge | example |
| 116 | E | Are we supposed to, like, write one country? | task | requirement |
| 117 | CS | We write one. | task | requirement |
| 118 | A | I think we are supposed to discuss about respective country. | task | requirement |
| 119 | Teacher | You have one more minute left for your discussion. | mgmt | focus |
| 120 | CS | Definitely China. | knowledge | repetition |
| 121 | A | Okay, <i>lah</i> . Then, we ... | knowledge | agreement |
| 122 | CS | I think they have a lot of | social | interrupted start |
| 123 | A | They must have technique. If they poison the person then they must | knowledge | elaboration |
| 124 | A | But you cannot | social | interrupted start |
| 125a 125b | FY | For what? Huah! Most expensive liver ... Other than that, cannot already, <i>lah</i> . Lungs cannot, <i>lah</i> . | knowledge | clarification; response |
| 126 | A | I think we have come to the stage that whether you agree or not depends on the country. | knowledge | repetition |
| 127 | A | She's (referring to the teacher) definitely going to say no to all countries. | task | requirement |
| 128 | E | I mean, not everything you have to give money. | knowledge | clarification |
| 129 | E | There are other ways, right? You can easily | knowledge | clarification |
| 130 | CS | Like what? | knowledge | clarification |
| 131 | E | Like self volunteers. | knowledge | initiation |
| 132a 132b | FY | Some people might think if you donate, you die not as a whole body. Anyway, if you are a ghost, <i>lah</i> . The Chinese believe | knowledge | nego (contrast); elaboration |
| 133 | A | Chinese also cannot donate, <i>what</i> . | knowledge | elaboration |
| 134 | E | So you buy with money, <i>lah</i> . | knowledge | repetition |
| 135 | CS | Encourage more people to | social | interrupted start |

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|-----|---------|--|-----------|-------------|
| 136 | A | Why don't we discuss about other points instead of ... getting money? There are other other methods? | mgmt | suggest |
| 137 | E | Like benefits. | knowledge | initiation |
| 138 | A | What about medical benefits? Free for family members? | knowledge | elaboration |
| 139 | Teacher | Okay, let's stop our discussion | mgmt | focus |

F2F 7

| Turn | Std | Utterances | Category | Subcategory |
|------|-----|--|-----------|-------------------|
| 1 | CL | I think I won't agree, <i>lor</i> , on using monetary rewards. | knowledge | initiation |
| 2 | CL | They are trying to exploit poor people. | knowledge | initiation |
| 3 | CL | It's like, you know now, really they are kidnapping children, just to chop off their hands to be beggars as a source of income. | knowledge | initiation |
| 4 | CL | The children are kidnapped then their organs are taken. So, | knowledge | elaboration |
| 5 | QY | So, if you are going to put in this scheme, right, maybe there'll be ways... | social | interrupted start |
| 6 | J | To encourage kidnappers then they'll kidnap kids or to kidnap anybody then kill them to donate off their organs. | knowledge | initiation |
| 7 | QY | I think we should create awareness for voluntary organ donation. | knowledge | initiation |
| 8 | J | I mean, when it becomes legalized, right, they maybe make it ... the sales of organs. | social | interrupted start |
| 9 | J | It's like, you know, they don't do it through the legal sources, like, it's some syndicate capture these people. | knowledge | elaboration |
| 10 | J | Through them get organs and then sell to you since sales of organ is legal | knowledge | elaboration |
| 11 | QY | I thought it's only for those brain dead patients. | knowledge | nego (contrast) |
| 12 | CL | Yeah, I think for the family of those brain dead patients, they can, they are allowed to, allowed to sell, <i>lah</i> . | knowledge | agreement |
| 13 | CL | They are authorized. | knowledge | repetition |
| 14 | CL | What I view is that probably from the legal point of view, the government point of view is that only the brain dead people may abuse it. | knowledge | elaboration |
| 15 | CL | Because there are this kind of people around so it's like probably those family will with the quack doctors, kidnap someone ... | knowledge | example |
| 16 | ZY | Whoa are those who can give permission? | knowledge | clarification |
| 17 | J | It's only family members. | knowledge | response |
| 18 | ZY | Yeah. Before we give to people, we should check where these organs are from. | knowledge | elaboration |
| 19 | CL | So you are saying we should check? | knowledge | clarification |
| 20 | J | But it's very hard to check, you know, because | knowledge | nego (contrast) |
| 21 | CL | Perceived from the legal side end, perceived everybody to be ..., I mean, | social | interrupted start |
| 22 | QY | Should be some way... they are some people who are trying to take money from people | knowledge | initiation |
| 23 | J | Some relative | knowledge | example |
| 24 | J | Or some buyer will get from black market, | knowledge | example |

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|----|----|---|-----------|-------------------|
| 25 | J | try to make it such that the person might be because of suicide or something like that. | knowledge | elaboration |
| 26 | QY | But then it's like the "internal affairs", lah? | knowledge | example |
| 27 | CL | It becomes like a murder, right? | knowledge | clarification |
| 28 | J | You make the murder appear like it's a suicide so that they take the organs and sell | knowledge | elaboration |
| 29 | CL | And then it's going to be like discrimination. | knowledge | elaboration |
| 30 | J | Yeah, people get lots | social | interrupted start |

| Turn | Std | Utterances | Category | Subcategory |
|------|---------|---|-----------|-------------------|
| 1 | SZ | All these measures, <i>lah</i> , they are not mature. | knowledge | judgment |
| 2 | R | Mature? | knowledge | clarification |
| 3 | SZ | All these measures, not mature enough, <i>lah</i> . | knowledge | repetition |
| 4 | R | Mature? | knowledge | clarification |
| 5 | SZ | Quite new in the world, <i>lah</i> . I mean, it's not like, ah..., I didn't hear much success for cases, <i>lah</i> . | knowledge | elaboration |
| 6 | SZ | I mean, using cloning. | knowledge | initiation |
| 7 | R | But why do you want to consider question two? | mgmt | focus |
| 8 | R | As in, okay, do you think using financial rewards, is it not ethical? Is it wrong? | mgmt | elicitation |
| 9 | SZ | No, I don't think it's wrong, <i>lah</i> . | knowledge | response |
| 10 | R & AD | I think it's wrong. | knowledge | disagreement |
| 11 | R | I don't ... just like to support our arguments. | social | interrupted start |
| 12 | R | Actually, can balance the thing because if we answer question two. There's how many alternatives do you want? | task | planning |
| 13 | AD | Possible alternatives, <i>what</i> . | task | planning |
| 14 | AD | It doesn't mean that it's already, like, taken place as in it's successful. | knowledge | elaboration |
| 15 | R | Successful? | knowledge | clarification |
| 16 | AD | I didn't mean that the alternatives must be already taken place in the society. | mgmt | consensus |
| 17 | Teacher | You are saying question two, right? | mgmt | focus |
| 18 | AD | Yeah. Is it a possible alternative, like, zeno-transplantation actually haven't been made really successful but can we write about that? | knowledge | clarification |
| 19 | Teacher | Yes, you can but that means you have to explain what this possible alternative is and then you have to think about the considerations that, I mean, the medical issues involve, ethical or moral issues involved. | knowledge | response |
| 20 | AD | Do you think that using animals' organs is not correct? | knowledge | clarification |
| 21 | R | What you about ... the bones? | knowledge | clarification |
| 22 | SZ | It depends, <i>lah</i> , on whether you allow the organs to enter the free market. | knowledge | elaboration |
| 23 | SZ | The government puts down the restriction, only give a certain money to those who donate the organs, <i>lah</i> . | knowledge | elaboration |
| 24 | SZ | To those whose family members who are dying, whose got a member dying. | knowledge | elaboration |
| 25 | SZ | It's just a comfort, <i>lah</i> . | knowledge | elaboration |

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|----|----|--|-----------|-------------------|
| 26 | SZ | I mean, it's mainly such a strong incentive to cultivate a free market for organs. | knowledge | elaboration |
| 27 | SZ | Of course, the market, those selling and buying the organs, right, it's just financial strategies to have an organ market or just to make people more willing to donate their organs, <i>lah</i> . | knowledge | elaboration |
| 28 | SZ | It's still donation, <i>lah</i> . | knowledge | repetition |
| 29 | R | I also think that the number of those are increasing. | knowledge | elaboration |
| 30 | R | I mean, the number of patients who look for organ transplant. | knowledge | repetition |
| 31 | R | So the need for organ transplant is very demanding, <i>lah</i> , so like, even if we clone or let's say question two, find another alternatives, we also have to consider the ethical issues. | knowledge | elaboration |
| 32 | R | It may not be so ethical for other people also. | knowledge | clarification |
| 33 | R | You know, cloning and stuff. | knowledge | repetition |
| 34 | SZ | Cloning. | knowledge | repetition |
| 35 | SZ | Sometime, transplant of organs from animals is not so controversial. | knowledge | repetition |
| 36 | SZ | It still needs a few years to cultivate. | knowledge | elaboration |
| 37 | SZ | I think I heard one of the success case is ... cannot remember, <i>lah</i> , I think there's one or two transfer animal organs to human body. | knowledge | example |
| 38 | AD | It's not yet successful, <i>what</i> . | knowledge | disagreement |
| 39 | AD | It'll only last for a few days then it fails, <i>lor</i> . | knowledge | elaboration |
| 40 | SZ | I think it can use the gene ... to, like, animals to alter genes, <i>lah</i> . | knowledge | elaboration |
| 41 | AD | Question one about financial incentives, we can say that ... as in they are not trying to save people like as in because they want to be kind and generous but it's because of the money. | social | interrupted start |
| 42 | R | So, you disagree with the financial incentives? | mgmt | elicitation |
| 43 | SZ | No, <i>lah</i> . | knowledge | repetition |
| 44 | SZ | Why people are not willing to do it, they are afraid. | knowledge | initiation |
| 45 | R | Even though they are interested? | knowledge | clarification |
| 46 | SZ | Yeah. People's mind set may change, <i>lah</i> . | knowledge | elaboration |
| 47 | R | What do you mean? | knowledge | clarification |
| 48 | SZ | If you give financial incentives, you will encourage more people to donate organs. | knowledge | elaboration |
| 49 | R | It's effective. | knowledge | judgment |
| 50 | SZ | It's effective, <i>lah</i> . | knowledge | agreement |
| 51 | R | Even if it means that you are exploiting people? | knowledge | clarification |
| 52 | R | So, if that's the case, why ... we continue to ... | social | interrupted start |

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|----|----|---|-----------|-----------------|
| 53 | R | I think we should decide which one we want to discuss, I mean, focus on one or two because it's quite hard to ... have a lot of | mgmt | focus |
| 54 | AD | But I think I'd prefer to do question one. | mgmt | response |
| 55 | AD | You, <i>leh?</i> | mgmt | consensus |
| 56 | R | Okay, lah, because we can also say both sides of this question one so don't have to be on one side only, <i>lah</i> . | mgmt | response |
| 57 | R | So just now for not supporting this thing is because crafting people's mind. | knowledge | clarification |
| 58 | AD | Then also people exploiting the people. | knowledge | repetition |
| 59 | SZ | Sorry, what's the first point? | knowledge | clarification |
| 60 | R | Collecting people's money, like money, I don't know, like ethical issue here, I also don't know, like willingly. | knowledge | repetition |
| 61 | SZ | You mean, if people are willing to donate, you are uncomfortable, <i>ah?</i> | knowledge | clarification |
| 62 | R | Uncomfortable? | knowledge | clarification |
| 63 | SZ | What do you mean by craft people's mind? | knowledge | clarification |
| 64 | AD | Maybe without the incentives to donate organs willingly because for incentives maybe those, like, initially do not wish to donate because of the money then donate. | knowledge | elaboration |
| 65 | R | Then to support would be ... effective if we don't consider ethical moral issue? | knowledge | clarification |
| 66 | R | But sometimes, right, even if you offer a lot of money, some people still refuse to ... there are some cases, right? | knowledge | nego (contrast) |
| 67 | SZ | If you have financial incentive, some people are ... making money, <i>lor</i> . | knowledge | elaboration |
| 68 | SZ | Actually, it's depending on experiment, <i>lor</i> , as described in the passage, <i>lah</i> . | knowledge | elaboration |
| 69 | SZ | Through experiment, people don't know, actually for financial advantage, the quantity, I mean, the amount of money to give is very important. | knowledge | elaboration |
| 70 | SZ | It'll decide how large, I mean, how many people will be doing it, <i>lah</i> . | knowledge | elaboration |
| 71 | SZ | Actually, for financial institute, there are more people doing it. | knowledge | elaboration |
| 72 | SZ | Is it free market or a form of black market, <i>lah</i> . | knowledge | elaboration |
| 73 | SZ | Quite hard to say so I mean, amount of financial advantage is very important, <i>lah</i> . | knowledge | repetition |
| 74 | AD | What do you mean black market? | knowledge | clarification |
| 75 | SZ | It's not only black market, for any market, I mean, people will, people who are still alive, they want to sell their organs to ... after they sell their, I mean, now the buyer is not the personal but the buyer is the government, something like that. | knowledge | elaboration |

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| 76 | SZ | I mean, if amount is adequate for financial incentive, people donate more and people not because of money also donate, <i>lah</i> . | knowledge | repetition |
| 77 | SZ | Quite hard to decide, <i>lah</i> . | knowledge | response |
| 78 | R | If we agree on it, how do we actually elaborate the point? | task | planning |
| 79 | R | People might exploit the poor. | knowledge | repetition |
| 80 | AD | We say agree to a certain extent, however, have some bad points. | task | planning |
| 81 | SZ | Do we write one essay together? | task | requirement |
| 82 | R | Not really, <i>lah</i> . | task | requirement |
| 83 | SZ | Ah... | task | requirement |
| 84 | R | Because she says must do body one then points | task | requirement |
| 85 | SZ | Support? How? | mgmt | elicitation |
| 86 | R | Huh? | mgmt | response |
| 87 | SZ | Because the demand is increasing, <i>lah</i> , you can save more people's life, <i>lah</i> . | knowledge | initiation |
| 88 | SZ | There are people who are poor. | knowledge | elaboration |
| 89 | R | I don't really understand. | knowledge | clarification |
| 90 | AD | Does he mean that mixing money and organ transplant ethically wrong? The relationship? | knowledge | clarification |
| 91 | R | yeah, but if you overlook this point, then you can say that, you know ... | social | interrupted start |
| 92 | R | What about the last part on page two? Whether they are gifts that go straight to the family members to cover funeral expenses. Is it important? | knowledge | reference (ext) |
| 93 | AD | They use the money for funeral. | knowledge | initiation |
| 94 | AD | It's something like, it's saying ask the poor to help. | knowledge | elaboration |
| 95 | AD | The financial incentives are not useful to the rich. | knowledge | elaboration |
| 96 | AD | They are very rich, they don't need the money, they don't have to donate. | knowledge | elaboration |
| 97 | R | There are also the poor people who also need organ transplant. | knowledge | repetition |
| 98 | R | Maybe we can also say that the rich donate to the poor. | knowledge | elaboration |
| 99 | SZ | I think the essay refer to donating as a kind of national service, just give the money so, because if you contribute to the country more, right? | knowledge | initiation |
| 100 | R | Then the money is for what? | knowledge | clarification |
| 101 | SZ | For contribution, <i>lah</i> . | knowledge | repetition |
| 102 | R | Then everyone must compulsory? | knowledge | clarification |
| 103 | SZ | Yeah. They contribute something to the country, right, then give you some money. | knowledge | repetition |
| 104 | SZ | Actually, it's just ... army is for national service, right? | knowledge | clarification |
| 105 | R | It's for guys only, <i>lah</i> . | knowledge | response |
| 106 | SZ | For national service because you don't | knowledge | elaboration |

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|-----|---------|---|-----------|-------------------|
| | | know who will receive your organ. | | |
| 107 | R | You donate after you die or | knowledge | clarification |
| 108 | SZ | After you die, of course, after you die. | knowledge | response |
| 109 | R | So make it like a law, is it? | knowledge | clarification |
| 110 | SZ | Law, right. | knowledge | agreement |
| 111 | SZ | You see, in this way, ... | social | interrupted start |
| 112 | AD | It's funny. It's not very possible. | knowledge | judgment |
| 113 | SZ | I mean, it's | social | interrupted start |
| 114 | AD | If make it, like a regulation. It's like they'll raise like a lot of objectives. | knowledge | nego (contrast) |
| 115 | AD | For a small country, it may also involve ...It's just like create a lot of problems. | social | interrupted start |
| 116 | SZ | Is it? | knowledge | clarification |
| 117 | AD | It's the right of humans. It's like our right. | knowledge | elaboration |
| 118 | AD | So, I'm not comfortable with such a law. | knowledge | judgment |
| 119 | SZ | I think I just mean consider those who are willing to donate as national service. | knowledge | repetition |
| 120 | SZ | I don't mean everyone to donate. | knowledge | elaboration |
| 121 | SZ | It's just a way to comfort yourself. | knowledge | elaboration |
| 122 | SZ | It's usually quite hard. | knowledge | response |
| 123 | R | I think once we offer financial incentives for those who donate organs, we don't know the people who actually donate for the money or they do out of their willingness or generosity. | knowledge | nego (contrast) |
| 124 | R | So, it's hard to show also, right, in that case. | knowledge | repetition |
| 125 | R | I think that it's ... You don't know what's the motive behind the donation. | knowledge | repetition |
| 126 | SZ | Ah... | knowledge | acknowledgment |
| 127 | Teacher | Almost time. | mgmt | focus |
| 128 | Teacher | You've got your main points ready? | mgmt | consensus |
| 129 | R | I think we've got the main points to support for question one. | mgmt | response |
| 130 | Teacher | So question one, so what about question two? Have you decided which one you would like to focus on – one or two? I mean, it can be individual, you can do it individually. But you've got some ideas already? | mgmt | consensus |
| 131 | R | Hmmm... | mgmt | response |
| 132 | Teacher | Yes? You know what to write? | task | requirement |
| 133 | AD | Sort of, <i>lah</i> | task | requirement |
| 134 | Teacher | So, I'm going to stop the discussion now so that you can go and work on your outline. | mgmt | focus |

Essays of chat students

Chat 1 – ML

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| In today's society, more people are facing more difficulties in building a strong and resilient family. | B1 | |
| The negative conditions that people faced today in the social and economic aspects are weakening the strong family ties that once existed. | B1.1 | |
| These negative conditions include those bad influences transmitted to the media that is capable of weakening family ties; | B1.1.1 | Art 2, B1.3.2 |
| the changing of family values due to changing times; | B1.1.2 | Art 2, B1.3.3 |
| and higher demand in the workforce is making it harder for people to dedicate time into nurturing a resilient family. | B1.1.3 | Art 2, B3.2 |
| Today's Parents shall look into the issue and bring out ways that can help in closing the bridge among family members to set up resilient strong ties. | T | |
| Body paragraph 1 | | |
| To build up a resilient family, communication among members is the basic fundamental tool in connecting each others' views. | P1 | ML S11 (Art 1, S3) |
| Through communicating, members would gain an understanding of each others' needs and would therefore be there to lend support whenever it is needed. | P1.1 | |
| This emotional backing among family members helps to strengthen the ties and hence the family is able to cope with changes or problem present in the society together. | P1.2 | Art 1, S3.1 |
| Body paragraph 2 | | |
| Family members must also be able to dedicate some time for bonding among members despite the long hours demanded by the workforce. | P2 | ML S2.1; Art 1, S2 |
| Spending time together helps to build stronger bonds among the family. | P2.1 | |
| During bonding, the emotional needs of the members are nurtured and this allows the member to know how he is deeply appreciated. | P2.2 | ML S10 |
| This will in turn makes the member to cherish the relationships present between the family and build up a resilient family. | P2.2.1 | |
| Therefore, it is important that family must spend quality time together to ensure bonding with family members is not neglected. | P2.3 | Joy S2 (Art 2, P6) |

| | | |
|---|-------------------|-----------------------|
| Some examples to spend time together will include going on family vacations, to the simplest of reading bedtime stories together during bedtime. | P2.3.1; P2.3.2 | Art 1, S2.1.1.4 |
| Body paragraph 3 | | |
| For a family to weather the dark storms and come out stronger as a team, it is essential that the members work through problems together than giving up. | P3 | ML S2.2 (Art 2, B3.2) |
| Working together to solve problems will enable each member to see that the family is willing to go through thick and thin together, and thus everyone will persevere till the end to find the solution out. | P3.1 | |
| With a pool of support, the family member will be able to translate optimism into the difficulties that they faced and come out stronger thinking that he is not going to face the adversity alone. | P3.2 | |
| Family members should never stop giving words of encouragement to spur the family member on. | P3.3 | |
| This lending of support shows that the family will never give up on the individual member and hence the fighting spirit present in everyone in the family helps to strengthen the family relations. | P3.3.1 | |
| Conclusion | | |
| There are certainly many other ways to help build up a resilient family. | C1 | |
| However, to build one in the midst of a prevailing social and economic climate in Singapore is not a simple one at all, but it is possible. | C2 | |
| However, that is possible only if each family member put in effort in to spending time with each other. | C3 | |

Chat 2 – T

| Introduction | Idea code | Idea source |
|--|------------------|-----------------------|
| Ways to build a strong resilient family: (fundamental aspects) | T | |
| 1. Effective communication | T | |
| 2. Quality time spend with the family members, have regular family outings to foster the bonds between family members. (parental involvement and children involvement in the parent’s life – mutual) | T | |
| 3. Independence and freedom, for personality development. Works in coherence with effective communication between family members | T | |
| Body paragraph 1 | | |
| A. Effective communication | P1 | MT S1 (Art 1, S3) |
| <ul style="list-style-type: none"> Parents should spend more time talking to their children, get to know what is going on in their life. | P1.1 | JieJ S4.1.3 |
| Thus if their child is having problem, they will be able to notice immediately. | P1.1.1 | |
| <ul style="list-style-type: none"> ICQ, the Internet are fields where parents have limited control over. | P1.2 | T P1.3.2 |
| Through communication, parents are able to teach the child the correct usage of these IT, and warn them of the danger involved. | P1.2.1 | |
| Parents should let the child know of their views of some matters. | P1.3 | |
| Let the child see things from the parents’ stand and learn to accept the idea. | P1.4 | |
| <ul style="list-style-type: none"> Acceptance of the family rule is more effective than forcing the rules on the child. | P1.5 | Art 1, S4 |
| <ul style="list-style-type: none"> Through the internet, child exposed to all sorts of information, they have a set of principles on their own. | P1.5.1 | |
| In times of crisis, parents together with their children should try to work out a solution as a team. | P1.6 | |
| <ul style="list-style-type: none"> If there were angry feelings, family members can learn to settle their differences by suggesting a better way of coping with such frustrations. | P1.6.1 | |
| Body paragraph 2 | | |
| B. Bonding between family members | P2 | CY S3 (Art 1, S2.1.1) |
| Regular family outings or family traditions can be established to foster the bonds between family members. | P2.1 | CY S3.1 |

| | | |
|---|--------|-----------------|
| <ul style="list-style-type: none"> It gives a strong sense of a person's roots, brings the family members together through the event and foster strong bonds. | P2.1.1 | |
| <ul style="list-style-type: none"> Fun-filled activities and traditions eg. Birthday celebrations are events that can occupy child's spare time and reduce the amount of time playing on the Internet. | P2.1.2 | |
| Interaction with elders or seniors of their age group is another avenue for strengthening interpersonal skills. | P2.2 | |
| <ul style="list-style-type: none"> Better understanding, mutual understanding leads to strong bonds. | P2.3 | |
| <ul style="list-style-type: none"> In times of needs, child will know who to approach, the family members rather than the friends (peers) who has less experience in life and lack the maturity to handle some matters | P2.4 | CY S4.1.2 |
| Body paragraph 3 | | |
| C. Personal development – freedom | P3 | |
| There must be times when things are done on personal basis and not family basis. | P3.1 | Art 1, S2.2 |
| Personal decisions have to be made, instills the sense of responsibility into the child. | P3.1.1 | |
| Child since young have to be taught/ given the chance to make their own decisions. | P3.1.2 | |
| Start from small. | P3.1.2 | |
| Thus child when older, when they are in direct contact with the society, they have the confident and experience to handle the challenges. | P3.2 | |
| Mistakes are committed in their daily life and pointed out by parents. | P3.3 | T S4.2 |
| <ul style="list-style-type: none"> Children learn faster through their mistakes. | P3.3.1 | |
| Today's society, parents act more as a friend. | P3.4 | CY S4.1.1 |
| Both parties are learning at the same time to adapt to the increasingly changing environment. | P3.4.1 | |
| Children since young – more exposure leads to more confidence in the child. | P3.5 | |
| Parents act as a guiding role, guardian. | P3.6 | |
| “Limited but permeable boundaries” are set up for this purpose. | P3.7 | Art 1, S2.2.1.3 |
| Conclusion | | |
| The 3 fundamental concepts work hand in hand. | | |
| Communication is involved throughout, it is the most important aspect. | C1 | |
| With effective communication, we have strong bonds within the family. | C1.1 | |

| | | |
|--|------|--|
| Freedom is given to the family members based on the mutual trust they have on each other (bonding). | C2 | |
| Parents are able to trust their child at home when they are at work, efficient work, thus more time to spend with family (Cycle) | C2.1 | |
| The prevailing social and economic climate act as a small challenge, that will only foster even stronger bonds in the family. | C3 | |

Chat 2 – JieJ

| Introduction | Idea code | Idea source |
|--|------------------|--|
| In the middle of the prevailing social and economic climate in Singapore it is even more essential to build a strong resilient family. | B1 | |
| Family is the one you depend on when in need, whom you look forward to working for, the one you would like to share your happiness and sorrows and the one whom will stand by you no matter what happens. | B1.1 | Art 1, S2.1.1.1 |
| In the society today not only Singapore, there are lots of changes in the social and economic climate. | B1.2 | |
| Social climate can be in terms of the different lifestyles and activities people are engaged in as compared to the past, different ways of communication like using the internet versus meeting up for a conversation and having rape cases in Singapore of 1 case every 3 days (Mah, 2003). | B1.2.1 | T P1; CY P1.3; JieJ P1.1; Art 3 |
| As for economic climate, it can be in the aspect of firstly, having more nuclear families around. | B1.2.2 | |
| More and more families are having both parents working so as to support the family and the demand for labour. | B1.2.3 | CY P1.2; T P1.2.3 |
| Secondly, the economy has not been very stable in the last few years due to inflation and outbreaks of diseases leading to more people being retrenched and jobless. | B1.2.4 | |
| In all these cases, family gives them the strength and courage to go on in life. | B1.3 | |
| Therefore, it is important to build a strong bond and relationship within the family. | B1.3.1 | |
| Here are some ways to build a resilient family. | | |
| Body paragraph 1 | | |
| Interaction with members in the family is one of the key to building family bond. | P1 | CY S3 (Art 1, S2.1.1) |
| There are two types of interaction; one is the physical interaction and the other verbal interaction. | P1.1 | |
| From the start of birth of a child, parents should make it a habit to at least have a day to accompany their children in activities no matter at home or places out of home. | P1.2 | |
| In addition, during their time together there should not be any distraction. | P1.2.1 | Art 2, P6.3.1 |
| ‘Children tend to feel their surroundings more than analyze them’ (Metcalf, 2003), hence parents should give their full attention to their children as that they will not feel neglected but feel the care and importance from their parents. | P1.2.2 | Art 2, P6.3.1.1 |
| Body paragraph 2 | | |

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|---|--------|-------------------------|
| Verbal interaction can be in aspect of communication. | P1.3 | MT S1 (Art 1, S3) |
| Communication within a family is very important as it will affect how a message is conveyed and absorbed. | P1.3.1 | MT S1.1 (Art 1, S3) |
| Having the ability to communicate well with the family will help strengthen the bonds within the family. | P1.3.2 | |
| By getting children involve in conversation about family matters will make them feel important and let them have the opportunity to voice out their point of views, which helps to build up their courage. | P1.3.3 | |
| Everyone in the family should share their problems and things that happen with the family. | P1.3.4 | |
| In this way, everyone in the family will feel that they have a part to play. | P1.3.5 | |
| Furthermore, parents need to accept the views of their children even if it is different from their thinking as time changes and in the meantime parents can know more about the outside world through their children. | P1.3.6 | JieJ S4.1 |
| Even if their children make mistakes, parents are able to detect early and give them proper guidance before they step into the society. | P1.3.7 | JieJ S4.1.3; T S4.2 |
| As time goes by, children will respect their parents even more and are more willing to share their problems with the family members like a friend. | P1.3.7 | CY S4.1.1; CY S4.1.2 |
| Body paragraph 3 | | |
| Lastly, showing care, understanding and respect for each other in the family. | P2 | Art 1, S4.6.2 |
| Cultivate the children to have the habit of informing parents where or who they are going out with. | P2.1 | |
| One good idea is to know your children's friends, make friends with them and accept them. | P2.2 | |
| Give children their own time and space too, do not over restrict them in this way they can learn how to be independent but parents need to make sure they know what is going on and show their care always. | P2.3 | Art 1, S2.3 |
| Conclusion | | |
| Building strong bonds within the family is not an easy task and is not build overnight. | C1 | |
| It takes time and patience especially in this tense and changing environment. | C2 | |
| Hence to build strong resilient involves physical and verbal interactions and showing care, understanding and respect for each other. | C3 | |

Chat 2 – MT

| Introduction | Idea code | Idea source |
|---|------------------|---|
| As you know, recently Singapore has non-stabilized economic and social climate. | B1 | T P1 |
| This condition gives many effects to the society, such as: the increasing number of crimes and broken family. | B1.1 | |
| Therefore actions need to be taken to safe the society, and it should begin from our own family by building a strong family, which is resistant with bad social and economic climate. | B1.2 | |
| Effective ways to build a strong resilient family are based of these three key points, i.e. effective communications, hands on among the family members, and bonding and proper guidance since young. | T | |
| Body paragraph 1 | | |
| First of all, effective communications is one of essential factors in building and keeping good relationship with people everywhere, especially among the family members. | P1 | MT S1 (Art 1, S3); MT S1.1 (Art 1, S3) |
| Effective communications mean that the quality of communication is more important than the quantity or frequency. | P1.1 | Art 2, P6 |
| This factor can be obtained in many ways. For example having conversation with all members during dinner time or during playing game (mahjong) together. | P1.1.1 | JieJ S3.4 (Art 1, S2.1.1.5); CY S3.3 |
| In the conversation, each member should tolerate each other and be given the same opportunities including the small children (Lim-Quek, 2001). | P1.1.2 | Art 1, S3.2.1 |
| Then all of children are allowed to share their opinions and thoughts or ask their doubts with parents. | P1.1.3 | CY S4.1.2 |
| Open minded, moderate, and modern parents are really required. | P1.1.4 | |
| The other way is parents spend more time with their children for hanging out together. | P1.2 | JieJ S2 |
| They can go out together for watching movie, playing in the park or just jogging. | P1.2.1 | CY S3.1; CY S3.2 |
| Body paragraph 2 | | |
| Secondly is about hands on among the members. | P2 | T S5; Art 1, S4.6.2 |
| Care, respect and tolerate each other are really needed. | P2.1 | |
| As a family, those three things are very convenient. | P2.1 | |
| Hands on has a lot of meanings and can be implemented in various ways. | P2.2 | |
| For example: helping other members who has problem. | P2.2.1 | |
| We have to considerate with others' condition. | P2.2.2 | |

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| If there is unusual thing with our sibling, we should ask him/her whether he/she is ok. | P2.2.3 | |
| Then we should give some advices or solutions if he/she asks. | P2.2.4 | |
| Sometime parents also have serious problems, in this case children should give much consideration by not asking too much and give chance for them solve their problems. | P2.2.5 | |
| Furthermore, parents should not really care with parenting stuff like in the past but should be more like friend with children. | P2.3 | T S4 |
| Therefore children will be more open if they have problem and parents can gives many solutions and advices. | P2.3.1 | CY S4.1.2 |
| Body paragraph 3 | | |
| Bonding and proper guidance since young ages are also important in building a strong family resilient. | P3 | CY S3 (Art 1, S2.1.1) |
| Bonding is needed to form deep loving attachments among members, so that each member will matter and depend on the family for his/her emotional needs. | P3.1 | Art 1, S2.1.1.1 |
| This can be developed through saying prayer together before sleeping, reading stories, or sharing happy and painful moments at work or school (Lim-Quek, 2001). | P3.1.1 | Art 1, S2.1.1.3, S2.1.1.4, S2.1.1.6 |
| Moreover, bonding is not sufficient without proper guidance. | P3.2 | |
| It means that parents should give the right guidance to children, so that they can walk on the right way; | P3.2.1 | |
| know which is good and bad things and do the best for their own future. | P3.2.2 | |
| For example: parents show the importance of education to get a better future by giving the real life example of success and un success person. | P3.2.3 | |
| Conclusion | | |
| All in all, building a strong resilient family takes time and could not be done in a night. | C1 | |
| Effective communications, hands on, and bonding and proper guidance are only the ways. | C1 | |
| This still needs great efforts, seriousness, and cooperation among all family members. | C1.1 | |
| So sometime in the future we will be able to obtain a strong resilient family in Singapore. | C2 | |

Chat 2 – CY

| Introduction | Idea code | Idea source |
|---|------------------|---------------------------------|
| With increasing competition due to globalization, the emphasis of Singapore society is place on facing challenges and rising above the other to remain on the top. | B1 | |
| Because of these, people aim for better materialistic life for their family, presence of different hobbies between parents and children due to wide range of choices and youngsters are easily influenced by external factors usually occurs. | B1.1 | |
| As a result from the presence of this economical and social climate, the stability of families in Singapore is very much threatened. | B1.2 | |
| Body paragraph 1 | | |
| In Singapore, it is very common that both parents are working and the job of looking after the children usually fall to the hands of the maid. | P1 | CY P1.2; CY P1.2.1 |
| This resulted in a decrease in the time spent with children. | P1.1 | CY P1.2.2 |
| This is threatening to the family as children need special attention during certain phase of their growing up. | P1.2 | |
| And when the parents are not with them, they might feel isolated, unimportant and might turn rebellious, straining the relationship with their parents. | P1.3 | |
| Therefore, parents play very important roles in preventing this from happening. | P1.4 | |
| They should always find time for effective communication with their children and should spend real quality time with their children whenever they can. | P1.5 | MT S1 (Art 1, S3); Art 2, P6 |
| Communication can be as simple as reading a bedtime story to your little ones, finding time to share the events of the day or week or just lend a listening ear to any distressed member. | P1.5.1 | Art 1, S2.1.1.4, S2.1.1.6 |
| Thus, effective communication should be used as the basic tool in building a strong resilient family. | P1.5 | |
| This is especially essential when both parents are busy working. | P1 | |
| Body paragraph 2 | | |
| With the presence of globalization, there is a wide range of hobbies for everyone and thus, it is very hard to find a common hobby that both children and parents like. | P2 | CY P1.3.1 |
| The youngsters especially will go for the more thrilling and exciting hobbies which their parents will deem as dangerous. | P2.1 | |
| Parents on the other hand would hobbies like watching soap operas or doing weekend grocery shopping that youngsters would find boring. | P2.2 | |

| | | |
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| The difference in the nature of their hobbies will further the generation gap between them. | P2.3 | CY P2 |
| To minimize that, a family should be committed to practice some form of family traditions, choose one that is of common interest of every members. | P2.4 | |
| For example, mahjong session which is a popular game among both adults and youngsters in Hong Kong and it is common for the family to play this game every weekend when they are free. | P2.4.1 | CY S3.3 |
| Through these family practices, family members can build bonds by interaction. | P2.5 | CY S3 |
| Besides, bond can also be built through physical expressions like a warm hug. | P2.5.1 | |
| This is especially true for young kids who love to snuggle close to their parents. | P2.5.2 | |
| By building strong bonds between one another, family members can have a sense of belonging to their family and will not be driven apart by generation gap. | P2.5.3 | |
| Body paragraph 3 | | |
| Moreover, due to globalization, youngsters in Singapore have easy access to a lot of external factors of influences like the media, friends and games. | P3 | Art 2, B1.3.2 |
| They might absorbed the bad influences like mixing with bad company or are attracted to and displayed the violence depicted in movies and games. | P3.1 | |
| For example, the stabbing incident in Singapore whereby an angry youth stabbed another youth who killed him in a counter strike game. | P3.1.1 | |
| Parents now come in as a form of guidance. | P3.2 | |
| They should not stick to the stiff parenting role like the past but instead be more like a friend to their children, being flexible and open to changes. | P3.2.1 | T S4; JieJ S4.1; CY S4.1.1 |
| In this way, the youth can find it easier to communicate to their parents especially in pouring out their grievances and troubles. | P3.2.2 | CY S4.1.2 |
| Parents can then effectively guide them and in the same time, enable their children to make some decision on their own and explain that they have to be responsible for their actions. | P3.2.3 | |
| In this way, young can grow out to be responsible adults and can differentiate between the right and the wrong. | P3.2.4 | |
| Conclusion | | |

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| With references to Singapore context, effective communication is the most essential in order to build a resilient family. | C1 | |
| Following is building strong bonds since young, effort of each member in practicing family tradition and finally working together as a family in decision making can further strengthen the family ties. | C2 | |
| In order to achieve a united and harmonious family, each member must understand the reason behind all of them and thus be willing to contribute continuously. | C3 | |

Chat 3 – Teck(Joker)

| Introduction | Idea code | Idea source |
|--|------------------|---|
| In Singapore, as the economy of the country progresses, it results in the pace of life getting faster and people’s thinking changing too. | B1 | |
| People nowadays are usually thinking on how to achieve a more comfortable life and a higher status in society. | B1.1 | |
| As a result, family bonds are neglected and people tend to be more and more materialistic. | B1.2 | |
| However, a strong resilient family is very important to everyone, as it will make one’s life more fulfilling and enjoyable. | B1.3 | |
| Hence, below are some ways on how to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore. | T | |
| Body paragraph 1 | | |
| Firstly, due to the high living standards in Singapore, both the parents in a family normally need to go out to work, so that their financial needs can be met. | P1 | Peng(TatZz) P1 |
| As a result, the parents will not be able to spend much time with their children, resulting in a weak family bond between them. | P1.1 | |
| Also, most families have employed maids to take care of their children as both parents have to work and this will result in a weak family bond as little time is spend together with their children. | P1.2 | Peng(TatZz) P1.2 |
| Besides these, the children may also become bad as they may commit crimes, such as stealing and vandalism, or create troubles in school, such as fighting and cheating. | P1.3 | Peng(TatZz) P2.1 |
| This may because they want to attract the attention of their parents by committing these acts. | P1.3.1 | Peng(TatZz) P2.1.1 |
| Therefore, to solve this problem, parents may try to make an effort to spend time with their children to let them feel that they are not neglected. | P1.4 | Peng(TatZz) S1 (Art 1, P6) |
| This can be done by staying at home during weekends and spending time with them communicating with them, and not sleeping away most of the weekends. | P1.4.1 | Peng(TatZz) S1.2; Ting(lim) S3 (Art 1, S3) |
| Also, everyday after work, when the parents get home, they can try to spend some time with their children asking what they have done today or is there anything they want to ask them about, instead of reaching home and dropping onto the bed after a bath and meal. | P1.4.2 | |

| | | |
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| Furthermore, the parents may have one of them having a job that has flexible working hours, so that they can spend time with their children and are able to be there for them if they have any problems. | P1.4.3 | |
| Also, the parents are able to monitor their children's lives and are able to know what is going on and not when things happen then they get to know the cause. | P1.4.4 | |
| Hence, what children need from their parents is actually more on care and concern from their parents rather than material needs given to them. | P1.5 | Ting(lim) S3.4.2 (Art 1, S4.6.2) |
| Body paragraph 2 | | |
| Next, due to more accessibility to anywhere in Singapore, people nowadays are able to enjoy different forms of entertainment on the market easier like going shopping, movies and others. | P2 | |
| With these temptations from these entertainments, children will tend to be less willing to stay at home with their parents and are more willing to go out with friends. | P2.1 | |
| As parents need to work, they have less time for these entertainments, hence it will be their children who have more time for these entertainments. | P2.2 | |
| Hence, the children being to willing to spend any time in any activities with the parents will weaken the family bonds between them. | P2.3 | |
| To solve this problem, parents can organize family outings like barbeque, picnic or watching movie, to try to improve on the relations between them and their children. | P2.4 | Teck(Joker) S4.2; Peng(TatZz) S4.3; Teck(Joker) S4.3.2.1 |
| This is because through these outings, parents are able to talk to their children and are able to know what they want and how they feel, thus the parents are able to make appropriate actions and strengthening the family bonds between them as a result. | P2.4.1 | Ting(lim) S3.1 |
| Also, if the children are unwilling to participate in these outings, the parents can take the initiative to participate in something that their children are willing to do, through this, the parents may be able to get to know more on how their children think and feel, thus strengthening the family bonds between them. | P2.4.2 | Ting(lim) S4.3.2; Peng(TatZz) S4.3.2.3 |
| Therefore, even if children are unwilling to do anything with their parents, the parents should still try to find something to do with their children, so that the family bonds between them will not be weakened. | P2.4.2 | |

| | | |
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| Body paragraph 3 | | |
| Besides these, there may be a generation gap between the parents and the children, making the family bonds between them weak. | P3 | Peng(TatZz) P3.1 |
| This is more prone in eastern culture like in Singapore. | P3.1 | Peng(TatZz) P3 |
| Due to a big age difference, children will feel that there is a barrier between them and they parents, thus they are not willing to tell their parents their problems, or feelings, or anything. | P3.2 | |
| Also, they will not be able to have any common topics to talk on. | P3.3 | |
| Hence, withdrawal on both sides will result in the weakening of family bonds between them. | P3.4 | |
| To solve this problem, the parents and the children must be willing to open up to one another and share their feelings and problems. | P3.5 | R S7 (Art 1, S2.1) |
| By doing this, both sides will be able to understand what the other side wants and they can adjust to facilitate their wants. | P3.5.1 | |
| Also, with a deeper understanding of one another's feelings, they will know how they feel and why they do some things in a certain way. | P3.5.2 | Peng(TatZz) S3.2 (Art 1, S2.1) |
| Therefore, through sharing with one another their feelings and problems, the barrier between the children and the parents can be broken. | P3 | |
| Body paragraph 4 | | |
| Lastly, the role models in children's hearts nowadays are not their parents anymore but their idols. | P4 | Peng(TatZz) S5.2.1.4 |
| This is because children think that their parents have nothing for them to look up to and there is no point in setting them as their role models. | P4.1 | Peng(TatZz) S5.2.1.6 |
| Also, due to more divorces and dignity that parents want to show, children no longer have any faith in their parents, not to say to admire them or setting them as their role models. | P4.2 | |
| Even if those idols pose a good influence to the children, the family bonds between the parents and the children will weaken, as the children do not look up to their parents at all. | P4.3 | |
| To solve this problem, the parents must show a good example like maintaining a good marriage bond. | P4.4 | Peng(TatZz) S2 (Art 1, S1); Peng(TatZz) S5.2.1 (Art 1, S1.3.1) |

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| With no problem clinging onto the parents, the parents are able to show that they can be the role models for their children as they are able to know to their children that they are capable of solving any problems of their own and of their children's too. | P4.4.1 | |
| Besides these, parents must also be able to own up to their own mistakes so that they can show their children that they are fair in everything. | P4.4.2 | Ting(lim) S5.3 |
| Therefore, if parents can be the role models of their own children, the family bonds between them will surely strengthen. | P4 | |
| Conclusion | | |
| Therefore, to build a strong resilient family in the midst of the prevailing social and economics climate in Singapore, time must be spent with children even though the parents have no time due to work, efforts must be put in to try to do some activities together, generation gap must be shorten and parents should try to be the role models of their children. | C1 | |

Chat 3 – Peng(TatZz)

| Introduction | Idea code | Idea source |
|--|------------------|--------------------------------------|
| The family forms the basic unit of a society. | B1 | |
| Therefore it is important to ensure stability in families in order to shape a well stabilized society. | B1.1 | |
| The role of the family is like an incubator that shapes one’s character and way of thinking when he grows up and enters the society. | B1.2 | |
| Therefore, it is important to build strong family ties to inculcate important moral codes or values to the individual. | B1.3 | |
| In order to build strong family bonds, certain efforts must be made by each family member. | T | |
| Body paragraph 1 | | |
| Firstly, the family must be the support that the individual can rely on whenever he is met with difficulties. | P1 | Peng(TatZz) S3.4.1 |
| The individual must have the mentality that no matter what happens, he will still have the backing of his family to rely on. | P1.1 | Peng(TatZz) S3.4.1 |
| In order to achieve that, family members must have patience for each other. | P1.1.1 | Peng(TatZz) S9 |
| This is important to build up family warmth for the cohesive environment of the family. | P1 | |
| Body paragraph 2 | | |
| The second thing to build strong family ties is to have communications between family members. | P2 | Ting(lim) S3 (Art 1, S3) |
| The communication should be an effective two way communication. | P2.1 | |
| Through communications, family members can then know more about each other and understand each other’s needs better. | P2.2 | Peng(TatZz) S3.2 (Art 1, S2.1) |
| These interactions enable the individual to relate or confide their problems to their family members, rather than to keep everything within. | P2.3 | Ting(lim) S3.2.1 |
| Family members can then offer advices for appropriate problems to aid them in times of need. | P2.4 | |
| This will in turn develop tolerance for each other in order to achieve better family ties. | P2.5 | |
| Body paragraph 3 | | |
| Next, the family should try to indulge in some common activities together. | P3 | Teck(Joker) S4.5 |
| They can try to play some games together or have picnics. | P3.1 | Teck(Joker) S4.5.2 |
| The activities involved, maybe as simple as having dinner together or taking a stroll in the park. | P3.2 | R S4.4.4 (Art 1, S2.1.1.5) |

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| This sharing of common interests will result in development of a more cohesive family unit. | P3.3 | |
| During the process of doing some common activities, it presents a prefect opportunity for communication between family members. | P3 | |
| It provides a more relax atmosphere for family members to relate to each other. | P3.4 | |
| Body paragraph 4 | | |
| Spending quality time with their children is something very crucial to build strong family bonds. | P4 | Peng(TatZz) S1.1 (Art 2, P6) |
| In the current society of Singapore, most family consists of two full time working parents. | P4.1 | Peng(TatZz) P1 |
| This result in limited time spent with their children. | P4.2 | |
| The current economic downturn further reduces time spend on family time. | P4.2.1 | |
| Most parents will be working long hours to sustain their lifestyle and their current job. | P4.3 | Peng(TatZz) P1.1 |
| This results in their children being neglected or left alone at home with their maids or grandparents. | P4.3.1 | Peng(TatZz) P1.2 |
| This situation is very unfavorable in building resilient family ties. | P4.3.2 | |
| Amidst the hectic working schedule, the parents must seek out time to spend with their children. | P4.4 | Peng(TatZz) S1 (Art 2, P6) |
| They should try to bring their children out on weekends or allocate a “family day”, where the entire day will be allocated to family activities only. | P4.4.1 | Peng(TatZz) S1.2; Peng(TatZz) S4.3 |
| This is important for the child to feel being loved by their parents and not feel neglected by them. | P4.4.2 | |
| There the key thing is not about the quantity of the time spent, but the quality. | P4 | |
| Body paragraph 5 | | |
| The last important thing to achieve to have a strong cohesive family unit is to have mutual respect for each other. | P5 | Art 1, S4.6.2; Art 2, P7.2.2 |
| The children must have respect for their parents. | P5.1 | Art 2, P7.2 |
| But in order to achieve that, the parents themselves must set a good example to gain the respect of their children. | P5.2 | Peng(TatZz) S5.2.1 (art 1, S1.3.1) |
| They must conduct themselves in a proper manner and follow a set of moral codes and values. | P5.2.1 | Art 1, S4.6.2; Art 2, P7.2.2 |
| The parents should try to be “role models”, in which the child can look up to, and someone they will look for when faced with difficulties. | P5.2.2 | Peng(TatZz) S5.2.1.6; Peng(TatZz) S5.2.1.7 |

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| The family values taught to the child at a young age, will be an impression on the child, it acts as the principles he will rely on to make decisions in the society. | P5.2.3 | Art 2, P3 |
| Therefore proper guidance is important at a young age to shape the character of the child. | P5.2.3 | |
| Conclusion | | |
| All the four key factors to have a strong resilient family unit are interrelated. | C1 | |
| Every one of them is essential and important in order to achieve a strong cohesive family unit. | C2 | |
| All in all, it means that each family member must be willing to make the extra effort to understand one another better. | C3 | |

Chat 3 – Ting(lim)

| Introduction | Idea code | Idea source |
|---|------------------|----------------------------------|
| A family is defined as a fundamental social group in society typically consisting of one or two parents and their children. | B1 | |
| The couples in the family also share common goals, values and have long-term commitments to one another. | B1.1 | |
| In the society today, in order for the people to survive as well as to meet the high standard of living, people normally spend most of their time working and neglect the family. | B1.2 | Peng(TatZz) P1 |
| Such a trend is even more obvious these days in Singapore as both the parents in the family usually work till late night in order to support the family. | B1.2.1 | Peng(TatZz) P1.1 |
| As a result the children are usually left alone without any parental guidance and worse without parental love. | B1.2.2 | |
| As such, the parent and children bonding is not strong which in turn leads to the crippling of the family structure in many Singapore families. | B1.2.3 | |
| In order to improve the current situation, parents are encouraged to communicate more with the children and spend more quality time with the children. | T | |
| Also having a strong marriage bond and learning to respect one another are also important to enhance the situation. | T | |
| Body paragraph 1 | | |
| Having a strong marriage bonding is important in the development of a strong family structure. | P1 | Peng(TatZz) S2 (Art 1, S1) |
| This is because the parents are the ones who drives and determine the structure of the family. | P1.1 | |
| In a family, the parents are the key personnel who decide on the values to inculcate the children. | P1.2 | Art 1, S4.6 |
| If quarrel always happen between the parents, it may give the wrong impression to the children that that is the way of life and it is the only way to resolve problems. | P1.3 | |
| And normally after a quarrel, the parents are usually emotionally unstable. | P1.3.1 | |
| During this time, no matter how minor the mistake the children has committed, the parents will usually flare up and vent their frustration on the children. | P1.3.2 | |
| As a result, the children will feel that they are not loved anymore and worse, some may think that the parents are being too unreasonable and impatient. | P1.3.3 | |
| This will in turn weaken the family bonding. | P1 | |

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| Thus in order to lay a strong foundation for the development of a family, the marriage bond between the couple must be strong. | P1 | |
| Body paragraph 2 | | |
| Learning to respect one another in the family is also important area to focus on for a development of a strong and resilient family. | P2 | Peng(TatZz) S5 (Art 1, S4.6.2; Art 2, P7.2.2) |
| It will help to minimize the conflicts within the family and so unhappiness between the family members will be minimized. | P2.1 | |
| For instance, when the children respect the parent, more communications will be carried out. | P2.1.1 | Art 2, P7.2 |
| Advices that parents suggested to the children will also be considered seriously as well (Seth, 2003). | P2.1.2 | Art 2, P7.2 |
| In this case, the children will unlikely to become defiant and mixed around with bad company. | P2.1.3 | |
| On the other hand, whenever parents show respect to the children the children will appreciate how understanding the parents are towards them. | P2.2 | Art 2, P7.2.1 |
| This kind of mutual respect and understanding that each gives to one another will make them realized that that is the correct way to treat any person he or she meets so as to build a strong relationship with one another. | P2 | |
| Body paragraph 3 | | |
| Spending quality time with the children is also essential in the building of a strong and resilient family. | P3 | Peng(TatZz) S1.1 (Art 2, P6) |
| In Singapore context, as parents rarely have much time to spend on their children due to their work commitment, devoting quality time to the children is very important. | P3.1 | Peng(TatZz) P1 |
| Facing with such constraints, the time spent should be used to get to know their children better by getting one to be involved in their activities. | P3.2 | Ting(lim) S4.3.2 |
| Whenever the parents make an effort to join in their activities, the there will be more interactions between them. | P3.2.1 | |
| As time goes by, the children will feel more comfortable and willing to reveal their problems to the parents. | P3.2.2 | |
| In the end, the relationship between them will eventually improve. | P3.2.3 | |
| In addition, joining their activities also helps to relieve the stress from the parents. | P3.2.4 | |
| Hence it is utmost important for parents to at least spend more quality time with the children. | P3 | |
| However, we have to take note that all these are not possible if there is no effective communications between them. | P3 | |

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| Body paragraph 4 | | |
| This brings me to the most important solution to the problem. | P4 | |
| That is to encourage more effective communications between the parents and the children. | P4 | Ting(lim) S3 (Art 1, S3) |
| Strong relationship, trust, understanding one another can never be achieved if no communications is carried out between them. | P4.1 | Art 1, S3.1 |
| So in order for the parents to understand their children better and to know their problems, communications between them is needed. | P4.2 | |
| Once a conversation is struck, exchanging of ideas and problems will begin to flow. | P4.2.1 | Ting(lim) S3.2.1 |
| This will then allow the parents to give guidance and advice to the children. | P4.2.2 | |
| As time goes by, the children begin to trust their parents more and they too will feel that their parents actually love and care for them. | P4.2.3 | Ting(lim) S3.4.2 (Art 1, S4.6.2) |
| Thus, the children will not be left alone, and they will always know that there is someone who is ever willing to lend them a listening ear. | P4.2.4 | |
| Eventually, the bonds between them will greatly improve. | P4 | |
| Conclusion | | |
| In conclusion, strong marriage bond, learning to respect one another, spending quality time and encouraging more communication between the parents and children are some of the solutions to building of a strong and resilient family. | C1 | |
| However communication with the children is still the key solution to this problem because most of the solutions to this problem will eventually require them to communicate first before anything can happen. | C2 | |
| In the end, I would strongly advice people to at least devote some time to communicate with the children if they are really busy with their work. | C3 | |

Chat 3 – R

| Introduction | Idea code | Idea source |
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| With the rapid development and prosperity of Singapore, it has definitely caused a huge impact on the family relations here. | B1 | |
| It has changed from a close-knitted one to a more diversified and separated one. | B1.1 | |
| Family members are not as close to one another as before and this is negatively affecting traditions and deeply penetrating values of the society. | B1.2 | |
| Body paragraph 1 | | |
| Various factors have led to the negative impact on the relations among families in Singapore today. | P1 | |
| One important factor to consider is the effect of globalization. | P1.1 | |
| No doubt globalization has helped Singapore achieve its current position today, but it has also led to the influx of many negative outside values. | P1.1.1 | |
| Nowadays, foreign ideas relating to individualism are able to enter this region easily and are more openly accepted among the younger generations. | P1.1.2 | |
| The media has played a tremendous role in spreading the negative influences of the western culture here and this has resulted in moral decay among the young ones. | P1.1.3 | Art 2, B1.3.3 |
| More children are feeling that taking care of their parents and living together as a family is a burden to them. | P1.2 | |
| They look forward to a life which is more unrestricted and carefree. | P1.2.1 | |
| Declining family values has also led to more children sending their parents to the old folk's home. In the olden days, the word "old folk's home" would have been considered a taboo subject among families. | P1.2.2 | |
| However, in today's context, it is termed as cheap and convenient. | P1.2.3 | |
| Body paragraph 2 | | |
| Another point to note is the ever increasing living costs and the desire to achieve a higher standard of living. | P2 | |
| Singapore is a very competitive society now as opposed to the past. | P2.1 | |
| Previously, the standard of living was quite low and people were easily contented. | P2.2 | |
| They are happy as long they have a house and it would be a luxury if they can afford a car. | P2.2.1 | |

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| However, this is definitely not the case now. | P2.2.2 | |
| People nowadays are all striving towards the “5C”s; cash, credit card, car etc. | P2.2.3 | |
| This has led to both parents having to work at the same time and women can longer stay at home to look after the kids. | P2.2.4 | Peng(TatZz) P1 |
| Modern working parents also rely a lot on maids to look after their children. | P2.2.5 | Peng(TatZz) P1.2 |
| Lesser quality time spent together as a family is causing families to drift apart. | P2.3 | |
| In fact, children are turning more to their peers for help when they have problems rather than seeking out fellow family members. | P2.4 | |
| This is largely due to the fact that their parents are usually too busy working to have time for them which is really quite sad. | P2.5 | |
| Body paragraph 3 | | |
| People are also becoming more and more independent. | P3 | |
| They no longer have to rely on the next generation to support them in old age. | P3.1 | |
| With the upcoming pension and retirement schemes, old people are in a way more able to look after themselves and are relying less on their family members. | P3.2 | |
| This in turn has led to the selfish thinking of them caring for themselves more than their family members whom they felt will not have much contribution to their lives. | P3.3 | |
| More parents are also sending their children overseas for an education and the distant relationship is definitely taking its tow on family relations. | P3.4 | |
| And education and the distant relationship is definitely taking its tow on family relations. | P3.4.1 | |
| A simple act of letting their child having a taste of independence may in fact result in their child soaking in all the negative influences of the western culture and leaving them for good. | P3.4.2 | |
| Conclusion | | |
| No doubt in the recent years, there has been a lot of emphasis by the Singapore government on moral education and inculcating the correct family values in the younger generation, the number of broken families are steadily on the rise. | C1 | |
| Youngsters these days treat marriage as child’s play and divorce to them is as simple as “123”. | C2 | |

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| Many children grew up in broken families and the image of a close-knitted family is one they can never perceive in their mind. | C3 | Peng(TatZz) P2 |
| I conclude that although Singapore has developed into a prosperous nation, the citizens are slowly losing their family values. | C4 | |
| There will never be a total loss of family values, as these are too strongly rooted within the society. | C5 | |
| However, family relations in modern Singapore can never be the same again. | C6 | |

Chat 4 – Char

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| A family is more than just a collection of individuals. | B1 | |
| Family members are uniquely related to one another through ties of kinship. | B1.1 | |
| Family not only provides love, food and shelter but also security and a sense of belonging. | B1.2 | |
| In the midst of prevailing social and economic climate in Singapore, however, the definition of family is no longer the same. | B2 | |
| There are so many factors that have caused the failures of my functional families. | T | |
| We shall talk about the different aspects to build a strong resilient family in this contemporary society. | T | |
| Body paragraph 1 | | |
| Over the years, Singapore has become a highly competitive and modern society. | P1 | |
| Economy and advancement in different areas are picking up at a fast pace. | P1.1 | |
| These have lead to a high standard of living quality. | P1.2 | |
| As a result, there has been an increasing phenomenon of working mums in society. | P1.3 | |
| With the parents, father and mother working, there is a high possibility of neglecting or overlooked the needs of the children at home. | P1.3.1 | G S1 |
| Thus parents should balance family and work in order to achieve a functional family in this prevailing social and economic climate. | P1.3.2 | |
| Work isn't everything. | P1.4 | |
| When work and family commitments clash, it can strain family relationship and at the same time, can lead to lost of work. | P1.4.1 | |
| Time should be sacrifices for the family. | P1.4.2 | |
| Thus it is essential that both parties know how to juggle time between work and family by ruling out the priorities. | P1.4.3 | |
| Body paragraph 2 | | |
| Effective communication between parents and children is also one of the factors that can build a functional family. | P2 | Jan S2 |
| “Conversation among family members’ natures caring, empathic, open and trusting relationship” (Family today, Issues No 2/96) | P2.1 | Art 1 |
| This is true and important. | P2.1.1 | |

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| Time should be spend to ensure sufficient communication within the family. | P2.2 | Jan S1.1 |
| Open and honest conversations or discussions help to understand each other feelings, ideas and view well. | P2.3 | |
| This is one way to build trust with each other. | P2.3.1 | |
| During the conversation, it is essential that parents give full attention and concentration on children. | P2.3.2 | |
| Through such conversation, family members will be able to know other well and show understanding and concern for one another. | P2.3.3 | G S5.3 |
| Effective communication is thus able to create a trusting bond within family. | P2.4 | Art 1 |
| Body paragraph 3 | | |
| Thirdly, certain control should be emphasize within the family. | P3 | |
| Children should be given certain amount of control and freedom over their lives instills in them responsibilities and maturity. | P3.1 | |
| Through this, children will be able to learn about the world and the results of their decision. | P3.1.1 | |
| This control is equivalent of setting appropriate limits and rules within the families. | P3.1.2 | Jan S5 |
| Clear rules and regulations are ruled out, consequences are imposed if rules are offended. | P3.1.3 | |
| In this way, children are able to learn mistakes and not offend it again and at the same time, they are able to know the limit of doing certain things. | P3.1.4 | |
| Body paragraph 4 | | |
| Lastly, quality of time should be spent. | P4 | Char S4 |
| It is not the amount of time spend that matter but is the quality. | P4.1 | |
| Parents should identify the things and activities that the family members like to do. | P4.2 | |
| Once the parents know the child interest, they can then use these areas as the entry point to interact and strike conversation with them. | P4.2.1 | |
| Quality time should be spend to cultivate more understanding and deeper bond through activities that are carried out together. | P4.2.2 | |
| This is highly important in Singapore family. | P4.2.3 | |
| This is because, as most parents are working, the time spend with children are very little and interactions are at times, almost impossible. | P4.2.4 | |

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| Activities should include playing games, outing, shopping, sports and many more. | P4.2.5 | |
| These activities not only pull the family's bond closer, it also helps the working parents to de-stress and children to have a break from tons of schoolwork. | P4.2.6 | |
| Conclusion | | |
| These factors indeed will help to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore. | C | |
| Keeping family healthy and happy will therefore require efforts and commitments of every member. | C | |

Chat 4 – G

| Introduction | Idea code | Idea source |
|--|-------------------|--------------------|
| Family is the basic building block of society. | B1 | |
| Therefore, it has a very important role to play in society, since a cohesive society can only come from close-knitted families. | B1.1 | |
| In the past decade, society has undergone many changes, like modernization of society, increasing existence of the generation gap and economic problems like recessions. | B2 | |
| Since family is the basic unit of society, it is highly susceptible to the impacts of such changes. | B2.1 | |
| However, in Singapore, families do not seem to be greatly affected by such changes. | B3 | |
| To look at this point in greater detail, there is a need to consider the factors that have shaped family relationships in Singapore. | T | |
| The three such factors are completeness of a family, number of parents working and financial background of the family. | T | |
| Body paragraph 1 | | |
| Firstly, the completeness of a family can be simply divided into two categories: broken families versus complete families. | P1 | Jan P4.1 |
| In the first instance, broken families would refer to families that do not have both the parents present. | P1.1 | |
| No matter what the cause might be, the effects are somewhat similar. | P1.2 | |
| In a family without the father or mother, the children will grow up in an environment lacking of care. | P1.3 | G P2.1 |
| This is because the single parents will have to work very hard to support the family and this means less quality time spent within the family. | P1.3.1; P1.3.2 | Char S4 |
| It is highly inevitable that less communication and bonding sessions occur within such families. | P1.3.3 | Jan S2 |
| Furthermore, the children might be more exposed to the lurking dangers of society, since they lack fatherly discipline or motherly love. | P1.3.4 | |
| Thus, broken families tend to be less close-knitted. | P1.3.5 | Char S4 |
| On the other hand, complete families where both parents are present, tend to be more close-knitted. | P1.4 | |
| This is due to the sheltered environment produced, which incorporates sufficient love and discipline. | P1.4.1 | |

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| The children will therefore receive enough attention from their parents and problems can be easily shared within the family, leading to family cohesiveness. | P1.4.2 | |
| Complete families, that include the grandparents' generation, will have even greater cohesiveness, because there will be even more love within the family and also greater sharing of burdens. | P1.4.3 | |
| However, complete families with only one child, might be less close-knitted, simply because the only child will be more introvert due to the lack of companionship or pampered due to the undivided attention. | P1.4.4 | G S2.2.1 |
| Either of these will mean that the child might keep more matters to himself and hence become more selfish. | P1.4.5 | |
| Thus, the family will find it hard to bond together. | P1.4.6 | |
| So, it can be seen that complete families tend to foster closer family relationships as compared to broken families. | P1 | |
| Body paragraph 2 | | |
| Secondly, family relationships can be influenced by the number of parents working. | P2 | G S1 |
| In the first case, where both parents are working, it is obvious that the cohesiveness of the family is very limited. | P2.1 | |
| This is because the parents have to divide their attention between work and family. | P2.1.1 | |
| This also means that less quality time would be spent within the family. | P2.1.2 | Char S4 |
| The children who receive such minimal attention might feel lonely as there is no one for them to confide in. | P2.1.3 | |
| They might also face disciplinary problems due to their idea of "non-existence parents". | P2.1.4 | |
| In such circumstances, parents and children are actually separated by an invisible line, both physically and emotionally. | P2.1.5 | |
| This situation is further aggravated by the employment of maids. | P2.2 | |
| This is because the children might end up being more bonded to the maids than to the family. | P2.2.1 | G P1 |
| This phenomenon is receiving increasing attention, as lots of maids are now known as "alternative mothers" in the eyes of the children. | P2.2.2 | |
| In another case, where only one parent works, the families that fall into this category is bound to be more closely-knitted. | P2.3 | |
| This is despite the argument that the children might be closer to the parent who is at home, because the family relationships actually improves with one parent at home than none. | P2.3.1 | |

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| The parent, most probably the mother, who is at home, tends to exercise better control of the children in terms of results, discipline and behaviour. | P2.3.2 | |
| Furthermore, he or she will assume greater responsibility in taking care of the family and this generally improves the well-being and welfare of the entire family. | P2.3.3 | |
| The parent at home can also share the happenings of the family with the other parent who is working when he or she returns home. | P2.3.4 | |
| So, the children are actually monitored by both parents. | P2.3.5 | |
| Furthermore, the children have someone to confide in when a parent stays at home and the children will also have lesser opportunity to create any mischief or hanky-panky. | P2.4 | |
| It will also be easier for the working parent to interact with the children, since his or her counterpart will update him or her with the necessary happenings in the family. | P2.4.1 | Jan S1.1 |
| Therefore, no one is left out of the family in this case and the relationships within the family will be closer. | P2.4.2 | |
| Hence, better family relationships are fostered when one parent does not work and stays at home to look after the family. | P2 | |
| Body paragraph 3 | | |
| Last, but not least, the financial backgrounds of families also play a part in shaping family relationships. | P3 | |
| In a family that is very well-off, the children are often pampered and materialistic. | P3.1 | |
| More often than not, parents neglect their children as they feel that money can compensate for time not spent with them. | P3.2 | |
| This is definitely a wrong concept as children do need attention and love from their parents. | P3.2.1 | |
| Money alone definitely cannot help the children to share their problems, nor take care of them. | P3.2.2 | |
| Hence, most of the families in such cases tend to be less close-knitted. | P3.2.3 | |
| In a family that is very poor, the family relationships are not any better as well. | P3.3 | |
| This is because both the parents will have to work to meet ends meet and support the family as well. | P3.3.1 | |
| This means that minimal time is spent as a family as a whole. | P3.3.2 | Jan S1.1 |
| The financial problems also affect the child adversely since children might be easily jealous of peers who are better-off, and this might lead to commitment of crimes like stealing or shoplifting. | P3.4 | |

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| This problem is further aggravated by the lack of discipline and moral inculcation by the parents, as they hardly have any time to do so. | P3.5 | |
| Under such circumstances, the family has a high probability of being distorted with weak family bonds. | P3.5.1 | |
| The optimal financial background would be one whereby the family is self-sufficient. | P3.6 | |
| In such a case, the family will not have any financial problems or problems arising from excess wealth. | P3.6.1 | |
| There will be a certain degree of contentment within the family and such families are more likely to develop closer relationships. | P3.6.2 | |
| Furthermore, they will be able to fork out more time for family activities due to the lesser family problems. | P3.6.3 | |
| Hence, this proves that money cannot buy family relationships and a self-sufficient family will create deeper family relationships. | P3 | |
| Conclusion | | |
| All in all, the ideal family seems to be a self-sufficient one that is complete with one parent not working. | | |
| Of course, there are many exceptions to this rule and it also takes many other contributing factors to foster close family relationships. | | |
| However, the abovementioned points have showed that family relationships are still very much dependent on commitment and time spent together and these points are hardly altered by changes in society. | | |
| To conclude, family relationships are greatly shaped by the completeness of a family, number of parents working and financial background. | | |

Chat 5 – Jul

| Introduction | Idea code | Idea source |
|---|------------------|--|
| Establishing a resilient family is extremely important as they lay a foundation for the society as the people will have a greater sense of belonging , identity and security. | B1 | |
| This in turn benefits society as whole as a sense of unity and prevails. | B2 | |
| In a country like Singapore, the people have to stay united as it is facing a slight recession and retrenchments are increasing and the future seem s uncertain. | B3 | Mad B1.2 |
| Hence, there a strong need to build strong ties to provide love, care and support for individuals facing these problems. | T | Art 1, S4.6.2 |
| Body paragraph 1 | | |
| Firstly, in order to build closer relationships with family, the parents have to start instilling the right values in their children since young. | P1 | Art 1, S4.6; Jul S2 (Art 2, P3); BL S2.1 (Art 2, P3) |
| This will in turn shape their beliefs and characters at an early stage and prevent their minds from being influenced negative from the media or other mediums. | P1.1 | Art 2, B2.1 |
| These values include filial piety – a form of gratitude a appreciation towards the parents for their upbringing; | P1.2 | Art 1, S4.6.2 |
| respect for family members as well as others – recognizing the fact that every individual has his own point of view; | P1.3 | Art 1, S4.6.2 |
| and a sense of commitment – it is important to lend support to family members who are facing problems and try to share their problems. | P1.4 | Art 1. S4.6.3 |
| Hence, the child will grow up to be someone who is strongly committed to his families and at the same uphold his beliefs and in due time be ready to face the uncertain world | P1 | |
| Body paragraph 2 | | |
| Secondly, parents need to have a strong marital relationships so as to set a good example for their children. | P2 | Art 1, S1; Mad S7.3 (Art 1, S1.3.1) |
| Their children can at the same time establish a trust in marriages. | P2.1 | |
| However, parents must need to balance work and family well and resolve any emotional issues between themselves. | P2.2 | Mad S5 |
| When the children realize the benefits of close kinships, they will be more willing to communicate more. | P2.3 | |
| When communication is existent, the family will be ready to share their ideas and opinions. | P2.4 | Mad S1 (Art 1, S3); Art 1, S3.2 |

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| Body paragraph 3 | | |
| Thirdly, communication is extremely vital as emotional needs can be nurtured | P3 | Mad S1 (Art 1, S3); Art 1, S2.1.1.2 |
| Bonding with family members is greatly enhanced as parents can be involved in their childrens' life more often. | P3.1 | Art 1, S2.1.1 |
| In addition, every has a chance to express their thoughts and opinions. | P3.2 | Art 1, S3.2.1 |
| Suppressing feelings and thoughts may have a negative impact on the relationships as communication breaks down. | P3.3 | |
| Hence, every family should make an effort to communicate and at the same time spend quality time with one another. | P3.4 | Mad S3 (Art 2, P6) |
| For example, sitting down for dinner everyday and making weekly family trips together. | P3.4.1 | BL S3.3; Art 1, S2.1.1.4 |
| Body paragraph 4 | | |
| Fourthly, every family members should be tolerant and patient towards one another. | P4 | |
| They must recognized the fact that everyone is entitled to their own beliefs and opinions. | P4.1 | |
| If any family member fails to understand a their feelings, that person should try to explain in a clear instead of getting irritable. | P4.2 | |
| In addition, one should not take it out on others when he is in a bad mood. | P4.3 | Mad P3 |
| Hence, conflicts can be minimized. | P4.4 | |
| Parents should also try to avoid harsh methods to deals with their children. | P4.5 | |
| For example, if the children do not perform up to expectations, they should find out the root if the problem instead of caning them. | P4.5.1 | |
| Body paragraph 5 | | |
| Lastly, reasonable family rules should be negotiated rather than imposed. | P5 | Art 1, S4.4.1 |
| The parents should allow a child to have a level of freedom | P5.1 | Art 1, S4.5 |
| These rules can involved the time usage of computers, curfews etc.. | P5.2 | |
| Mostly importantly, once the rules are set, all family members should comply. | P5.3 | |
| This will mininise conflicts and tension. | P5.4 | Art 1, S4.5.3 |
| Conclusion | | |
| In conclusion, showering love , care and concern remain the top priorites as they nurture emotional needs. | C1 | Art 1, S4.6.2 |

| | | |
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| These acts lead to better communication and enhances family relations. | C2 | Art 1, S3 |
| Family members on their part must try to be tolerant and understanding. | C3 | |

References : (retrieved from http://www.aboutfamilylife.org.sg/1_2_30_0_0_0_2_0.htm(june 19,2003) Article 1

<http://www.fathermag.com/204/fathering/>(june18,2003) Article 2

Chat 5 – Mad

| Introduction | Idea code | Idea source |
|--|------------------|--------------------------------|
| Most of the countries including Singapore are facing bad economies. | B1 | Jul B1; BL B1.1 |
| Retrenchments and pay cuts by companies are inevitable during bad times. | B1.1 | Jul B1.1.1 |
| As a result, people are affected. | B1.2 | |
| Does it affect only the person who is being retrenched or receiving a lesser salary? | B1.3 | |
| No, it not only affects the person but his or her family as well. | B1.3.1 | |
| The family could just sink into a financial crisis. | B1.4 | |
| Family relations will be tensed and stressed. | B1.4.1 | Mad B1.2 |
| Furthermore, in the present society of ours, it is not unusual for both parents to be working. | B1.5 | Mad P1.3 |
| In the end, parent spends less time with their children because of work commitment. | B1.5.1 | |
| More often than not, the children are normally left in the care of the maids. | B1.5.2 | |
| Thus, children tend to build a closer relationship to the maid rather than their parents. | B1.5.3 | Mad P1 |
| All these factors are straining family relationships. | B1.6 | |
| So, to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore, communication, support, spending time with family and the ability to balance between work and family is crucial. | T | |
| Body paragraph 1 | | |
| Communication is the most useful way to understand each other. | P1 | Mad S1 (Art 1, S3); BL S1.1 |
| We expressed and received our love, care and concern by talking and listening to our parents or our children. | P1.1 | |
| It is very important to be able to express our thoughts and feelings with little uneasiness within the family. | P1.2 | Art 1, S3.2 |
| All these are achieved by having constant chats session with each other. | P1.3 | |
| Furthermore, we must learn to accept and respect each other views and talk it out when conflicts occur. | P1.4 | Art 1, S3.2.1 |
| “Whilst power resides in the parents, children have their opinions and therefore, negotiations are made possible between parents and children.” (Karen, 2001) | P1.5 | Art 1, S3.2.2 |
| Body paragraph 2 | | |
| Next is support in the family. | P2 | Mad B1.3 |

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| Everyone knows the present situation in Singapore with retrenchments and pay cuts going on. | P2.1 | Jul B1.1.1 |
| If unfortunately a family member is hit with either of the two, family support is very important. | P2.2 | |
| Though the reality is hard to accept, but gaining the support, care and concern from the family will help to soothe things. | P2.3 | |
| For example, if your father gets a pay cut, you and the other family members can help by consoling him and be thriftier. | P2.3.1 | Mad B1.4.3 |
| When your father senses the kind of support that is given to him, he will feel much better and less worried. | P2.3.2 | |
| Body paragraph 3 | | |
| Thirdly, the ability to separate work and family matters is very much required. | P3 | Mad S5 |
| Parents should try not to bring work-related problems or any bad moods from work back home. | P3.1 | Mad P2; Mad P3 |
| This will affect the child. | P3.2 | |
| “Children tend to feel their surroundings more than analyze them, so they notice when they don’t have the full attention of the parent.”(Metcalf, 2003) | P3.3 | Art 2, P6.3.1.1 |
| Furthermore, when parents feel down or unhappy, the child may think that they have done something wrong and as a result blame themselves for it. | P3.4 | |
| One worse thing is when parents take it out on children. | P3.5 | Mad P3 |
| This is definitely undesirable. | P3.5.1 | |
| The child has done nothing wrong to receive that kind of treatment. | P3.5.2 | |
| Therefore, learning to ‘put things in their place’ will aid family relationships. | P3.5.3 | |
| Body paragraph 4 | | |
| Finally, spending time with family is something not to be missed. | P4 | Jul S3.2 |
| The parents spend most of their time working outside and thus having little time left for their children. | P4.1 | |
| Parents should frequently organize family outings so that everyone can get together and spent quality time with each other. | P4.2 | BL S3.3; Mad S3 (Art 2, P6) |
| This also helps everyone to take a break off the stress from work or school problems. | P4.3 | |
| Furthermore, parents and children can understand each other better during these times. | P4.4 | |
| So, stronger and stable relationships are built up. | P4 | |
| Conclusion | | |

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| In conclusion, all of us got to try to be more optimistic about the future. | C1 | |
| Having a supportive and caring family does help matters. | C2 | |
| We should not neglect our family in any situations. Therefore, through talking, supporting, spending time with each other and have a balance lifestyle, we hope that a stable and united family can overcome any challenges facing them. | C3 | |

References:

[Karen, Lim-Quek, 2001. Traits of a functional Family. Retrieved from http://www.aboutfamilylifr.org.sg/1_2_30_0_0_0_2_0.htm](http://www.aboutfamilylifr.org.sg/1_2_30_0_0_0_2_0.htm) on 19 June 2003

Chat 5 – BL

| Introduction | Idea code | Idea source |
|--|------------------|--|
| “Family units are the basic building blocks of our society. But good family environments and strong family relationships are not always easy to achieve.” | B1 | Art 3 |
| This is especially true in the prevailing social and economic climate of Singapore. | B1.1 | Jul B1 |
| With the war on terrorism and the recent outbreak of Sars, Singapore’s economy has become very unstable with unemployment rates escalating. | B1.2 | |
| Family relationships are inevitably tensed up as they quarrel over financial issues. | B1.3 | Mad B1.2 |
| Besides, most children nowadays only regard their parents as their main monetary source and that some of them are even closer to the maids than the family. | B1.4 | Mad P1 |
| Thus, it can be seen that there is a need to put in extra effort in order to build a strong and resilient family. | T | |
| Body paragraph 1 | | |
| To build a strong family, we should first start from educating the young children. | P1 | Jul S2 (Art 2, P3); BL S2.2 (Art 2, P3) |
| This is because children in Singapore have not been through wars and do not now how hard life can be, unlike their parents. | P1.1 | |
| Thus, many of them tend to take things for granted. | P1.2 | |
| Most of them do not understand the importance of having a strong family relationship. | P1.3 | |
| Moreover, young Singaporeans nowadays tend to keep up with the fashion without much consideration for their family financial situation. | P1.4 | |
| Hence, there is a need to inculcate the right family and moral values to the children from young. | P1.5 | Art 1, S4.6 |
| This can be done through setting a routine for young children. | P1.5.1 | |
| For instance, asking the child to save money and help out the household chores regularly. | P1.5.2 | |
| They will then be able to develop a habit of doing the correct things at the correct time. | P1.5.3 | |
| Values such as discipline and being justice and fair can also be instilled in children through playing of games since they learn to obey rules during games like chess and even hide-n-seek. | P1.5.4 | |

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| With the child having the correct mindset and ability to understand the importance of families, a strong and resilient family can then be built. | P1 | |
| Body paragraph 2 | | |
| Parents also play an equally important role in the building of the family. | P2 | BL S7 |
| Most of the time they are the ones setting example for the children and teaching them the rights and wrongs. | P2.1 | Mad S7.3 (Art 1, S1.3.1) |
| It is not wrong to say that they are actually the “leaders” of the family. | P2.2 | Art 1, S1.3.1 |
| As a result, parents should also be responsible in the well being of the family. | P2.3 | |
| With the growing number of working parents in Singapore, being able to spend time with their children pose a big problem to the family. | P2.4 | Mad P1.3 |
| Thus, parents should learn to separate work and family and not bring home their work to do. | P2.4.1 | Mad S5 |
| They should plan their time carefully such that they will have sufficient time to take care of their children and communicate with them. | P2.4.2 | Jul S3.2 |
| Parents can organize more family outings like picnics, overseas tours and make it a point for the family to exercise together in order to bond the family and encourage communication. | P2.4.3 | BL S3.3; Jul S3.3.1 |
| “Conversation among family members nurture caring, emphatic, open and trusting relationships” (Lim-Quek, 2001). | P2.5 | Art 1. S3.1 |
| Hence it is important for parents to be able to communicate with their children in order to have a health family relationship. | P2 | |
| Body paragraph 3 | | |
| Lastly, government and the society can also do their part in building a resilient family. | P3 | |
| More help lines and family centres can be set up to provide counseling services to family in distress. | P3.1 | |
| Employers can provide employees more benefits such as longer paid leaves to take care of children and for them to spend time with the family and organize company events which require the employee’s whole family to take part. | P3.2 | Jul S6 |
| Government can also hold campaigns and events to encourage family bonding and set laws to ensure employees are not deprived of time spent with family. | P3.3 | |
| Conclusion | | |

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| In conclusion, it is clearly that there is a need to build a strong family, since family is the ultimate support and can provide great security for every family member. | C1 | |
| Thus, with the above-suggested ways, a strong and resilient family can be built easily. | C2 | |

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Chat 6 – SY

| Introduction | Idea code | Idea source |
|---|------------------|-----------------------|
| I am strongly against the idea on using monetary rewards to boost the supply of organs for transplants. | B1 | SY T1 |
| Although monetary rewards may seem as an attractive means to boost organ supplies, it may cause many undesirable effects if the supply of organs are done in an unethical way. | B1.1 | |
| Black markets for organs may increase. | B1.2 | SY P7 |
| Human life is further devalued as the selling of organs become a profit trading business rather than to serve the purpose of saving lives. | B1.3 | Art A, A4.1.2 |
| Furthermore, unfair treatment would occurred among the rich and poor people as those who have financial means would be able to get their desired organs faster. | B1.4 | Huey P5 |
| This would leave the poor people at disadvantage situation to be left behind or exploited. | B1.4.1 | IM P4.4; Art A, A3 |
| The poor people may result in selling their organs for money to earn a living. | B1.4.2 | |
| Therefore, by using monetary rewards to boost the supply of organs for transplant is not a fair and ideal way to achieve its aim of saving more lives. | B1 | |
| Body paragraph 1 | | |
| First of all, people may be involved in black market trade. | P1 | SY P7 |
| The illegal trade of buying and selling organs may be prevalent, as they would try their ways and means to earn profit out of it. | P1.1 | PLX P4.3 |
| Others may results in doing heinous acts to force the people to sell their organs. | P1.2 | |
| “ Brokers ensnare people with jobs that do not exist and they go to Istanbul. For example, where they are scared into having the operation. That is really criminal behavior.” | P1.3 | Art 3 |
| “ How do you regulate a black market? Some states have tried.. but the problem is that there is an ethical dilemma: How much do you pay a healthy poor person for mutilating their body?” “It is always going to be someone desperate who sells.”(Reuters: 2-3) | P1.4 | Art 3 |
| These unethical ways may occur frequently as their main aim is to earn profit rather than to save lives of other people. | P1.5 | |

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| Thus, their unhealthy greed would cause them to abuse humans' organs for their selfish motives. | P1.6 | SY P3 |
| This is not a situation we hope to see when humans' organs are being exploited. | P1 | |
| Body paragraph 2 | | |
| Secondly, human life would be devalued if organs were obtained through monetary rewards. | P2 | Art A, P4.1.2 |
| Human body is scared to us. | P2.1 | Huey P1 |
| It is not a commodity for sale. | P2.1.1 | Huey P1 |
| "Organs and tissues should be freely given without commercial consideration of financial profit."(Lisa: 1) | P2.2 | Art 2 |
| Furthermore, human beings cannot be weighed by money and humans' organs are not a product! | P2.3 | PLX P2 |
| Donation of organs is a benevolent movement rather than through monetary rewards that deeply affects this honorable and selfless act. | P2.4 | |
| If organs are involved in black market trades, it further devalues the main motive of savings lives. | P2.5 | SY P7 |
| "Any attempt to assign a monetary value to the human body or its body parts, even in the hope of increasing organ supply, diminishes human dignity and devaluates the very human life we seek to save"(Goldberg & Staff: 2) | P2.6 | Art A, A4.1.1; A4.1.2 |
| Body paragraph 3 | | |
| Thirdly, using monetary rewards to boost organs supply may result in another type of effect-preferential treatment. | P3 | |
| The rich who have means of purchasing power would be likely to get the organs first. | P3.1 | Huey P5 |
| This may cause the propaganda of bidding for organs at a higher cost. | P3.1.1 | |
| This is an unfair treatment to the poor. | P3.1.2 | |
| Thus, the poor are left behind in getting their desired organs. | P3.1.3 | |
| Furthermore, poor people may resort to sell their organs to gain money. | P3.1.4 | |
| "A Moldovan woman, desperate to feed her family, decides to sell one of her kidneys to a rich Westerner for \$3,000-more than a year's salary for the donor, peanuts for the recipient."(Reuters: 1) | P3.2 | Art 3 |
| "There are loads of poor people who get exploited and are willing to sell an organ to get money." (Reuters: 2) | P3.3 | Art 3 |

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| Therefore, poor people have no other choice to be exploited by rich people in exchange of money. | P3 | |
| Body paragraph 4 | | |
| Lastly, using the monetary rewards may not achieve its desire result to boost organs supply. | P4 | |
| For example, there is a religious restriction on selling and donating their organs. | P4.1 | |
| Besides that, some people do not agree their loved ones to donate their organs due to safety reason. | P4.2 | |
| Some family members reject the idea of donating the organs of their loved ones that passed away. | P4.3 | |
| They are too despair to leave them and would not want them to die without any missing organs. | P4.3.1 | |
| Thus, monetary rewards to boost organs supply is not ideal. | P4 | |
| Conclusion | | |
| All in all, by using monetary rewards to boost supply of organs transplants is not ideal. | C1 | |
| Through monetary rewards, organs supply may increase but this would cause many undesirable effects. | C2 | |
| It defeats the purpose of saving lives. | C2.1 | |
| If government agrees to use monetary rewards just for the sake of increasing organs supply, many people may use unethical ways to achieve it. | C3 | |
| Thus, it is not advisable to use monetary rewards. | C4 | |

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Chat 6 – IM

| Introduction | Idea code | Idea source |
|---|------------------|-----------------------|
| Over the years, there has been a certain numbers of doctors, public or government bodies wanting to endorse the idea of using monetary rewards to boost the supply of organs for transplants. | B1 | |
| However, due to its sensitivity and complication of this issue, the idea has yet to be endorsed. | B1.1 | |
| Honestly, I hope that the idea will not be endorsed at all. This is so because of the reasons that will be mentioned in the following paragraphs. | T1 | |
| Body paragraph 1 | | |
| First of all, there are actually quite a number of syndicates that trafficked human organs and their main target groups are poor people. | P1 | PLX P4.3; IM P4.4 |
| To the syndicates, these poor people are easy target because most of them would do anything in return of money. | P1.1 | |
| Additionally, because there are people willingly to pay high prices for human organs, the number of syndicates would keep increased to target people living in poverty. | P1.2 | IM P4.4; Art A, A3 |
| We can say that “if there’s demand, there’s be supply”. | P1.3 | |
| On the whole picture of this is that human transplants have been abused as many people are using this as an opportunity to make quick and easy money. | P1.4 | |
| Body paragraph 2 | | |
| Secondly, most of the syndicates do not have the full safety ways or equipments to remove the organs. | P2 | |
| Because this activity is illegal, most carry out the operation in small, isolated rooms without paying much attention to the hygiene. | P2.1 | |
| Actually, there are cases where people wounds got infected after the operation. | P2.2 | |
| We might have thought that the money is not worth the cause of getting side-effect from the operation but to the people living in poverty, this has never came to a thought to them. | P2.3 | IM P4.2.2 |
| Money comes first before anything. | P2.3.1 | |
| Body paragraph 3 | | |
| Thirdly, the rich people would have a first-hand in getting human transplant than to the poor people. | P3 | Huey P5 |
| It can be described as “who can pay more, will get one”. | P3.1 | SY P5.2.1 |

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| This kind of situation would happen mostly in the third-world countries where there are only two classes of people, the very rich and the very poor. | P3.1.1 | |
| The very rich people would have what they wanted and the poor people would be denied of anything. | P3.1.2 | |
| Even the hospitals would rather tend to the very rich than to the very poor. | P3.1.3 | |
| Mostly, the very poor would experience closed doors from the hospitals, “no money, no talk”. | P3.1.4 | |
| On the other hand, in the developed countries, even though the poor are given medical incentives, the reality still lies in the case of who has more money. | P3.2 | |
| Anyone who has more money can have the privileges to have organ transplants first. | P3 | |
| Conclusion | | |
| To conclude as a whole, human transplant has become an abuse, whereby people no longer willingly donates their organs out of goodwill, but rather for the monetary rewards. | C1 | |
| Increasing number of poor people removing their organs would be on the rise, given the attractiveness of the money in return. | C2 | |
| To actually raise awareness of people coming forward to donate their organs willingly, the response would be slow. | C3 | |
| However, if money is to come in as a monetary reward, there would be an abuse of human transplant | C4 | |
| It seems that either ways have problems implicating. | C5 | |
| If there’s a desperate need for human organs, I, myself would have to eventually come to terms that monetary rewards have to be used. | C6 | |
| I would then suggest that the governments of each country to implement strict laws to protect the whole situation from being seen as an abuse. | C7 | |
| It would not be easy but I hope that there would be other better ways to improve the human transplants situation than to use money as a monetary reward. | C8 | |
| Money must be the last resort. | C8 | |

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Chat 6 – PLX

| Introduction | Idea code | Idea source |
|---|------------------|------------------------------------|
| Research in the United State has found that the number of potential donors each year is about 17,000 while only about 6000 people really donated their organs (Goldberg,2003). | B1 | Art A, F1.5 |
| Nearly 11,000 people can be saved if everyone tries their best to help others who need the organs. | B1.1 | Art A, B1 |
| Hence it is no wonder that governments of every country in the world is thinking of using monetary reward as an alternative to encourage more people to donate their organs after their death. | B1.2 | |
| However, is using monetary reward really a good idea? | | |
| As the saying goes, “Money is the root of all evil”. | B1.3 | |
| Such reward will only prompt unhealthy greed, devalue human life and may not even improve the situation. | T | |
| Body paragraph 1 | | |
| Firstly, use of monetary reward will result in unhealthy greed. | P1 | SY P3 |
| Many poor people may be attracted by the reward and choose not to give the best treatment to their sick members and choose to let their family members to die in order to exchange their body organ for the reward. | P1.1 | |
| Furthermore, such reward will be a sign that the government has approved such transition and this will further encourage human trafficking in the black market. | P1.2 | SY P7 |
| Many poor people will fall under prey of such illegal trafficking. | P1.2.1 | PLX P4.3; IM P4.4; Art A, A3 |
| Many poor people may sell their children to such criminals for money. | P1.2.2 | SY P3 |
| Body paragraph 2 | | |
| Secondly, such reward will devalue the meaning of human life. | P2 | Art A, A4.1.2 |
| Every part of human life is precious;there is no price in the world that can compare to human life. | P2.1 | PLX P2 |
| Hence by setting a reward for organs donated, we are attempting to undermine human life. | P2 | |
| People will have the perception that human life can be exchanged for money and in turn ignore the sacredness of human life. | P2.2 | |
| It will not be long when such loosening in the law will be exploited by criminals in the black market and rampant wastage of life can be seen as in cases of abortion where human life has lost its value to many people. | P2.3 | SY P7 |
| Body paragraph 3 | | |
| Thirdly, monetary reward may not even increase the number of organs donated. | P3 | |
| Many people really cannot and would not donate their organs. | P3.1 | |
| For example, ‘Some families refuse on religious grounds. | P3.2 | |
| In Judaism and Islam, tradition holds that the body should be buried intact, though some clergy have given their blessing to donation.’(Barnard, 2002) | P3.2.1 | Art 3 |
| And another example, ‘Transplant have long been a rarity in Japan for a number of reasons-cultural taboos oppose the cutting up of | P3.2.3 | Art 2 |

| | | |
|---|--------|----------------------|
| corpses and people have resisted becoming donors amid fears of doctors letting donors die to harvest their organs.’(Kageyama, 1999) | | |
| In Singapore, some Chinese believe in life after death and hence some refuse to donate their organs in order to preserve a whole body to bring to the next life. | P3 | |
| Therefore, using monetary reward will also not help to boost the supply of organs for transplant. | | |
| Body paragraph 4 | | |
| The offer of monetary reward may instead turn off potential donors. | P4 | PLX P6 (Art A, A4.2) |
| For those people who donate their organs out of their willingness and unselfishness, the offer of money is an undermining of their dignity. | P4.1 | Art A, A4.1.3 |
| These people may not need the monetary reward offered by the government to determine the meaningful thing that they had done. | P4.2 | |
| For them, to know that someone will be able to lead a normal life with their organ is the best reward and recognition of what they had contributed to the society. | P4.3 | |
| The offer of money will only pollute the beauty and sacredness of such unselfish act. | P4.4 | |
| This will only turn off potential donors and hence make matter worst. | P4 | |
| Body paragraph 5 | | |
| Education and awareness is still the best way to boost organ supply. | P5 | |
| More enthusiastic campaign should be held to raise awareness and explain the myths that people have about organ donation. | P5.1 | |
| For example, pop stars, celebrities and famous advocators could do their part to encourage people to donate their organs. | P5.1.1 | |
| In Japan, the government can have stricter laws to punish those doctors who do not do their best to save patients in order to harvest their organs. | P5.1.2 | |
| The media can also wider broadcast the plight of patients who really need new organs to continue their life and also the stories of successful organ transplants and the new life that the transplants had given to patients. | P5.1.3 | |
| In addition, easier and more convenient procedures could also be made by the government to allow the donation of organs. | P5 | |
| For example, government could set up website to allow people to online declare their willingness to be a donor. | P5.1 | |
| Conclusion | | |
| In conclusion, there is still much to be done in awareness and education that the governments have not done. | C1 | |
| Use of the monetary reward is still the last resort and is still not needed in the boosting the supply of organs. | C2 | |

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Chat 6 – Huey

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| I disagree with the idea of using financial incentives in an attempt to increase human organ donation. | T1 | |
| As the saying goes, ‘Money is the root of all evil’, if a country is to implement such a program, it will definitely experience detrimental effect on the society. | B1 | |
| This is especially true in the third world countries where the poor are willing to sell their organs for the money in order to survive. | B2 | |
| Assigning monetary value on human body is devaluing human life and more unhealthy greed and unethical act will take place. | B3 | Art A, A4.1.2 |
| The gap between the rich and the poor will further widen. | B4 | Huey P5 |
| Also, people who want to donate their organs out of altruism and kindness will be turn off by such a program. | B5 | PLX P6 (Art, A4.2) |
| Body paragraph 1 | | |
| Firstly, human life is precious and priceless. | P1 | |
| One should not assign a monetary value on human body. | P1.1 | PLX P2 |
| Our body is given by god and we should not treat it as a commodity and trade it for money. | P1.2 | Huey P1 |
| If one has to die because both his kidneys have failed to function, I feel that he should leave this world and not deprive others of their organs and purchase from them just to prolong his own life. | P1.3 | |
| Then the donor has only one kidney to live on. | P1.3.1 | |
| What will happen if one day his only kidney fails to function? | P1.3.2 | |
| It is unfair to the donor. | P1.3.3 | |
| Therefore human life is precious and we should treasure it. | P1 | |
| One should just live life to the fullest and not to take advantage of others and devaluing human life. | P1 | |
| Body paragraph 2 | | |
| Secondly, such an attempt will lead to unhealthy greed and unethical act in the country. | P2 | SY P3 |
| For example, criminals might take advantage of the situation and make profit out of it. | P2.1 | |
| It will encourage the criminals to kidnap victims and sell their organs. | P2.2 | |
| A black market might be set up for the buying and selling of organs. | P2.3 | SY P7 |
| Out of desperate, people on the waiting list for organs might take the illegal way to buy organs. | P2.4 | |
| Unethical doctors might even remove his patients’ organs without their consent or knowledge of the patients and make a profit out of it. | P2.5 | |
| All these acts will cause social upheavals in the country and the citizens will be living in constant fear, worrying if they will be the next victim. | P2.6 | |
| Body paragraph 3 | | |
| Thirdly, using financial incentives will further widen the gap between the rich and the poor. | P3 | Huey P5 |
| The rich has the privilege as they have a much higher purchasing power. | P3.1 | |

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|--|--------|----------------------|
| For example, if two patients on the waiting list, one is rich and the other is poor, want to buy an organ from a donor, the rich one will definitely get it as he can offer a higher price than the poor. | P3.1.1 | SY P5.2.1 |
| The poor are then left to die as they are unable to fork out such a huge sum of money. | P3.1.2 | |
| Using financial incentives to increase human organ donation is an unfair system to the poor. | P3.2 | |
| Body paragraph 4 | | |
| Last but not least, this system might even cause the number of donations to drop as people are turned off by the money as they are willing to donate their brain-dead relative's organ out of altruism and kindness. | P4 | PLX P6 (Art A, A4.2) |
| Not all people are money oriented. | P4.1 | |
| Their ultimate aim is to give those in need of organ a chance to live. | P4.2 | |
| Conclusion | | |
| In conclusion, I feel that human life is priceless and no amount of money can measure the value of human life or human part. | C1 | |
| Also, there will be too many negative impacts on the country if it is to implement such a program. | C2 | |
| It is unfair to the poor as the rich can enjoy the benefits while the poor has no choice but wait for their death. | C3 | |
| The amount of wealth one possesses should not determine how long one can live. | C4 | |

| Introduction | Idea code | Idea source |
|---|------------------|---------------------------|
| Human organ transplant is a solution to the problem of organ failure. | T1 | |
| With today's technology, i.e. stem-cell research is still an ongoing project and artificial organs are very limited, I think that human organ transplant is the best solution to replace failed organs. | T1 | |
| Human organ transplant is the closest and safest method to replace failed organs, hence the best solution to the problem of organ failure. | T1.1 | |
| Closest in a sense that one is using another human fellow's organs (of the same species) and not other species' organs. | T1.2 | |
| Safest in a sense that one is preventing different species from coming into close contact and hence, taking measures to prevent cross-species diseases to surface. | T1.3 | |
| However, there seems to be a shortage of donated human organs and a significant increase in the number of patients waiting for organs. | B1 | Art A, F1 |
| Hence, many other alternatives had been thought by the scientists and researchers. | B1.1 | |
| Other possible alternatives to replace failed organs include xenotransplantation, using of stem-cell research to culture and produce organs and the implantation of artificial, organs in bodies to substitute the failed organs and take over the "job" from them. | B1.1 | WP S1; WP S2; WP S3 |
| However, human organ transplant had already raised many controversial issues, let alone the alternatives solutions. | B1.2 | |
| Body paragraph 1 | | |
| An alternative solution to the problem of organ failure is through xenotransplantation. | P1 | WP S2 |
| Xenotransplantation is the transplantation of tissues/organs from one species to another. | P1.1 | |
| Often, pigs are used as donors to provide tissues and organs for humans because they have close features to humans (their organs are about the right size for humans). | P1.2 | |
| However, there are many medical, ethical and moral issues involved with it. | P1.3 | |
| Xenotransplantation can be used for bridging purpose, which is to act as a temporary organ in humans to sustain life until a medically suitable organ is available. | P1.4 | |
| However, there are far more medical and safety risks that outweigh the benefits of xenotransplantation. | P1.4.1 | |
| These risks include the risk of immune rejection, the need for high dosage of immunosuppressive drugs to fight rejection, which lowers the immune system and puts a patient at risk for other kinds of potentially fatal infections, risk of infection by micro-organisms transferred from pigs that could cause a range of more or less serious diseases, some of which may still be unknown to us (cross-species diseases) and the risk that the animal organ will not be able to perform well inside the human body (Ethical and Social Issues Raised by Xenotransplantation). | P1.4.2 | Art 3 |
| Examples of cross-diseases are mad-cow disease, bird flu and the recent SARS. | P1.4.2.1 | |
| These diseases cause much discomfort to the whole world and are very unwelcome to the human race. | P1.4.2.2 | |

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| To add on, other than the medical and safety risks, there are ethical and moral issues involved in it, as well as psychological and social issues. | P1.5 | |
| Xenotransplantation leads to the breeding and killing of animals to provide organs for humans. | P1.5.1 | |
| This is considered immoral by people with strong convictions for animal rights. | P1.5.2 | |
| Pigs are popularly used for xenotransplantation and many Muslims are strongly against this as they regard pigs as "dirty". | P1.5.3 | sWt_drEaMz S2.1; sWt_drEaMz S2.1.1 |
| They do not consume pigs let alone allowing pig organs in their bodies and to be part of them. | P1.5.4 | |
| Also, it is very difficult to understand how the patients that underwent xenotransplantation will feel. | P1.6 | |
| They may be will feel that they are part-human-part-animal and boundaries may be created between them and humans. | P1.6.1 | |
| Therefore, xenotransplantation, though is an alternative solution to organ transplant, is very much more controversial than human organ transplant. | P1 | |
| Body paragraph 2 | | |
| Another alternative solution is researching/tissue and organ engineering from human source, i.e. a branch of stem-cell research. | P2 | WP S1 |
| This stem-cell research is quite recent and new and aims to bring the medical field to a higher level. | P2.1 | |
| Therefore, much more research has to be done and hence, not much controversial issues have yet surface. | P2.1.1 | |
| However, there is one moral issue that was quite frequently debated and that is the question of whether we are killing lives when using the cells from embryos for the research. | P2.2 | WP S1.2 |
| One group of people claimed that the scientists are destroying lives or going-to-be lives when they are experimenting with the cells from embryos. | P2.2.1 | |
| However, another group of people, the scientists, claim that the human embryo that they experiment with was created in vitro in an assisted reproduction procedure, remained in storage after completion of all intrauterine transfers requested by the mother, and has departed parental control according to instructions to the attending physician that the embryo shall be given to research and that there shall not occur any transfer to a uterus, or ex vivo nurture beyond a number of weeks specified in the instructions, of either the embryo or any totipotent cell taken from the embryo. | P2.2.2 | sWt_drEaMz S1.3.1 (Art 2) |
| Therefore, they claimed that experiments with embryos that are less than 2 weeks old (it was also legalized that embryos that are less than 2 weeks old is not considered a life) is not immoral (Louis M. Guenin). | P2.2.3 | Art 4 |
| Therefore, this alternative solution to human organ transplant may look optimistic but now, human organ transplant is still much preferred. | P2 | |
| Body paragraph 3 | | |
| Lastly, researching artificial organs or devices is another alternative solution to human organ transplant. | P3 | WP S3 |

| | | |
|---|--------|-----------|
| However, this field is quite limited as there are not many organs in our body that can be replaced artificially like our liver. | P3.1 | |
| However, with our science and technology advancement, we have already succeeded in coming out with artificial heart and the dialysis machine that replaces our human heart and our kidneys. | P3.2 | |
| This is a breakthrough for science and technology arena and had not much ethical and moral issues. | P3.3 | |
| One ethical issue is on the reliance of artificial heart. | P3.3.1 | |
| Christians do not agree with the use of artificial heart and think that scientists are playing the role of God by creating and destroying lives as they please. | P3.3.2 | |
| They think that those people that rely on artificial hearts are no longer considered alive. | P3.3.3 | |
| Also, the artificial organs or devices are not as convenience) as having healthy organs or after a human organ transplant operation. | P3.4 | |
| Therefore, this alternative solution is feasible but once again, human organ transplant is more preferred as compared to artificial organs or devices they bring much more convenience to humans. | P3 | |
| Conclusion | | |
| To conclude, I think that human organ transplant, which is not the only solution to the problem of organ failure, is still the best solution. | C1 | |
| However, the problem is not that there are not enough medically suitable organs; rather, it is that most of the suitable organs are buried. | C2 | |
| Despite public relation initiatives, widespread public and professional education, and a variety of laws aimed at increasing donation rates, donations has increased miserably while those in need of organ transplants has grown much significantly in comparison. | C3 | |
| In America, there are more than 6,000 Americans that die annually while they are waiting for suitable organs to save their lives. | C4 | Art A, B1 |
| The waiting list for organs keeps on increasing as nothing so far had succeeded in persuading people to donate their organs (Carey Goldberg). | C5 | Art A, F1 |
| This had lead to the US political and medical leaders' proposal to raise human organ supply by using money and leads to another never-ending debate regarding human organ transplant. | C6 | |

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Chat 7 – WP

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Organ failure has been one of the major killers for the last few decades. | B1 | |
| For instance, one person will die of organ failure in Singapore each day (National kidney foundation Singapore, 2001) and in America, an average of 4000 people die each year while waiting for organ transplant.(Donation & Estate Planning, N.D.) | B1.1 | Art 3 |
| Though the authorities have put in a lot of efforts in raising public awareness for organ donation, still the gap between organ supply and demand keeps on increase rapidly. | B1.2 | Art A, F1.3 |
| This drives the biomedical scientists to look for alternative solutions for organ failure. | B1.3 | |
| Besides human organ transplant, other potential and promising solutions for organ failure are Xenotransplant, artificial organ and therapeutic cloning. | T | |
| Body paragraph 1 | | |
| In short, Xenotransplant is a medical technique involving transplantation of animals' tissue into human bodies. (Bergguist, 1998, January 23). | P1 | WP S2; Art 4 |
| So far, baboon and pig turn out to be the best candidates for animal's organ harvesting. | P1.1 | |
| The organs involved in xenotransplant are usually heart, kidney, liver and bond marrow. | P1.2 | |
| One advantage of xenotransplant is that the surgery can scheduled at the patient's convenient, oppose to emergency surgery performed whenever a human donor is dead. | P1.3 | |
| Since this technique is in its infancy stage, a lot of medical problem still have to be sort out. | P1.4 | |
| First of all, due to cross species transplantation, the genes of the animal's organ do not match well with human's one. | P1.4.1 | |
| Thus, upon xenotransplantation, the patient's body immune system will set up a defense mechanism against the alien organ in the body, causing severe rejection of the newly transplanted organ. | P1.4.2 | |
| Though surgeon can block off the human immune system by using immunosuppressive drugs, eventually the patient still die because of other disease that attacks the body due to low immune system. | P1.4.3 | |
| To solve this problem, scientist turn over to genetic engineering, which offers the technique to alter the genes of the animal's organ such that it matches human's DNA. | P1.4.4 | |
| But still, more research has to be done in order to turn this theory into reality. | P1.4.5 | |
| Another medical issue concern about xenotransplant is the danger of introducing animal disease into human species. | P1.5 | |
| There are a lot of viruses and bacteria that only fatal to one specific species but not the others. | P1.5.1 | |
| For instance, baboon body carries myriad transmittable agents that are harmless to it, but fatal to human.(Williams, 1996, June) | P1.5.2 | Art 5 |
| So a thorough screening on the animal's organ has to be done in order to prevent cross species disease spreading. | P1.5.3 | |
| On the other hand, xenotransplant does bring up quite a few ethical issues regarding animal's right. | P1.6 | |

| | | |
|---|--------|---|
| Often, the animal lover bodies will bring up the issue of ethically not acceptable for animal organ harvesting, especially high level primates that closely relate to human are involves. | P1.6.1 | |
| Whereas for pig, the ethical issue is not so serious because thousands of pigs are slaughtered for food everyday, so what's the difference when they are "slaughtered" in the operation room? | P1.6.2 | |
| But again when Islamic religion is concerned, Muslims are not allowed to take in any thing extracted from the pig, including pig's organ transplantation. | P1.6.3 | sWt_drEaMz S2.1; sWt_drEaMz S2.1.1 |
| Body paragraph 2 | | |
| Another possible cure for organ failure would be using artificial organs. | P2 | |
| Just like artificial limb, artificial organs are man made devices or gadget that can be used to replaced the failed organ and carry out the normal function of the replaced organ. | P2.1 | |
| This device can be implanted either inside or outside of the human body, depending on its design. | P2.2 | sWt_drEaMz S3.2 |
| This potential field covers a great variety of human artificial organs from head to toe. | P2.3 | |
| Today, scientists are cracking their brain in designing artificial lung, artificial eye, and artificial pancreas, other than the well known artificial heart. | P2.4 | Art 6 |
| Though this method might help to solve the organ failure problem, but it is temporary, not permanent. | P1.4.1 | |
| This is because the artificial organs usually cannot perform all of the functions of the replaced organ, due to human's limited knowledge of the organ itself and also the complexity of the organ mechanism which make the construction of the artificial organ impossible base on current technology. | P2.4.2 | |
| Thus the artificial organs need constant maintenance and will eventually disturb human body system in the long run. | P2.4.3 | |
| After the implantation, on average 80% of the patients live for 1 year and 60% live for 5 years, this is why surgeons prefer to use artificial organs as a bridge, which serves as a temporary replacement for the failed organ until a human organ is available. (Claudia, 1985) | P2.4.4 | Art 6 |
| But again this brings up a ethical issue on whether these patients should be given the priority upon others on the waiting list for organ? | P2.5 | |
| Because patients who do not received artificial organ can make use of artificial organ when there is an emergency and those patients who have artificial organ implanted have a limited lifetime, it is reasonable to give them the priority. | P2.5.1 | |
| Maybe the authority can set up new rule in the organ waiting system, such that all patients will receive an artificial organ when the first emergency occurs, then only they are allow to receive a human organ after that. | P2.5.2 | |
| Body paragraph 3 | | |
| Last but not least, the success of mammal cloning in the last decades has offered genetic engineers a new way to tackle organ failure through therapeutic cloning or in layman term, tissue/organ cloning. | P3 | WP S1.1 |
| This technique involves the transfer of the non-reproductive cell's nucleus to an egg cell in which its nucleus is pre-removed. | P3.1 | |

| | | |
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| In short, it is somatic cell nuclear transfer (NT), which is the same technique used to create Dolly. | P3.1.1 | |
| Then the product of this process would be an embryo, which has the same DNA as the parent cell and this embryo are full with embryonic stem cells (ES) which have the potential to differentiate to any other types of cell, including organ tissues. | P3.1.2 | |
| So scientist can culture specific organ by carefully control the environment of the stem cells, which signals the stem cells to change into specific type of cell. | P3.1.3 | |
| Thus surgeons can culture a genetically identical organ for the patient who suffers from organ diseases. | P3.1.4 | |
| But still, this theory is still far beyond reality, as the NT technique is still subject to high failure rate which will result in abnormality. | P3.2 | |
| If cloning is successfully carried out, the patient will have a great chance of recovery and no rejection will occur, since the transplanted organ is genetically same as the old ones. | P3.3 | |
| Though this method seems to be superior among the rest, yet it still subject to ethical issue. | P3.4 | WP S1.2 |
| It is morally unacceptable for human to create embryo, which is a potential life, and then destroying it for the interest of saving other life. | P3.4.1 | |
| In addition, large number of egg cells is needed as the NT process has a high failure rate. | P3.4.2 | |
| To tackle this issue, some countries such as Britain plans to loosen the law by allowing creation of human embryo up to 14-day old. (Ho & Cummins, 2002) | P3.5 | Art 8 |
| In fact, there is abundant supply of ES cells from excess embryo created for in vitro fertilization. | P3.5.1 | |
| Alternatively, biologist can replace ES cell with adult stem cell, which are stem cell found in body. | P3.5.2 | |
| Another major concern about therapeutic cloning is that it might act as a stepping stone for human cloning and eugenics. | P3.5.3 | |
| Since these two processes involved very similar technique used in therapeutic cloning, there is a public concern of misusing NT technique to clone human or to selectively pick out bad genes and put in good genes to enhance one's physical or mental abilities, in other words, designed baby. | P3.6 | |
| Conclusion | | |
| Though some of the techniques are still at the infancy stage and confront quite a few ethical issues, but never the less they offers a chance of prolonging the lives of those organ failure patients who are at the 'dead' end of the organ waiting list. | C1 | |
| In conclusion, authorities and the research communities should work hand in hand to sort out those moral issues involved and at the same time, fine tune each techniques such that they can bring permanent new hope to those who suffered from organ failure. | C2 | |

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| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Nowadays, many people are suffering from the organ failure problems. | B1 | |
| They are dying and waiting for suitable organ to undergo the organ transplantation operation. | B2 | Art A, F1.1 |
| However, organ transplantation is not a perfect way to cure organ failure patient because it is very difficult to find a fitting organ which is not rejected by patient. | B3 | |
| Though, it is the best solution until now. | B3.1 | |
| Therefore, scientists try to discover other methods such as gene therapy, stem regeneration and traditional medicine to solve this problem. | T | |
| Body paragraph 1 | | |
| Stem regeneration is one of the methods but it still works in trial stage. | P1 | WP S1 |
| Basically, it works based on the regeneration principle. | P1.1 | |
| The stem cell in our body can generate to all kinds of tissue which will differentiate afterward. | P1.1.1 | |
| So, if we can control the growth of the stem cell and its product, we can produce the type of tissue that we want. | P1.1.2 | |
| Thus, we can use it to replace the failure organ in patient's body. | P1.1.3 | WP S1.1 |
| Body paragraph 2 | | |
| Another method to solve this organ failure problem is gene therapy. | P2 | |
| Gene therapy is an introduction of normal genes into the cells of patients with defective genes. (Snustad & Simmons,1999:8). | P2.1 | Art 3 |
| By introducing a normal gene into the failure organ's tissue, the specific gene will take over the metabolism function and produce the required substance. | P2.2 | |
| Nevertheless, the result is discouraging because the introduced genes were only expressed for only a short period of time. | P2.3 | |
| Hence, scientists still work on it and try to make its effect everlasting. | P2.4 | |
| Body paragraph 3 | | |
| Besides, Chinese traditional medicine is also one of the methods that has been used widely these past few years as the remedy for organ failure. | P3 | |
| People believe that taking traditional medicine would not have any side effect for our health. | P3.1 | |
| So, they take the traditional medicine based on the recipe which written by the "sen se" with natural material. | P3.2 | |
| But they have to follow the recipe tightly to get the efficient result. | P3.3 | |
| Body paragraph 4 | | |
| Although these alternatives are potentially contributing to human being, they involve in some medical and moral issues. | P4 | |
| Many people question about the safety of the Chinese traditional medicine because there is no scientific prove of its effectiveness. | P4.1 | |
| Even some of the natural materials or plants in Chinese traditional medicine are poison in scientific context. | P4.2 | |
| Moreover, people also curious about the gene therapy and wonder whether it brings side effect to our health. | P4.3 | |

| | | |
|---|--------|-------------|
| Therefore, there are a lot of doubts concerning about this these organ failure solutions. | P4 | |
| Body paragraph 5 | | |
| Furthermore, stem regeneration is involved in moral issue. | P5 | |
| Due to its ability to produce a baby, people treat it as a life. | P5.1 | |
| Thus, scientists are facing the sentence for their experiment because they use the stem cell which can produce a baby to make a bunch of tissue. | P5.1.1 | |
| Although the tissue can contribute to the organ failure patients, people still feel that scientists are killing a life and they should not use it to regenerate tissue. | P5.1.2 | |
| As a result, it makes a lot of debates involving the medical aspect and moral issue. | P5 | |
| Conclusion | | |
| Overall, the waiting list for the organ has been increasing by about 12 percent a year, while the number of brain-dead donor has been rising by under 3 percent, to about 6000 a year. (Glodberg,2003 :2). | C1 | Art A, F1.4 |
| It means that more people are dying due to the organ shortage. | C1.1 | |
| So, other methods such as encouraging organ donation by giving financial incentive and tax benefit to the donor maybe more effective instead of the gene therapy, stem regeneration and traditional medicine. | C2 | |
| If all the methods work together, it is highly possible the organ shortage problem can be solved. | C3 | |

Reference

3) Snustard,D.Peter. Simmons,Michael.J (1999). *Principles of Genetics* (2nd Ed). New York: John Wiley & Sons, Inc.

A) Goldberg, Carey (10/8/2003). Fiscal incentive weighted to boost US organ supply, 1-3. Retrived February 26,2004 from www.boston.com/news/local/articles/2003/10/8/fiscal_incentive_weighted_to_boost_us_organ_supply/

Chat 8 – Sirin

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Every year, there are approximately 150,000 people who die worldwide each year while waiting for an organ transplant. | B1 | |
| And this is only an estimate. | B1 | |
| There are others who die of organ failure simply because they may not have access to, or cannot afford to pay for, modern medical facilities. | B2 | Art A, F1.1 |
| It is obvious that the conventional method of waiting for donors, living or otherwise, to give up their organs to save those in need are not enough. | B3 | |
| There are many other plausible alternatives. | T | |
| And like all other medical issues, they are all plagued by medical, ethical, moral and social issues. | T | |
| Body paragraph 1 | | |
| Many scientists are exploring the ways in which genetic engineering can alleviate this problem through cloning. | P1 | Jes S1 |
| One way is to grow organs through the growing of stem cells. | P1.1 | |
| Scientists in Korea have had a break through in their stem cell research, where they have successfully isolated stem cells that are relatively stable. | P1.1.1 | |
| This paves the way for further research in finding ways to be able to construct these stem cells into structural tissues and organ like muscles, human organs such as heart etc. | P1.1.2 | |
| Thus, it would be logical to say that within a decade or so, organs could actually be cloned from stem cells, and the medical risk of transplanting cloned organs is low, as cells can be extracted from the patient, thus minimizing the chances of the body rejecting the organ. | P1.1.3 | |
| There are of course, other possible implications. | | |
| The commercialization of this technology might prove to be a setback to patients, as companies may seek to abuse the control of cloned organs, and sell these organs at a high price. | P1.2 | |
| The ease of organ transplants that follows might results in its abuse. | P1.2.1 | |
| Patients might seek transplants when their organs have ‘some problems’, looking for an easier way out by replacing their organs with ‘brand new’ grown ones, just like upgrading of machines like cars or computers. | P1.2.2 | |
| Body paragraph 2 | | |
| However, the previous example is just a possibility, albeit a very real one in the real future. | P1.2.3 | |
| Another controversial method that has been adopted is the xena transplants between humans and animals where organs of animals are used as a substitute to replace those in a human being. | P2 | JJ S2 |
| However, this method is generally rejected because of a number of issues. | P2.1 | |
| Firstly, it is cruelty towards the animal donor, as it is raised only to be put out so that its organ can be used for transplant. | P2.1.1 | |
| Secondly, there are concerns of the transmission of diseases from the animal donor to the human patient. | P2.1.2 | CL S2.4 |
| These could prove deadly, with notable examples being the mad cow disease, HIV, and more recently, the avian flu. | P2.1.2.1 | |

| | | |
|--|--------|--------------------------------------|
| Thirdly, the chances of the human recipient rejecting the donated organ is also very high. | P2.1.3 | Jes S2.1 |
| Body paragraph 3 | | |
| There are ethnic implications in the previous two alternative methods of organ transplant. | P3 | |
| Some religions reject these processes, as it is seen to be unnatural and is against their beliefs on, certain religions frowned upon the dead being buried with an 'incomplete' body, for various reasons including the emphasis on 'wholeness' of the body and soul. | P3.1 | Sirin P5; Sirin P5.1 |
| Thus, many families refuse to allow their deceased donate their organs to save another. | P3.1.1 | |
| This has drastically restricts the number of organ donor in an already staggering gap between donors and patients who needs organs from them. | P3.1.2 | |
| Racism is also one of the considerations. | P3.1.3 | |
| Human is no longer as unique as we are set out to be, we are being access in a more mechanically basis as we can now arm and save ourselves with "spare parts", the possibility of extensive organ transplant will definitely degraded human's value as an unique life form on earth | P3.2 | Sirin P3.1.2.1 (Art A, A4.1.1) |
| Organ transplant also has other moral, ethical issues and problems such as black market organ trading and related crimes. | P3.3 | JJP2.1; CL P9 |
| The article 'Fiscal incentive weighed to boost US organ supply' highlight the problems that come with offering monetary benefits to encourage more people to donate their organs. | P3.4 | Art A |
| The evil of money may cause families to effect the death of their loved ones prematurely so that the deceased's organs can be 'sold'. | P3.5 | Sirin P3.1 |
| Again this opens another can of moral and integrity issues to which there can be no true formulaic solution. | P3 | |
| Conclusion | | |
| In conclusion, human organ transplant is perhaps the safest and best medical method to save these patients; it also seems to be the only way now. | C1 | |
| And yet it is not without problems. | C1.1 | |
| But as it has shown, there are social fears that putting a cash value on organs degrades the human dignity and moral integrity. | C1.2 | |
| In the aspect of medical field, organ transplant is so far the most suitable and available method, most of the mentioned or available alternatives are with restrictions, still in experimental states, or require extreme resources that they are not normalize. | C2 | |
| Hence, today, organ transplant is the only sensible and reasonable alternative that will tackle source of the problem. | C3 | |

Chat 8 – Jes

| Introduction | Idea code | Idea source |
|---|------------------|--------------------------------------|
| As we all know, an adage says that there is no free lunch in the world. | B1 | |
| The meaning is if you want to get something, you must pay for it. | B1 | |
| Yes, it is a common truth in our society nowadays. | B1 | |
| We cannot deny that all people run for the benefit of themselves as much as possible in the daily life, which is no one will do things that are none of their business or without benefit. | B1.1 | |
| Although it does not sound good as it seems that everything is balanced by money, it is actually a principle of value among people in business society. | B1.2 | |
| Because of this simple reason, I endorse the view of using financial incentives as an attempt to increase human organ donation. | T | Jes T2 |
| Body paragraph 1 | | |
| As the newest data shows, the number of patients awaiting solid organ transplantation in the United States has risen to over 90.000 and keeps growing at a rapid speed. | P1 | Art 2 |
| Unfortunately, the number of organ donors remains no significantly increase although a lot of measures had been done. | P1.1 | Art A, F1.3 |
| In the light of the lack of success in increasing the number of cadaveric organ donors which just some persuasion does not useful enough, a system that using financial incentives to increase the donation of organs is considered to be built up. | P1.1 | |
| Yes, inevitably it may cause some ethical problems or some other problems while putting it into practice, but for those suffered from diseases it is worth for us taking a risk to have a try. | P1.2 | |
| At least we still have hope when try it while without trying the only result is a lot of people die when they are waiting for organs the try. | P1.2.1 | |
| After all, this will result in an almost immediate and substantial increase in the rate of organ donation although it goes with a lot of problems. | P1.2 | |
| No matter how bad the influence it will take, the positive and the most important point is that we save a lot of lives. | P1.3 | |
| At least we get our goal to save people. Life is the most important, isn't it? | P1.3 | |
| Clearly, it is not an easy task to mix money into organ donation as it needs a complex and comprehensive system and rules to prevent from illegal trade of organs underground. | P1.4 | JJ P2.1 |
| Body paragraph 2 | | |
| The first and also the most crucial thing is to enact a set of strict laws or regulations to ensure the right of donors. | P2 | |
| We must make sure that the donor's wishes be realized and not subjected to any decision-making process by their families or society. | P2.1 | |
| At the same time, we should heavily hit the dark market of buying and selling the organs in which human body parts being treated without respect, undignifiedly, as commodities. | P2.2 | JJ P2.1; Sirin P7 (Art A, A4.1.2) |
| Of course, we should also try to avoid the "live donation" purely for the finance purpose. | P2.3 | Jes P2.3 (Art A, F2) |

| | | |
|---|--------|------------|
| So all the organ transplants must be under the extreme control of the government and hospitals in order to make sure all organs come from brain-dead donors. | P2.4 | |
| After the assurance of the government, hospital and the family of donor that everything is legal, the transplant can be done and the financial incentive will be offered. | P2.4.1 | |
| Body paragraph 3 | | |
| The second thing is to decide which countries are able to do this operation. | P3 | |
| Of course, not all the countries can do it, as this kind of incentives will become a heavy burden to poor countries. | P3.1 | Sirin P6.1 |
| More seriously, people in poor countries are more willing to donate their organs to patients in rich countries for more money, which will a sharp decline in the supply of the organs of these poor countries that will make them into a tougher situation. | P3.2 | |
| So the operation can only be done in the developed countries first and then the developing countries and every country should be a separated system to avoid the random movement of organs. | P3.3 | |
| Only the patients who are not able to find appropriate organs in their own countries can apply to governments for getting organs from other countries in which donated organs are sufficient enough. | P3.4 | |
| The application should be examined and approved by both governments and then transplants will be allowed. | P3.4.1 | |
| Maybe in the future, we can set up a large organ depot for people throughout the world. | P3.5 | |
| Everyone can apply for organs in it and the list of transplant will be under sequence of time for the application. | P3.5.1 | |
| Conclusion | | |
| Although we cannot make sure whether the above two methods will work properly to meet our need, they are extremely important base for the operation. | C1 | |
| No one knows what will happen. | C1.1 | |
| Maybe we will meet a lot of serious problems after this try. | C1.2 | |
| However, we will try our best to overcome them on the principle of the two fundaments. | C1.3 | |
| This operation may fail, however many people will benefit from it, including the donors and the patients who need them. | C1.4 | |
| As this is a feasible method for currently condition for saving as many lives as possible. | C1.5 | |
| That is also the reason that I endorse the view of use of financial incentives in an attempt to increase human organ donation. | C2 | |
| We believe that tomorrow will be better. | C2 | |

Source:

<http://www.ama-assn.org/ama/pub/category/8445.html>

http://www.house.gov/commerce_democrats/press/108st37.htm

http://www.boston.com/news/local/articles/2003/10/08/fiscal_incentive_weighed_to_boost_us_organ_supply/

Organ donation- we'll make it worth your while

(by Jeffrey P.Kahn, Ph.D., M.P.H, university of Minnesota)

Chat 8 – JJ

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| As organ transplantation is the most efficient way for curing organ failure, human organ supply becomes more and more urgent for organ failure patients. | B1 | |
| In America, more than 6000 patients died each year while they were waiting for organ transplant. | B1.1 | Art A, B1 |
| Organ supply is now the key problem for solving this situation. | B1.2 | |
| Definitely, human organ is the best tissue to the problem of organ failure. | B1.3 | |
| However, it is not the only way. | B1.3.1 | |
| There are alternatives such as animal-to-human organ transplant and artificial organ as well as the debatable solution – cloning. | T | |
| Body paragraph 1 | | |
| For its genetically satisfaction, human organ is the best solution to perform organ transplant. | B2 | |
| Then here comes the first question. | B2.1 | |
| What should the source be? Despite the problem of organ donation what are other problems. | B2.1 | |
| It is acceptable to use organ then transplant from people who die in accident. | P1 | |
| However, recipients may when organs are from people whose heart and lungs stop while the entire brain is still working, because no one wants to take organs from someone still alive. | P1.1 | |
| However, waiting for a whole-brain-dead can leave many organs unavailable. | P1.2 | |
| Body paragraph 2 | | |
| After this question, immediately comes the question of distribution. | P2 | |
| Overall, transplantation are procedure fro people with lots of money or lots of insurance because people need to pay to receive organ transplantation. | P2.1 | |
| That leads to a social phenomenon that poor people never undergo the process. | P2.1.1 | |
| If we do not have to pay for it, should the choice of who gets new organs depend on social worth or anything else. | P2.1.2 | |
| Conclusion | | |
| These two are lying at the heart of lots of debates. | C1 | |
| We may say they are twin questions. | C1 | |

Appendix 19

Essays of face-to-face students

F2F 1 – V

| Introduction | Idea code | Idea source |
|---|------------------|---|
| In the midst of the prevailing social and economic climate in Singapore, there are a few vital factors contributing to the building of a strong resilient family. | B1 | Z P1 |
| Time management and the having of family outings and discussion sessions regularly play an important part in the building of family bonds and the instilling of family values does help in maintaining the relationship between the family members. | B1.1 | V S4.3; SH S2.5; V s4.5; Art 1. S4.6 |
| Due to the economic climate in Singapore, parents are spending most of their time focus on their work to keep up with the fast-paced society. | B1.2 | Z S4.1 |
| They had to work overtime in order to keep up with competition to avoid retrenchment since people are all queuing up as their replacement. | B1.3 | |
| In Singapore, any incompetence will be shown the door, as replacement is easily available. | B1.3.1 | |
| As a highly developed society, Internet is easily available at a click of the mouse. | B1.4 | |
| As usual, Internet does have its own pros and cons. | B1.4.1 | |
| The Internet nowadays can easily influence children and they may not be able to differentiate the dos and don'ts. | B1.4.2 | |
| They are also being exposed to the media that may not be a good influence on them. | B1.5 | Art 2, B1.3.3 |
| Shows such as “Phua Chu Kang Pte Ltd” teaches them the improper language; English as ‘Singlish’. | B1.6 | V P1.2.1 |
| Therefore, under such harsh circumstances, the above-mentioned factors will play a vital role in building a strong resilient family. | T | |
| Body paragraph 1 | | |
| Time management plays an important role in the building of a strong family bonding. | P1 | V S4.3; Art 1, S2 |
| Currently, parents spent most of their time at work as they faced stiff competition in work. | P1.1 | Z S4.1 |
| They need to manage their time to balance out the time spent at work and the time given to their family. | P1.1.1 | |
| Parents can try to squeeze out time in between here and there such as trying to have dinner at home. | P1.1.2 | SH S4.3.1.2 |

| | | |
|---|--------|----------------------|
| Although it may seem trivial, every bit does count in building of a strong relationship. | P1.2 | |
| Time is of utmost importance to building strong relationship between family members. | P1 | |
| Although work may be the leading factor to bring survival of the family in term of physical needs, time spent on building of relationship can be said as the “mental” bread to provide the surviving of the family. | P1.3 | |
| The motivation behind all this hard work and sufferings at work is to bring in income for the family. | P1.3.1 | |
| Thus, this means that family is the motivation behind all this hard work. | P1.3.2 | |
| Therefore, time must also be spent in building the relationship between the family members. | P1 | |
| So time management do play a vital part in building a strong resilient family under harsh social and economic climate. | P1 | |
| Body paragraph 2 | | |
| Another essential factor contributing to the building of a strong resilient family in the midst of the prevailing social and economic climate in Singapore is to have family outings and discussion sessions regularly. | P2 | V S4.5; SH S2.5.1 |
| Communication plays an important part to build on the family relationship | P2.1 | Z S2 (Art 1, S3) |
| Conversation among family members will be able to show that there is care and concern between family members. | P2.2 | Art 1, S4.6.2 |
| Since parents play a vital role in the development of children, it is important to spend time together. | P2.3 | Z S4 |
| Under bad influence from the media, parent should plan family outings to have more understanding about their children. | P2.3.1 | V S4.5; Z S2.2 |
| Thus, they will be able to teach their children to differentiate the dos and don'ts. | P2.3.2 | |
| Family discussions are to be held regularly to clear any misunderstanding between family members. | P2.4 | SH S2.5.1 |
| Any problems encountered during daily life can also be raised to everyone's awareness and ways of solving the problems can be worked out together. | P2.5 | |
| In these small bits of care and concern, it will bring a lasting relationship between family members. | P2.6 | Art 1, S4.6.2 |
| Thus, having of regular family outings and discussion session are important to build a strong bonding between family members. | P2 | |
| Body paragraph 3 | | |

| | | |
|---|--------|---------------|
| Lastly, instilling of family values can help to develop self-discipline. | P3 | Art 1, S4.6.2 |
| Self-discipline, in a way, can maintain the relationship among family members. | P3.1 | |
| First of all, taboos are to be set to prevent any conflicts caused due to any sensitive matter. | P3.2 | |
| This will of course improve the relationship but at some point of life, some taboos may not be that applicable. | P3.2.1 | |
| Thus, there must also be some space for negotiation to prevent any conflicts due to disagreement. | P3.2.2 | |
| Instilling family values such as tolerance to others, forgiving will be able to prevent any direct conflict when faced with any disagreement. | P3.3 | SH S3.4 |
| They will be able to control their temper and discuss the matter in a peacefully manner, rather than any direct head on conflicts. | P3.3.1 | |
| Self-discipline also ensured that that family members won't bring back any unhappiness that they suffered outside and throw their temper to other family members. | P3.4 | |
| Thus, instilling of family values to develop a sense of self-control can help in building of a strong family. | P3 | |
| Conclusion | | |
| In conclusion, time management, family outings and discussion and the instilling of family values are the main factors contributing to building a strong and resilient family in the midst of the social and economic climate in Singapore. | C1 | |
| All the family members will have to play a part in building and maintaining their relationship. | C2 | |
| In my opinion, combined and continued efforts are needed to build a strong and resilient family. | C3 | |

F2F 1 – Z

| Introduction | Idea code | Idea source |
|---|------------------|-----------------------------|
| In Singapore, we consist mainly of many nuclear families. | B1 | |
| In most of our families, both parents are working and spend very little time at home with their children. | B1.1 | Z S4.1 |
| Our society emphasises a lot on money and everyone is trying to earn as much as they can. | B1.1.1 | |
| After working, many people are stressed and tired out and after they reach home, they just go to bed and sleep. | B1.1.2 | |
| Thus, not spending enough time to interact with their family members, losing touch with them and leading to family breakdowns. | B1.1.3 | |
| So I feel that Singaporeans can build a stronger and more resilient family by having better understanding of each other, having more mutual respect and tolerance for each other and building stronger family ties. | T | |
| Body paragraph 1 | | |
| Firstly, we can have better understanding of each other just by communicating and interacting more with each other. | P1 | Z S2.2; Z S2 (Art 1, S3) |
| However, we tend to spend too much time at work and neglect our families. | P1.1 | Z S4.1 |
| We should try to plan our work more carefully so as not to work overtime. | P1.1.1 | |
| This will then enable us to go home earlier and interact with our families. | P1.1.2 | |
| For example, one should always try to be back home for dinner as it is a good time for interaction. | P1.1.3 | SH S4.3.1.2 |
| They can talk about their day's events and share their woes with their family. | P1.1.4 | Art 1, S2.1.1.5 |
| Then, they will not bottle up and stress themselves further and their families can understand them better as well. | P1.1.5 | |
| Then, when a better understanding is established, the family can then support each other in times of need and help one another out when the other is in trouble. | P1.1.6 | |
| Body paragraph 2 | | |
| Next, mutual respect and tolerance must also be observed in the family. | P2 | SH S3 (Art 1, S4.6.2) |
| These are very important factors in the family. | P2 | |
| If one does not have tolerance for each other, then most likely, the family will end up in fights and quarrels every other day. | P2.1 | |

| | | |
|---|--------|-------------|
| And if this happens, the family is not functioning properly and is more likely to break up faster. | P2.1.2 | |
| Mutual respect is also needed as everyone is different and has different ways of doing what they do and we have to respect them. | P2.2 | Art 1, S2.3 |
| For example, especially in a modern country like Singapore, people are more open-minded and want more freedom to do their own things so parents should respect their children and give them more freedom and try not to control them so much. | P2.2.1 | |
| The children must in turn also give parents the respect that they need. | P2.2.2 | |
| Then there will be harmonious relationships in the family. | P2.2.3 | |
| Body paragraph 3 | | |
| Lastly, we need to establish stronger family ties. | P3 | Art 1, S2 |
| This is because if there are none in the family, even with mutual respect and understanding, a family still cannot function as a whole. | P3.1 | |
| We can do this by organizing family activities that everyone can participate. | P3.2 | V S4.5 |
| For example, going for outings on Sundays when everyone is free to tourist attractions or picnics at a park. | P3.2.1 | |
| These activities will promote interaction and communication with the family and thus building stronger ties within the family. | P3.2.2 | |
| We can also organise sessions whereby everyone pours out their woes and the family can try to help them. | P3.3 | SH S2.5 |
| Then, the family will work together towards a same goal and build stronger ties at the same time. | P3.3.1 | |
| Conclusion | | |
| In conclusion, I feel that in order to have a stronger and more resilient family, one has to make the basic foundations more stable. | C1 | |
| And they can do it by having better understanding of each other and show each other mutual respect and tolerance. | C1.1 | |
| These will help quite a bit but still stronger ties with the family must still be achieved in order to have stronger and resilient families in such social and economic climates in Singapore. | C1.2 | |

F2F 1 – SH

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Singapore has undergone through tremendous changes throughout all these years, from a simple fishing village to a bustling city full of skyscrapers; from an unknown dot on the map to become a worldwide famous country. | B1 | |
| Even though Singapore has made a lot of advancements in technology, pressure and stress from the hectic pace have also increased. | B2 | |
| Our country's economic compared to the past also have improved a lot, most people in the country are more affluent and manage to live comfortably | B3 | |
| However, it is sad that families nowadays are not as bonded as compared to the past. | B4 | |
| Divorce rate has been increasing every year and newspaper reports about broken families have also become a norm. | B4.1 | |
| This is due to that there have not been enough interactions within families. | B4.1.1 | |
| Therefore I personally feel in order to build a strong family in my society, three factors are required which are strong marital relationship, communication and, mutual respect and tolerance. | T | |
| We will discuss on what ways can we do to promote these three factors. | T | |
| Body paragraph 1 | | |
| Firstly, in order to start a family, needless to say, is for couple to get together and then get married. | P1 | |
| In fact, for a family to stay strong in this society, the fundamental is to have a strong marital relationship. | P1 | SH S1 (Art 1, S1) |
| With that as a foundation, couples would be more bonded together and there will be definitely harmony in the family. | P1.1 | |
| Furthermore, trust is also very important within a couple, because of the busy schedule, the couple is seldom together so trust is very important. | P1.2 | |
| Many divorces are often due to third party whereby there are outside-marriage relationships. | P1.3 | |
| Actually one thing to prevent this is to make sure that the couple has been together for quite some time and the relationship is strong. | P1.3.1 | |
| Research has shown that those couples that rush to get married often have a short marriage term. | P1.3.2 | |
| Body paragraph 2 | | |

| | | |
|---|--------|-------------------------------|
| When a couple have a strong marital relationship, the next important point in line is communication and understanding. | P2 | ZY S2 (Art 1, S3); ZY S2.2 |
| We can see in most families, this factor is seldom seen. | P2.1 | |
| When there is communication, definitely there would be understanding in the family. | P2.2 | ZY S2 (Art 1, S3); ZY S2.2 |
| One way of doing this is to have regular talks within the family, if the couple are busy during the day, then maybe they could set a time at night to have a chat just before turning in. | P2.2.1 | SH S2.5.1 |
| A few minutes of concern actually means a lot and it would further strengthen the bond. | P2.2.2 | |
| Communication also does not mean within couples, it also means between parents and children. | P2.3 | SH S2.1 |
| In this way, the children would not be led astray and involved in children delinquency. | P2.3.1 | |
| Nowadays, handphones are now widely available, by making a phonecall, it can actually let both people in different places to communicate with each other. | P2.3.2 | |
| When the children feel that they are being loved, chances that they will be led astray are very slim. | P2.3.3 | |
| Children delinquency often comes from broken families. | P2.3.4 | |
| Body paragraph 3 | | |
| Lastly, in order for a family to continue staying together, mutual respect and tolerance is very crucial. | P3 | SH S3 (Art 1, S4.6.2) |
| Conflicts in a family are unavoidable and that is where tolerance comes into the picture. | P3.1 | SH S3.4 |
| Sometimes, tolerance is also a virtue in keeping the family together. | P3.2 | |
| One way is that whenever there is conflicts, is better to sit down and talk it out. | P3.1.1 | SH S3.4.2 |
| This is to show mutual respect to each other. | P3 | SH S3 (Art 1, S4.6.2) |
| Furthermore one point is always neglected in Singaporean families is that to gain respect from children, the parents first have to respect their opinions. | P3.3 | SH S3.2 (Art 1, S3.2.1) |
| In this way, there would be a mutual agreement and physical violence would be unnecessary. | P3.3.1 | |
| Furthermore, in this society, people are under great pressure and that creates stress which would cause people to be hot-tempered and so it is very important to exercise tolerance. | P3 | |
| Conclusion | | |
| As a result, if all the three factors are being adhere to, the family would get even stronger as time goes by. | C1 | |

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| To build a family is not difficult but for a family to stay strong under difficult times is not easy, therefore it is very important to have the three factors incorporated into the family. | C2 | |
| Additional all the factors are inter-linked and would not work well if one of them is missing. | C3 | |

F2F 2 – LD

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| As we see, Singapore gets a great achievement in the last decade. | B1 | |
| But do you know the people there? | B1.1 | |
| Do you want to get some ideas about how the family relationship changes with the development of the country? | B1.2 | |
| Just as many other things we met, they maybe positively or negatively affected so as the family relationship. | B1.3 | |
| As many things change in the decade, which rise up many factors that will affect the family relationship, a lot of things are different. | B1.4 | |
| I think the family relationship in Singapore is affected by more factors which weaken it compare to that of enhance it. | T | |
| Let us talk about the factors which enhance the family relationship first. | T | |
| I think it is enhanced mainly by two factors | T | |
| Body paragraph 1 | | |
| Education level acts as a key factor to enhance the family relationship. | P1 | ZW P9 |
| As we may notice: a family with higher education level, it is easy to form a stronger family relationship. | P1.1 | |
| It's easy to understand from education point of view: as the education in many other countries, education in Singapore always emphasis respect parents and love parents, which affects the way people thinking potentially. | P1.2 | SF P9.3 |
| People always would like to live with their parents and look after them, which is contribute to build a strong family relationship. | P1.3 | |
| Body paragraph 2 | | |
| The effect of more nuclear family which contains less people as it was before affect the family relationship also. | P2 | J S1.2 |
| It is a common sense that the smaller a family, the more attention of the family members will pay to each other, and this make it is easier to build a stronger family relationship. | P2.1 | |
| Furthermore, this is what happened in Singapore in the decade. | P2.2 | |
| Families which contain only three to four people become usual cases in the decade. | P2.3 | |
| This is easier for family members to know each other better as less people in the family. | P2 | |
| Body paragraph 3 | | |

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| The factors which enhance the family relationship, it is affected by three factors; they all are rose up by the development of the country | P3 | |
| Body paragraph 4 | | |
| It's quite easy for us to see: as Singapore got developed in the last decade, people get busier and busier. | P3.1 | |
| As a result of this situation, parents do not have that much time to pay on their children any more. | P3.2 | J P2.1 |
| They always have a lot of things to be done, and seldom have free time with their children, which will weaken the family relationship. | P3.2.1 | J P2.1 |
| Moreover, as parents have less time with their children, they kick the responsibility of looking after the children to the teachers in the school. | P3.2.2 | |
| And use the grade as the only guide for their children, which will further weaken the family relationship. | P3.2.3 | |
| Body paragraph 5 | | |
| As many others talked before, generation gap is another very important factor which will constantly affect the family relationship. | P4 | SF P6 |
| As parents and children think different things, it is very hard for them to find the common words. | P4.1 | J P6.1 |
| If no afford is paid on it, the situation will get even worse. | P4.1.1 | |
| Lastly, children would not like to live with their parents once they are grown up, because they are not happy to do so. | P4.2 | |
| And they always like to choose the way which can make them happy, so family relationship is further weakening. | P4.3 | |
| Body paragraph 6 | | |
| As the world is developing, it is easy to for us to notice the tendency of globalization, which may separate the family members to different countries. | P5 | H P1 |
| Then it is very hard for family members to meet each other in one year, how can they build a strong family relationship with each other? | P5.1 | |
| It wills weak the relationship dramatically. | P5.2 | |
| Conclusion | | |
| There is a long way for us to go to build a stronger family relationship, but we have to make it step by step: parents are encouraged first to work on their own emotional issues so as to build a strong foundation for their family. | C1 | |
| They can then build up their family on values such as love, care and concern; mutual respect; filial responsibility; commitment and communication. | C2 | Art 1, S4.6.2 |

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Family relationships in Singapore have been so much different in the last decade than it was in the last thirty years or so. | B1 | |
| In other words, it has changed. | B1 | |
| Family relationships (including relationships between the extended families, parent-parent relationship and parent-child relationship) in the last decade were not as close, compared to the family relationships in the 1970s where the families especially the extended families, always get together and interact. | B1.1 | |
| Family relationships have become less cohesive, less united and transient. | B1.2 | |
| The factors explaining these phenomena will be discussed in the following paragraphs. | T | |
| The factors include social, economic, education and political factors in shaping the family relationships in Singapore in the last decade. | T | |
| Body paragraph 1 | | |
| It was the structure of the thinking of the modern people in the last decade (1993-2003) that resulted in the changes that were prevalent in the family relationships in the last decade. | P1 | |
| People no longer believe that there were everlasting relationships in the world although they did cherish the hope of having an everlasting relationship with their spouse. | P1.1 | |
| This was unlike in the past where the people stood for each other “for richer or poorer, in sickness and in health.. till death do us apart”. | P1.2 | |
| A survey was done last year to understand what the young people think about marriages and whether they believe in everlasting relationship. | P1.3 | |
| Most of them replied in the survey that they do not believe that everlasting relationship can exist in the world today. | P1.3.1 | |
| Another example illustrating the changes in thinking of the people towards everlasting relationship was, during the last few years, there was an increase in the number of people who had sex with people other than their spouse. | P1.4 | |
| The reasons to this phenomenon may be that the person got sick of his marriage partner and wanted someone new (because their marriage partner may be unable to satisfy his needs or his marriage partner may be too fierce) , for excitement or wanting to try something new for the first time. | P1.4.1 | |

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| Some even had outside families and even raised illegitimate children, without even the legal wife knowing about the matter at all. | P1.4.2 | |
| Many couples also broke up after marriage, after they realized that they were not compatible in their characters and they were more open to the idea of divorce in the last decade. | P1.5 | |
| Body paragraph 2 | | |
| The high living standards in Singapore had made people felt that it was not enough to have only one person being the sole breadwinner of the family. | P2 | J P8 |
| As a result, the wife also work to bring in the bread and butter. | P2.1 | J P2 |
| With both parents working, the children had to be looked after by the care-givers in nurseries and kindergartens or by grandparents or maids who were hired to look after them. | P2.1.2 | |
| In time to come, the parent-child relationship would be weaken, thus resulting in the child being much closer to his grandparents or even an outsider of the family, the maid. | P2.1.2 | |
| This situation was not what we wanted in the first place. | P2.1.3 | |
| The child who was too young to differentiate between the mother and the maid, might even call his maid “mother” as the maid was the one to bathe and feed him and spent most of the time with him. | P2.1.4 | |
| This scenario is sad but it has already happened and is still happening now | P2.1.5 | |
| For children who have already become youngsters, they might even hate their parent for being greedy for money and thus neglecting them. | P2.1.6 | |
| For example, there were latch-key child situations in the past where the child ate instant noodles and all alone in the house, guarding the door of his house with no one to talk to. | P2.1.7 | J P2.1.1 |
| As a result of this, there would not be any trust in the parent-child relationship and even in the parents. | P2.1.8 | |
| Due to the high living standards in Singapore, a lot of people practised child planning to limit the number of children while keeping within their financial means to support the family. | P2.2 | ZW P3.3.1 |
| This resulted in single-child families and small families unlike in the past where the families were so big and the siblings’ relationship were strong. | P2.2.1 | |
| Body paragraph 3 | | |

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| People who were highly educated (graduate and above) got married later and some did not even get married because they could not find the right partner or their expectations were too high. | P3 | |
| They valued their freedom, ambitions and career more than anything else as they think that children would become a burden to them and a disruption to their own lives. | P3.1 | |
| Moreover, the parenting methods that these highly educated people employed to teach their own children differed from how their parents taught them in the past. | P3.2 | |
| The parent-child relationship in the last decade has become more like friendship, with the children talking to their parents as though they were talking to their friends. | P3.3 | |
| This resulted in the lack of respect for their parents because there were no longer boundaries for the children to abide by. | P3.3.1 | |
| Moreover, the highly educated parents would always try to give their best to their children and let their children to have everything the parents could provide. | P3.4 | ZW P3.3 |
| This resulted in spoiling the child and thus the responsibilities being undertaken by the child would be undertaken by the parents. | P3.4.1 | |
| For example, the parent when requested by the child, would help the child to complete his homework. | P3.4.2 | |
| This was unlike in the past where the parents had the power to discipline and order his children. | P3.3.2 | |
| Body Paragraph 4 | | |
| The political factors that have shaped family relationships in Singapore in the last decade were, the government encouraged people to have few children by giving housing priorities to those who had few children. | P4 | J P7.2.1 |
| Also the houses in the past were mostly, 1,2, or 3-roomed flats, and this would definitely play a part in influencing the people's decision to have more children or not. | P4.1 | |
| Conclusion | | |
| To conclude, the trend in family relationships is that, it began to become weaker since the last decade and will even erode further if people do not have the will and put in the extra time and effort to keep family relationships going. | C1 | |

F2F 2 – SF

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| In today' society, it is not difficult to see a rise in juvenile delinquency. | B1 | |
| Studies have shown that teenagers who are involved in crime such as vandalism, theft, and shoplifting generally come from families that have problems or single family. | B1.1 | |
| In general, these problems are somehow linked to the family relationship. | B1.1.1 | |
| What are the factors that have caused family members to drift more apart from each other? | T | |
| Body paragraph 1 | | |
| In my view, I think that globalization is one factor which weakens a family relationship. | P1 | H P1 |
| With globalization, there is much more interaction between companies and people from other countries. | P1.1 | |
| It is inevitable that more travelling has to be done whether it is to negotiate business deals or to work oversea for a period of time. | P1.2 | H P1 |
| Family relationship will definitely be affected when family members spend lesser time in their family. | P1.3 | |
| This is especially true between the parents and children. | P1.3.1 | H P1.1 |
| For example, when a father often has to travel between continents, he will has less interaction with his child. | P1.3.2 | |
| The child will not feel as close with the father. | P1.3.2.1 | |
| Wherever the child encounter a problem, he will thus feel less inclined to discuss his problem with the father. | P1.3.2.2 | |
| Body paragraph 2 | | |
| Another reason is that Singapore parents are more career-minded. | P2 | SF P3 |
| In the past, only the father in the family worked to support the family. | P2.1 | J P2.2 |
| The mother would stay at home to do whatever household chores needed to be done and stay with the children. | P2.2 | J P2.2 |
| In the present time, even mother has to work. | P2.3 | J P2 |
| Thus the child is more independent. | P2.3.1 | |
| When both parents work, they will have lesser time to spend with their children, the relationship between the parents and children thus drifted further apart. | P2.4 | J P2.1 |
| Body paragraph 3 | | |
| In most of today parents-child relationship, there exists a certain tension especially between those extremely competitive parents and their child. | P3 | |

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| There are some parents who want their child to excel in his/her studies so as not to lose out to others. | P3.1 | Ziwei P5.1 |
| Of course, this may attribute to the competitive environment in Singapore. | P3.2 | |
| However, when parents force their child to excel, this may create stress in the child causing a certain tension when facing their parents. | P3.1.1 | |
| This can produce a crack in their relationship. | P3.1.2 | |
| Body paragraph 4 | | |
| In a family, there is usually a generation gap between the previous generation (the parents) and the next generation (the child). | P4 | SF P6 |
| Sometimes, conflicts happen because of this. | P4.1 | J P6.1.1 |
| This is because there exists a difference in the traditional values and mindset between the two generations. | P4.2 | |
| There are a few factors contributing to this. | P4.3 | |
| Body paragraph 5 | | |
| Firstly, there is an influx of westernisation in Singapore. | P4.3.1 | |
| Many young people are influenced by western values and enthusiastically embraced them. | P4.3.1.1 | |
| These western values are generally frowned upon by the older generation as the older generation are more conservative and thus found them hard to accept compared to the new generation. | P4.3.1.2 | |
| Body paragraph 6 | | |
| Secondly, as more families become financially secured, they are able to send their children overboard for study. | P4.3.2 | |
| Those children are bombarded with the native cultures and values and may adapt them. | P4.3.2.1 | |
| These ideas or cultures usually crashed with that of their parents. | P4.3.2.2 | |
| Body paragraph 7 | | |
| Thirdly, with the development of technology like computers and the Internet, children are more exposed to world outside their own. | P4.3.3 | |
| They may easily be influenced by the other different traditional values or practices especially the western more liberal customs. | P4.3.3.1 | |
| Body paragraph 8 | | |
| In Singapore, there is also a higher rate of divorce than before. | P5 | |
| There are a couple of reasons for the increase in divorce rate. | P5.1 | |

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| It may due to love loss between the couple or that they find out that they are not really compatible after their marriage. | P5.1.1 | |
| Domestic violence is another reason. | P5.1.2 | |
| With increasing stress coming from this competitive world, the husband usually find his outlet for his anger in his wife and children. | P5.1.2.1 | |
| Infidelity can also cause a couple to divorce. | P5.1.3 | |
| Anyway, this creates a single family for the child that resulted from the previous marriage. | P5.2 | |
| There is thus a lack emotional stability in the child, which will cause problem in the child development. | P5.2.1 | |
| Conclusion | | |
| In conclusion, today's family relationships are degenerating due partly to the fast-paced of the society which create less time for the family members to interact more so as to understand one another more and therefore indirectly give each other stress. | C1 | |
| There is also factor such as the changing of values in this new century. | C2 | |
| Family members should therefore try to adapt to the changing environment and be flexible in dealing with each other so as not to overstep each other border. | C3 | |
| Better communication can certainly be the first step in building a better relationship with your family members. | C4 | Art 1, S3 |

F2F 2 – ZW

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| The family relationships in Singapore vary, owing to the several different factors that have shaped the family relationships. | B1 | |
| In Singapore, family relationships can be classified under two categories: close family relationship and weak family relationship. | B1.1 | ZW P7 |
| We will analyze the factors that shape the family relationships in the following paragraphs. | T | |
| Body paragraph 1 | | |
| There are several factors that result in a weak family relationship. | T | |
| One of the factors is the generation gap. | P1 | SF P6 |
| As society becomes more and more modernized, generation gap between parents and their children becomes gradually visible. | P1.1 | |
| This is especially so when the age gap between parents and children widens. | P1.1.1 | |
| Usually, when there is the presence of generation gap, the thoughts of the parents and that of the children differ. | P1.1.2 | J P6.1 |
| This may lead to arguments among family members, owing to the differing views. | P1.1.3 | J P6.1.1 |
| Children tend to confide their problems to their friends rather than to their parents. | P1.1.4 | |
| In this way, there is little or no communication between parents and children. | P1.1.4.1 | |
| With little or no communication, parents have no idea what their children are thinking and the problems their children faced. | P1.1.4.2 | |
| In time to come, the bond in the family becomes weaker. | P1 | |
| Body paragraph 2 | | |
| Another factor that contributes to the weak family relationship is the lacking of time of the parents in companying their children. | P2 | J P2.1 |
| Owing to the globalization, more and more Singaporeans are going abroad for business purposes. | P2.1 | H P1; SF P1.2 |
| When the parents are often abroad or occupied with their work, they will have lesser time with their children. | P2.1.1 | |
| There is hardly any communication between parents and children as both parties are busy with their own work. | P2.1.2 | H P1.1 |
| In time to come, the family relationship weakens. | P2 | |
| Body paragraph 3 | | |

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| There are also some minor cases which cause the family relationship to weaken. | P3 | |
| In Singapore, parents focus attentively on their children's academic results. | P3 | ZW P5 |
| As such, they expect their children to excel in all subjects. | P3.1 | ZW P5.1 |
| Hence, parents exert pressure on their children. | P3.2 | ZW P5.1.1 |
| This leads to children developing rebellious character and resentment towards their parents. | P3.2.1 | |
| Thus, this results in the souring of the relationship within the family. | P3 | |
| Body paragraph 4 | | |
| Divorces and separations between married couples are now common and widespread, with the result that once-complete families are now splitting up into two parts. | P4 | |
| This point focuses on the relationship between husband and wife. | P4.1 | Art 1, S1 |
| Nowadays, people receive higher level of education and tend to view divorce and separation as a common issue. | P4.2 | |
| Moreover, women are able to support themselves financially. | P4.3 | |
| Thus, people are more open to divorce and separation issue than that in the past. | P4.4 | |
| Body paragraph 5 | | |
| However, the trauma this has on the children cannot be overcome. | P4.5 | |
| Somehow they may feel at fault for the divorce, or feel frustrated that they are helpless to do anything to help. | P4.5.1 | |
| Body paragraph 6 | | |
| A broken family also means that the single parents have to take care of children by themselves. | P5 | |
| As they try to juggle work and family, they often place too much emphasis on work and neglect the children. | P5.1 | |
| The children who are unable to receive the care and attention they need at home will turn to other sources. | P5.2 | |
| They might mix with bad company, thus, leading to juvenile delinquency. | P5.3 | |
| Body paragraph 7 | | |
| However, there are also elements that constitute to the closeness in family relationship. | P6 | |
| Education plays an important role in the shaping of the closeness in family relationship. | P6 | ZW P9 |

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| Since young, teachers stress on the importance of family relationship through the teaching subject like moral education in building good relationships with family members. | P6.1 | SF P9.3; ZW P9.3.1 |
| Body paragraph 8 | | |
| The mass media also contributes to the shaping of the closeness in family relationship. | P7 | |
| Advertisements in the mass media advocate the importance of family relationships. | P7.1 | |
| For example, scene of promoting the importance of family ties can be seen frequently on the advertisement. | P7.1.1 | |
| We are greatly influenced by the mass media due to constant exposure. | P7.2 | |
| Another example is the annual family day promoted by the government through the mass media. | P7.1.2 | |
| Body paragraph 9 | | |
| The size of the family also poses as a factor which actually strengthens the bonds between family members. | P8 | ZW P3.3.1 |
| Nowadays, people received higher level of education and the standard of living is increased. | P8.1 | J P8 |
| Thus, people tend to have fewer children. | P8.2 | SF P3.2 |
| Hence, they are able to give more attention to their children. | P8.2.1 | |
| This enhances the strong relationship among family members. | P8 | |
| Conclusion | | |
| To conclude, there are many factors contributing to the family relationships in Singapore. | C1 | |
| I personally feel that if Singaporeans are able to understand the importance of family relationship and to realize that family members are always the closest to us, I am certain that the family relationship will improve. | C2 | |

F2F 3 – XW

| Introduction | Idea code | Idea source |
|--|------------------|--------------------------|
| The world is forever changing with new technology and trends emerging. | B1 | |
| Family relationship is no exception. | B2 | |
| It can be seen that the family relationships now differ from that in the last decades. | B2.1 | |
| In the past, family members may have a stronger relationship with one another as compared to now. | B2.2 | |
| We can actually attribute the differences to several factors as discussed in the following paragraphs. | T | |
| Body paragraph 1 | | |
| The trend of women being in the workforce have increased tremendously and this is more so the case today. | P1 | |
| With both parents working, less time is spent with the family. | P1.1 | |
| This has resulted in less communication between family members and hence relationship may not be so strong. | P1.1.1 | XW Q2, S1 (Art 1, S3) |
| Moreover with the improvement in technology, people may have to work until late at night as they have to hold meetings or establish contacts with their clients or employers from the other end of the world through computer. | P1.2 | |
| Thus the working time has increased at the expense of family time. | P1.3 | |
| Therefore with less family time, family members may not feel as close to one another and thus relationship may not be so strong. | P1.4 | |
| Body paragraph 2 | | |
| In addition, more and more parents are responding to the government's encouragement to work overseas or to invest in other countries. | P2 | |
| Hence one or both of the parents are usually not by the side of their children to accompany their growth. | P2.1 | |
| This may lead to children having a distance from their parents, as the time that they spent together is not long. | P2.1.1 | |
| Although they may communicate through phone to talk about their daily lives, but the relationship may not be as close than if you could have physical contacts. | P2.1.2 | |
| Children may thus find it difficult to open up to their parents if they encounter any problems or difficulties. | P2.1.3 | |
| Therefore as time passes by, distance/gap may widen. | P2.1.4 | |
| Body paragraph 3 | | |
| In Singapore, more and more families have employed maids to help look after their children. | P3 | |

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| This is even more so if both parents are working and hence leave their children in the care of the maid. | P3.1 | |
| Hence children may feel closer to the maids as the time that they spent with the maids is longer than with their parents. | P3.2 | |
| Therefore family foundation may not be strong than compared to the past. | | |
| Body paragraph 4 | | |
| Family relationships may also be shaped in this way due to the mentality of the people. | P4 | |
| Women are becoming more career minded and placed more emphasis on their work rather than their family. | P4.1 | |
| Moreover as they received higher education, their thinking have also changed. | P4.2 | |
| They may feel that marriage is just a procedure and that they should still have their own independent time even after marriage. | P4.3 | |
| If people find that they could not get along after marriage, they would turn to divorce as a solution. | P4.4 | |
| This can be seen from the increase in divorce rates today in Singapore and is still on the rise. | P4.4.1 | |
| Thus family relationship have been shaped in a way such that the family members are not so close together and may not open up to one another as much as compared to the past. | P4.5 | |
| Body paragraph 5 | | |
| The family size today is quite small. | P5 | |
| Most people today prefer to have just one or two children due to the high expense and the lack of time due to both parents working. | P5.1 | |
| Some may even feel that having children will be a burden and do not want to be tied down. | P5.2 | |
| Hence family relationship may not be so close as sometimes children may be the link to foster closer relationship within a family. | P5.3 | |
| Conclusion | | |
| In conclusion, there are several factors that may have shaped the family relationship such as education, small family size, technology, the lifestyle as well as the thinkings of people. | C1 | |
| However there are also many other factors such as the pace of the society today, the environment and social factors etc that may have an influence on the family relationship, which I feel, should not be neglected. | C2 | |

F2F 3 – S

| Introduction | Idea code | Initiator |
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| With the increasing high standards of living in Singapore, it is not surprising to find an increasing number of parents who cannot find enough time to spend with their children. | B1 | |
| In fact, it is a growing phenomenon which often results in many social problems due to dysfunctional family relationships. | B1.1 | |
| Thus the solution is to build a strong and resilient family that will remain strong despite stress and trouble that the families face. | T | |
| Body paragraph 1 | | |
| Time together is very vital in building a close-knit family. | P1 | M S1 |
| Time together gives the family an identity and a sense of unity. | P1.1 | |
| Time with supportive people nurtures positive self-identity in individuals and reduces feelings of isolation. | P1.2 | |
| Researchers have found that strong families eat, play, work, and share outside activities together. | P1.3 | |
| Strong families celebrate traditions which are enriching to present family life as well as building memories for the future. | P1.4 | |
| It gives the family time to communicate as well as to sharing ideas. | P1.5 | S Q2, S1.5 |
| Thus, spend meaningful time together in activities that each family member enjoys, and do this often. | P1.6 | |
| Family members may cut down on outside activities to reserve time together on a regular basis. | P1.7 | |
| Fixing a night for the week for some family activities together and make it a tradition. | P1.7.1 | |
| Example, playing board games such as Scrabble, Monopoly, twister or charades. | P1.7.2 | |
| If not, cooking together is also fun time. | P1.7.3 | |
| Allow the kids to help in baking cookies and making pizzas, after which watching movies together while eating! | P1.7.3.1 | |
| Simple activities such as eating ice-cream together if not going to the mall as a family are also ways of spending time together (no, they won't die of embarrassment). | P1.7.4 | |
| Body paragraph 2 | | |
| Effective family communication plays a critical role in maintaining positive, healthy relationships, solving problems, and managing stress. | P2 | XW Q2, S1 (Art 1, S3) |
| Effective communication has four parts: listening, rephrasing, probing, and positive speaking. | P2.1 | |
| Listening being based on nonverbal communication that demonstrates interest, such as direct eye contact. | P2.1.1 | |
| Rephrasing meaning restating the basic content of the speaker's message. | P2.1.2 | |

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| And, probing is a question or statement that invites the person who is speaking to say more, usually about her or his feelings or situation. | P2.1.3 | |
| Positive speaking is being kind and encouraging the other person. | P2.1.4 | |
| Honesty is part of this, but it is never brutal. | P2.1.5 | |
| Positive speaking also involves being specific about what you need or expect from others, and sharing your own feelings, thoughts and experiences. | P2.1.6 | |
| All these allow the understanding of one another and allow others to see the other's perspective. | P2.1.7 | |
| This allows open and trusting relationships to be built where each family member is able to freely express their views. | P2.1.8 | Art 1, S3.2 |
| Healthy families that communicate well do have conflict. | P2.2 | |
| Conflict is an emotionally-charged disagreement or attempt to force another person to change. | P2.2.1 | |
| Healthy families deal with conflict quickly and directly by using effective communication skills, keeping points such as adopting a win-win model so that both parties can benefit, solving the problem in step by step and understand that in a conflict it is normal to feel rage, then fatigued, by the intensity of emotions. | P2.2.2 | |
| Body paragraph 3 | | |
| Besides effective communication and family bonding, one of the most important things in building healthy family relationships is to show appreciation. | P3 | |
| Family members can show appreciation in three ways. | P3.1 | |
| First, they accent a person's good qualities. | P3.1.1 | |
| They congratulate family members on their accomplishments. | P3.1.2 | |
| They use positive words to describe each other. | P3.1.3 | |
| Second, they show they care through words, a hug or touch, or other gesture, such as leaving notes of encouragement or love in a briefcase or on a door. | P3.2 | |
| Third, they accept the appreciation sent by other family members. | P3.3 | |
| Although accepting appreciation is difficult for some people, it is important because it establishes trust and good will between people and builds self-esteem. | P3.4 | |
| Conclusion | | |
| In the busy world today, parents just cannot seem to find the time to spend with their children, resulting in family members living lives that are somewhat separate. | C1 | |
| There are many ways in building a strong resilient family and that includes an effective communication, spending time together and showing appreciation and these are the foundation in healthy family ties. | C2 | |
| So, take some time out and do some activities with your family today! | C3 | |

F2F 3 – SHU

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Singapore is facing an economic downturn presently due to the gloomy state of the global market. | B1 | |
| The September 11, 2001 terrorist attack in New York had caused the worldwide market to be greatly affected | B1.1 | |
| However, with the combined efforts of the countries worldwide, Singapore's economy is on the way of recovery. | B1.2 | |
| Even before the global economy could do well, the September 11 incident impacted by the SARS outbreak, make the whole economy worst – Singapore being one of these affected countries. | B1.3 | |
| Problems like retrenchment, downsizing of companies and pay cut take place. | B1.3.1 | |
| The CPF contribution make by the employers is also going to be cut to stay competitive and hopefully the economy could pick up. | B1.3.2 | |
| Therefore, Singapore is facing an unfavourable economic climate now but hopeful in the years to come. | B1.3.3 | |
| On the other hand, the social climate in Singapore is generally well. | B1.4 | |
| Though crime rate is on the rise, but it is still low as compared to the other countries. | B1.4.1 | |
| Due to the strong competition and the high standard of living in today's dynamic society, the trend of both parents working in the society has arisen significantly. | B1.4.2 | |
| With all these present worries and unexpected changes taking place, stress is natural, necessary and inevitable. | B1.5 | |
| Hence, it is important to build a strong resilient family in the midst of the prevailing social and economic climate in Singapore in order to cope and overcome the obstacles and accept the challenges down the road. | T | |
| Building a strong resilient family – firstly, is to adopt certain traits in order to foster a strong relationship among family members and secondly, handling the stress problem and lastly, the ways of managing a family financially in the midst of the weak economy. | T | |
| Body paragraph 1 | | |
| Despite the common scenario of a family having less time for one another due to work and other commitments, fostering a strong relationship among family members is important. | P1 | |
| Research indicates that many problems of individuals and society are related to dysfunctional family relationships. | P1.1 | |

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| For instance, thefts, teen pregnancy, substance abuse, child abuse and family violence are known to be aggravated by problems in the family. | P1.1.1 | |
| Hence, families are crucial in the development of human competence and character. | P1.1.2 | |
| The traits to building a strong family are - to show care and concern among family members, encouragement, positive discipline, communication and the ability to cope with changes. | P1.1.3 | Art 1, S4.6.2; XW Q2, S1 (Art 1, S3) |
| Body paragraph 2 | | |
| Communication is an important part of a satisfying parent-child relationship as it is a basic building block for strong families. | P2 | |
| Communication is a two-way process involving verbal and non-verbal messages. | P2.1 | |
| Positive communication is effective and supportive to family members; negative and critical messages convey feelings of unworthiness and build anger and resentment in children. | P2.2 | |
| Researchers believe that when adults and children stay in touch through attention and conversation, children may be less likely to 'act out' or behave in ways that cause conflict or require discipline. | P2.3 | |
| Adults who take the time to listen and learn about each other discover ways to more effectively communicate. | P2.4 | |
| Satisfying parent-child and between adults relationships happen when family members are able to discover, respect and respond to the individual uniqueness of the person whom they are communicating with. | P2.5 | Art 1, S3.2.1 |
| Body paragraph 3 | | |
| The quality of parent-child interaction is an important aspect of family life to focus on when building strong families. | P3 | |
| One common theme of these interactions is child discipline and guidance. | P3.1 | |
| For example, sensitive, responsive maternal behavior toward infants is associated with healthy and secure mother-infant relationship. | P3.1.1 | |
| This positive relation between parenting behaviors and child functioning continue into the pre-school years. | P3.1.2 | |
| Through the school-age years and into adolescence, parenting styles that consider the unique needs of the child, yet place an emphasis on personal responsibilities and appropriate levels of encouraging independence, are related to optimal child outcomes. | P3.1.3 | |

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| Conversely, authoritarian or power assertive methods of physical punishment, deprivation of privileges, and demanding, are associated with less positive outcomes. | P3.1.4 | |
| It will only be a matter of time as to when the child will retaliate and engage in undesirable actions. | P3.1.5 | |
| Body paragraph 4 | | |
| It is important for family unit and each individual within that unit to understand stress and how to deal with it effectively. | P4 | |
| Dealing with stressful situations in the family ultimately becomes the responsibilities of the family members as it will be negative and harmful if stress is not addressed or relieved. | P4.1 | |
| Stress in a family includes emotional stress, physical stress, job stress and etc | P4.1.1 | |
| In our society, things change rapidly. | P4.2 | |
| With change comes stress. | P4.2.1 | |
| Therefore learning to deal with stress and the changes create opportunities for families to become stronger and more resilient, or they can become weakened and less able to cope. | P4.2.2 | |
| Families were then able to work through the stressful situations successfully and appreciate the calm periods in their lives when they are stress free. | P4.2.3 | |
| It is the flexible and resourceful family that meets the challenge of stress head on and is able to adapt to changes that will be effective in overcoming the odds. | P4.2.4 | |
| Body paragraph 5 | | |
| In the midst of the weak economy, managing a family's finances are important. | P5 | |
| Numerous national studies indicate that financial management difficulties can affect families of all types and all levels of income. | P5.1 | |
| Hence the family must devise a plan to utilize the family's income efficiently and set long and short term goals. | P5.1.1 | |
| The family might want to come up with a spending plan – to have what they need and the rest of the income could be save up for use in harder times. | P5.1.2 | |
| If family is not careful, they may spend time and money without stopping to think about long term needs. | P5.1.3 | |
| This may not result in an immediate problem, but overtime, a lack of planning or goal setting can waste resources. | P5.1.4 | |
| Research indicates that families who establish both short and long term goals are more likely to achieve those things in life that are important to them. | P5.2 | |

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| Families who set goals manage their overall finances better than families who do not. | P5.2.1 | |
| They are also better able to communicate with each other when personal goals interfere with shared families' goals. | P5.2.2 | |
| Therefore, setting and reaching goals help individuals take greater control of their circumstances. | P5.2.3 | |
| Once set, goals strengthen the family's ability to function and achieve and live their dreams. | P5.2.4 | |
| Strong resilient families recognize that goals shift and change overtime and understand the importance of revising and negotiating priorities when new circumstances arise. | P5.2.5 | |
| Conclusion | | |
| Hence, in the midst of the prevailing social and economic climate in Singapore, each member in the family plays an important role and a strong resilient family can only be built when the above steps are taken. | C1 | |

F2F 4 – P

| Introduction | Idea code | Idea source |
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| In this new era of globalization, the development in various aspects such as science and technology has indeed brought many changes to livelihood. | B1 | |
| Many people are competing with one another in this society and becoming materialistic as the time passes by. | B1.1 | |
| They tend to neglect the importance of bonding strong family relationships which has in fact become a serious matter in our society and may worsen if immediate actions are not taken. | B1.2 | Ena Q2, S1 (Art 1, S2) |
| Consequently, as a caring society, we should understand and practise all possible factors that will help to shape family relationships. | T | |
| Body paragraph 1 | | |
| In general, strong marital relationship is crucial in order to build up the foundation of a family. | P1 | Art 1, S1 |
| The fact that family is formed from a certain marriage is undeniable and cannot be overlooked. | P1.1 | |
| Strong marital relationship between husband and wife simply means both are committed to their family and bear the responsibilities to give their children comfort besides lead them to the right path for a bright future. | P1.2 | Art 1, S1.1.2; Art 1, S1.2 |
| In Malaysia, even in most of the countries, children idolize their parents as the role models for success as they spend most of their time with parents since young. | P1.3 | |
| If the marriage component is unstable, for example, parents who always argue with each other will definitely cause the family members feel stressed, exhibit dysfunctionality in their lives and thus face depression. | P1.4 | Art 1, S1.3.3 |
| Another factor that contributes to a functional family is having appropriate bonding and separateness among family members. | P2 | Ena Q2, S1 (Art 1, S2) |
| This includes developing the ability to make wise decisions and choices and forming deep loving attachments among them. | P2.1 | Art 1, S2.1.3; Art 1, S2.1.1 |
| Appropriate bonding indirectly brings advantages to the family. | P2.2 | |
| All family members cannot stand living alone and need emotional supports in order to solve their problems. | P2.3 | Art 1, S2.1.1.2 |
| However, they also need to learn the limit and boundary that they are responsible for to prevent any misunderstandings. | P2.4 | Art 1, S2.2.1.1 |

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| Such appropriate bonding and separateness can be done through various activities like having campaign of awareness especially among new generations of today, organizing family day, having family outing at least once a week and many more. | P2.4.1 | Ena S1 |
| Body paragraph 2 | | |
| As we know, conversations among family members foster caring and closer relationships. | P3 | N S3 (Art 1, S3) |
| Family members are free to express their thoughts and feelings, whether it is relevant and make much sense to the topic or not. | P3.1 | Art 1, S3.2 |
| Conversely, on the other hand, they are willing to accept one's views and evaluate thoroughly before making any judgments. | P3.2 | |
| With effective communication, each and every family member is seen and heard. | P3.3 | Art 1, S3.2.1 |
| Thus, family member will not feel uneasy or not belonging to the entire family. | P3.3.1 | |
| This is important and meant to be used by children as they have different opinions from their parents and negotiations are made possible if both parties understand each other. | P3.3.2 | Art 1, S3.2.2 |
| Body paragraph 3 | | |
| Next, one other considered crucial factor that contributes to maintain strong family relationships is understanding family rules. | P4 | P S2 (Art 1, S4) |
| Different family has different rules as a result of the variety thoughts plus the influence of traditional family values. | P4.1 | |
| Such rules are formed to help all family members in their growing process. | P4.2 | Art 1, S4.4 |
| Therefore, these rules should be clear and negotiable as well. | P4.2.1 | Art 1, S4.4.1 |
| Thus, by compromising with one another in creating family rules, family members will not feel trapped or lost and eventually, continue to maintain the family to function well. | P4.3 | Art 1, S4.5.4 |
| As a result, the family will not break down or collapsed. | P4.3.1 | Art 1, S4.5.4 |
| Conclusion | | |
| Last but not least, care and concern among family members is important for a functional family. | P5 | LX S6 (Art 1, S4.6.2) |
| With sufficient care and concern, family members are aware that they are no longer alone or being neglected. | P5.1 | |
| When facing problems that cannot be solved easily and needed guidance, one can approach any of the family members for their opinions before making the final decisions. | P5.2 | |

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| The same applies to the family members who help one another by giving encouragement and words of confidence. | P5.3 | |
| In addition, children are taught with positive values such as honesty in order to gain trust from others. | P5.4 | Art 1, S4.6 |
| It is certainly important to have trust in a family that leads a strong bonding relationship. | P5.5 | P Q2 S6.1 (Art 1, S3.1) |
| All above all, shaping strong family relationships can only be done if all members play their roles seriously. | P5.6 | |
| There is no short cut method and nothing can be done with words if no actions have been taken. | P5.7 | |
| Therefore, as part of the caring society, we must work hand in hand and shape family relationships together. | P5.8 | |
| Thus, we will be able to gain peace and harmony in life. | P5.9 | |

F2F 4 – N

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Family is a place where the social life of a person starts. | B1 | |
| Family plays an important role in transmission of the cultural traditions from one generation to another. | B1.1 | |
| It acts as an educative unit and a socio-cultural agency. | B1.2 | |
| Family is place where we can let out all our feelings and share our thoughts and care for each other. | B1.3 | |
| According to Murdock, an anthropologist, a family is "a group characterized by common residence, economic cooperation and reproduction. | B1.4 | Art 3 |
| Let us now see the various factors which had helped to shape the family relationships in India in the past decade. | T | |
| Body paragraph 1: Economic factors which shapes family life | | |
| A family's economic welfare in this sense encompasses its general level of income, employment related benefits, type of work and employment of those earners in the family, level and availability of services from the private and public sector, as well as the general economic conditions in the community. | P1 | |
| Indeed, the very different causes of change to a family's economic conditions open the possibility of very different policy initiatives to address the experiences of children as they development. | P1.1 | |
| Body paragraph 2: Effect of Modernization on Family | | |
| In the simple and peasant societies, family was the unit of production as well as a primary unit of society. | P2 | |
| In the industrial society, the family has lost the place of being the unit of production and has been replaced by individual as the primary unit of society who works as a wage-earner or professional. | P2.1 | |
| The roles of family and marriage have undergone significant change in industrial societies. | P2.2 | |
| But even today, family occupies a unique place in industrial as well as pre-industrial societies. | P2.3 | |
| Families assume diverse forms and functions that vary from region to region, and express the social condition. | P2.4 | |
| It is seen that the family in Asia is moving slowly towards the Western nuclear family model, but retaining certain structural forms and traditional values. | P2.5 | |
| Body paragraph 3: Institution of Family in India | | |

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| Indian family, which is predominantly joint or extended, has remained remarkably stable despite some marked and drastic social, political, economic and religious changes over the last thirty years. | P3 | |
| Family has retained its primarily joint or extended characteristics. | P3.1 | |
| In general, Indian family has the following structural features | P3.2 | |
| In the cyclical family pattern, that is, joint family – nuclear family- joint family, landowners maintain the multi-couple life style for a longer time while non-cultivating landowners retain this family pattern for a shorter period; landless labourers tend to adhere to the extended family system for at least a while, despite the hindrance of early mortality. | P3.2.1 | |
| The socialization process is composed of a series of ceremonies beginning with the bathing and naming of the infant. | P3.2.2 | |
| Body paragraph 4 | | |
| In a society as large and culturally diverse and complex as India, changes take place at different speeds and at different levels of population. | P4 | |
| As such, the directions and patterns of change among women tend to vary not only among different segments of society, but also in different kinds of family organizations which vary considerably both structurally and functionally. | P4.1 | |
| Body paragraph 5 | | |
| Families on the Indian fringe are undergoing a change. | P5 | |
| The main factors of change are modern education, development programmes and urbanization. | P5.1 | |
| The direction of change is from the hold of collectivity (tribe, clan and family) to increasing individuality. | P5.2 | |
| Body paragraph 6 | | |
| India is a very diverse country and is known for its “unity in diversity”. | P6 | |
| The various cultural groups in India have played a significant role in shaping the family relationships. | P6.1 | |
| The different form of lifestyles in India are due to this major factor. | P6.2 | |
| In India, people learn the essential themes of cultural life within the bosom of a family. | P6.3 | |
| In most of the country, the basic units of society are the patrilineal family unit and wider kinship groupings. | P6.4 | |

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| The most widely desired residential unit is the joint family, ideally consisting of three or four patrilineally related generations, all living under one roof, working, eating, worshipping, and cooperating together in mutually beneficial social and economic activities. | P6.5 | |
| Patrilineal joint families include men related through the male line, along with their wives and children. | P6.6 | |
| Most young women expect to live with their husband's relatives after marriage, but they retain important bonds with their natal families. | P6.7 | |
| Conclusion | | |
| Considering all the above mentioned points we get a clear idea of the various factors which have shaped the family relations in India. | C1 | |
| Despite the continuous and growing impact of urbanization, secularization, and Westernization, the traditional joint household, both in ideal and in practice, remains the primary social force in the lives of most Indians. | C2 | |
| Loyalty to family is a deeply held ideal for almost everyone. | C3 | |

F2F 4 – Ena

| Introduction | Idea code | Idea source |
|---|------------------|--|
| There are many factors that have helped shaped family relationships in Singapore in the last decade. | B1 | |
| Some of the factors include; strong foundation of families, trust among members of the family, effective communication between family members, showing unconditional love for one another in the family, managing time well, tolerance and forgiveness etc. | T1 | |
| Each of the factors mentioned played important roles that contributed to shaping family relationships. | T1.1 | |
| The lack of any of these factors will affect the roles played by other factors, hence weakening family relationships. | T1.2 | |
| Therefore, we can see the importance of each individual factor and also how the factors worked together to help shaped family relationships. | T1.3 | |
| Body paragraph 1 | | |
| One of the very important factor that helped shaped family relationships is having a strong family foundation. | P1 | |
| A strong family foundation requires good bonding between family members, and this usually depends on effective communication. | P1.1 | Ena Q2, S1 (Art 1, S2); N S3 (Art 1, S3) |
| In addition, a good foundation is also based on teaching good family values. | P1.2 | Art 1, S4.6 |
| These family values will inculcate in the children, the importance of a family and also how a family can work together hand in hand to overcome any difficulty faced. | P1.2.1 | |
| The foundation of a family is first laid on at the time of a couple's marriage. | P1.3 | |
| How solid the foundation is depends on the relationship between the husband and wife and subsequently between the parents and children. | P1.3.1 | Art 1, S1 |
| Usually the parents and children have to work hard and put in a lot of efforts to create a strong foundation. | P1.3.2 | |
| When the foundation is strong, it is a good start to shaping family relationships. | P1.3.3 | |
| This is so because there would be very strong bonding between the members of the family and this strong bonding will help the family stick through any crisis together without the family breaking apart. | P1.3.4 | |
| Body paragraph 2 | | |

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| Another important factor that helped shaped family relationship is effective communication between family members. | P2 | N S3 (Art 1, S3) |
| Effective communication is when members in a family communicates with one another without any barrier, expressing thoughts freely and do not refrain from saying words of love, care and encouragement. | P2.1 | Art 1, S3.2 |
| Only with effective communication can members of the family understand and get to know one another to greater depths. | P2.2 | |
| In addition, when words of love are being expressed, it makes one feel loved and important in the family. | P2.3 | |
| This is especially important in times when one faces a difficulty as these words of love and encouragement can him to stand up on his feet again. | P2.4 | |
| When family members can communicate effectively with one another, it also reduces the chances of a disagreement that may arise due to opposing point of views. | P2.5 | |
| With effective communication, children will also learn to voice out their views in ways that they do not defiance against their parents but shows respect for them. | P2.6 | Art 1, S2.3.1 |
| Body paragraph 3 | | |
| Trust among members of a family also plays an important that helped shaped family relationships. | P3 | P S5 (Art 1, S4.6.2) |
| In many cases, relationships fumble and collapse even when the slightest winds blow when there is no trust in these relationships. | P3.1 | |
| Hence, to keep a family together and prevent it from falling apart, family members should learn to trust one another. | P3.2 | |
| Children should be inculcated with values like integrity and honesty and this would make them realize that lying is wrong and they should be truthful to their parents. | P3.3 | |
| They should know that once their parents find out that they lied, it would be difficult for their parents to trust them again. | P3.4 | |
| Parents on the other hand should be flexible and give their children a chance to explain their actions and look at the situation from their children's point of view. | P3.5 | |
| This will prevent them from jumping into conclusions, and reprimanding their children without listening to their children's explanation. | P3.6 | |
| Having trust between family members will also help strengthen the foundation of a family. | P3 | |
| Body paragraph 4 | | |

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| Another crucial factor that played a major role which helped shaped family relationships is managing time well. | P4 | |
| This is because it is very important that a family spends quality time together. | P4.1 | Art 2, P6 |
| As we know, in Singapore, there is stiff competition in the market, and the pace of living is getting faster and faster. | P4.2 | |
| Hence, more and more families have both parents working, and so the time that parents spend with their children has drastically decreased. | P4.3 | Ena Q2, P1.1 |
| This is very unhealthy since parents and children will eventually distance from one another. | P4.4 | |
| Similarly, as children gets older, they tend to spend more time with their friends instead with their families, and this will cause even greater communication breakdown between parents and children. | P4.5 | |
| Therefore, both parents and children have to play their parts, to manage their time well so they find time to spend with one another. | P4.6 | |
| On the one hand, parents should try to take time out of their busy schedule to spend time with their children. | P4.7 | |
| On the other hand, children should learn to place their family as top priority rather than their peers. | P4.8 | |
| With such co-ordination between parents and children, it wouldn't be too much a hassle for parents and children to spend time together. | P4.9 | |
| It would be most ideal if parents and children can make efforts to get together for meals or outing at least once a week. | P4.10 | Ena S1 |
| In addition, during the time spent, there should be effective communication among family members to ensure that the time is spent wisely and effectively. | P4.11 | |
| Conclusion | | |
| From the above points, we can see that building good family relationship is not an easy task and it does not depend on only one person in the family. | C1 | |
| Everyone in the family should put in equal efforts, and play their roles. | C2 | |
| We also see that shaping family a relationship is not done overnight, but it stretches from the first day of marriage and continues from one generation to another. | C3 | |

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| <p>Shaping family relationships is based on the above factors mentioned, but at the same time, it is also important that family members show appreciation for one another for their efforts and tolerate and forgive one another for any mistakes made</p> | <p>C4</p> | |
| <p>Hence, to shape family relationships, we need to have all these points in mind.</p> | <p>C5</p> | |

F2F 4 – LX

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| It is not easy to form a family and it is even more difficult to make it strong and resilient nowadays. | B1 | |
| Parents always have a fabulous impact on children. | B2 | |
| Their behaviors and personality usually be crucial to their children’s future. | B2.1 | |
| Body paragraph 1 | | |
| Actually, in China, the economic climate is prosperous. | P1 | |
| You see, more and more people are enjoying the increase of their incomes. | P1.1 | |
| Even though, parents not squander the money to dote on children. | P1.2 | |
| They should be as thrifty as before and make sure that every expense of even one cent should make sense. | P1.3 | |
| As a Chinese saying goes, “it is easy to become extravagant from thrifty; but it is difficult to return thrifty from extravagant.” | P1.4 | |
| They should keep children aware of their life styles, and let them know it is not easy to make money. | P1.5 | |
| Body paragraph 2 | | |
| In the modern world, the competitions are fiercer and fiercer. | P2 | |
| Take them into account, this generation will naturally face more and more frustrations and failures. | P2.1 | |
| How to cheer them up, that is the point parents should pay attention to. | P2.2 | |
| Above all, they should be positive mother themselves. | P2.3 | |
| They should be optimistic about everything themselves. | P2.4 | |
| Whenever they face difficulties, they should deal with them without fear, and then say to children, “Look! Isn’t Mum and Dad really something? You can make it, too!” | P2.5 | |
| The key is to give support to fill them with confidence to confront the next challenge. | P2.6 | |
| Body paragraph 3 | | |
| Nowadays, people’s minds are more complicated and sophisticated. | P3 | |
| Sometimes we will be fooled or cheated, maybe we will feel upset and even angry at the spot, but we cannot lose heart to the world. | P3.1 | |
| Children should be guided to be hopeful, to trust others as well as to be trustworthy, to love people surround with a grateful heart. | P3.2 | |

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| “There is no lack of beauty but the discovery.” | P3.3 | |
| So parents should appreciate the goodness of the world with them and discover the goodness together. | P3.4 | |
| During discovery, all can love life more deeply. | P3.5 | |
| No matter what the others do onto you, you just do what you should to light up the life. | P3.6 | |
| Body paragraph 4 | | |
| Teach children to be responsible is the parents’ responsibility. | P4 | |
| Be responsible to family, to friends, to society and to oneself is very important in modern times. | P4.1 | |
| They need to learn that they must shoulder everything result from what they have done. | P4.2 | |
| In the prevailing social climate, credit is related to one’s reputation, one will be respected if and only if one is creditable. | P4.3 | |
| Body paragraph 6 | | |
| Parents should be affectionate. | P5 | |
| Love is the most beautiful language in the world. | P5.1 | |
| Children can grow in the loving atmosphere, and can be full of love in their hearts. | P5.2 | |
| Parents can show love directly, just by giving out fancy gifts at times; by saying, “Oh, honey, I love you so much!” ; by hugs and kisses before their bedtime... then children will know they mean a lot to their parents, and they can always feel being surrounded by love. | P5.3 | |
| They will learn how to love others as they grow up, as well as the family is strong always. | P5.4 | |
| Conclusion | | |
| Each ideal family life is different, but the happiness they enjoy is all the same. | C1 | |
| The world consists of many strong and resilient families, then it is the desirable place where we lead our lives. | C2 | |

F2F 5 – PL

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Due to the advance and high technology, researchers had revolutionized scientific breakthrough in the biomedical and genetic engineering fields. | B1 | |
| The researchers had succeeded to bring hope again to many patients whom their organs are not functional. | B2 | |
| The new breakthrough was transplanting human organ into the patient to replace the failed organ. | B3 | |
| However, in the recent era, shortage of human organ has become a major issue. | B4 | |
| This has affected the death of many patients whom are still in the waiting list because only very little people are willing to donate their organs. | B5 | Art A |
| Scarce of human organs have led to many syndicates selling human organs illegally. | B6 | |
| Some willing to sell their liver, kidney or bone marrow to the syndicates for the attractive money they could receive. | B6.1 | |
| As the results, many researches are trying for other alternatives to curb the scarce of human organs. | T | |
| Body paragraph 1 | | |
| Shortage of human organs can be improved by transplanting animals' organ into human body which is known as xenotransplantation. | P1 | C S1 |
| Due to the organ donors are insufficient compared to the number of patients waiting for their turn for organ transplant, the researches come up with a solution which is to use animals' organ to replace human organ. | P1.1 | |
| This can solved the scarcity of human organs and save lives of many patients suffering from diseases which require transplanting new organs to curb organ failure. | P1.2 | |
| Nonetheless, xenotransplantation also has its' own disadvantages. | P1.3 | |
| The recipient's body immune system will reject foreign organ transplanted and might cause serious health effect to the recipient if medication were not taken care of regularly. | P1.3.1 | PL S1.2.1 |
| However, "most researchers have focused on pigs, which are highly compatible with humans - and by adding some human genes to specially bred pigs, it reduces the risk that transplanted animal organs will be rejected by their human recipients" (BBC News, 1999). | P1.3.2 | Art 2 |

| | | |
|---|----------|---------------------------------------|
| Due to the used of animal organs to transplant in human beings and the majority animal organs come from pig's organ, some religious, ethical and moral issues had arisen. | P1.3.3 | W S1.3.1 |
| Muslims are not allow to used the organs from pig due to their religion beliefs and "concern about the ethics of animal organ transplants, both for humans, and for animal welfare" were also arises. (BBC News, 1999). | P1.3.3.1 | Art 2 |
| Body paragraph 2 | | |
| Therapeutic cloning is also one of the solutions to solve the scarcity of human organs. | P2 | C S2 |
| This method is to create a similar organ from the recipient's own stem cell. | P2.1 | PL S2.2.2 |
| Thus, the stem cell will propagate many cells to produce an organ. | P2.1.1 | PL S2.2.3 |
| Therefore, the organ has the recipient's DNA. | P2.1.2 | |
| As a result, the body immune system will not reject the new organ after transplanting because the new organ is not foreign to the body immune system but has the same DNA as the organ before. | P2.1.3 | PL S2.2.2.1 |
| However, research is still undergoing as the changes for the stem cells to replicate into an organ is very low and plenty of egg cells are needed to replicate into stem cells after the egg cells are stimulated. | P2.2 | |
| Therapeutic cloning will be the best solution if the researches were to succeed, but many religious and ethical issues had vigorously disagreed with this method. | P2.3 | |
| From many religions point of view, every parts of human beings are sacred and it can only be created by God and not human. | P2.4 | |
| Therefore, therapeutic cloning was banned for researches but now it is allow for research however it is done passively. | P2.5 | |
| One major concern is also that therapeutic cloning may cause mass production of human organs where it will further lead to decreasing the value of a human being as the human organs can be easily reproduced. | P2.6 | C S2.2.5; C S2.2.4 (Art A, A4.1.1) |
| Body paragraph 3 | | |
| On the other hand, human organ transplant is the first solution to the problem of organ failure despite the medication method. | P3 | PL T1 |
| Human organ transplant also face the similar effect as animal organs transplant where the body immune system will reject a new organ in the system. | P3.1 | C P1 |

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| In spite of the rejection of foreign organs, many ailing patients were given new life after the surgery. | P3.2 | |
| “Today, most organ transplants are relatively safe, routine procedures, and transplantation is considered to be the best treatment option for thousands of patients every year”. (Harris, n.d) | P3.3 | Art 3 |
| However, the human organ donors were inadequate to fulfill all the patients who need organ transplant. | P3.4 | |
| Nevertheless, it has also the least ethical and moral dispute over human organ transplant compared to therapeutic cloning and animal organs transplant. | P3.5 | |
| Conclusion | | |
| In conclusion, the human organ transplant is still the best solution to the problem of organ failure. | C1 | |
| Due to the shortage of human organs, more campaign must be carried out and organizations should be established to gain the public’s awareness about the scarcity of human organs. | C2 | |
| In this way, more people will sign up to donate their organs before or after death. | C2.1 | |

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| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Hailed as one of the greatest breakthroughs in the biomedical field, human organ transplant has since saved tens of thousands of patients. | B1 | |
| However, as mentioned by Carey Goldberg in her article for Globe Newspaper, as many as six thousand Americans die every year in the wait for human organs to be donated to them.(Goldberg,2003) | B2 | Art A, B1 |
| In view of the chronic shortage of human organs, scientists and doctors have started looking into other possible alternatives, among which are xenotransplant, stem cell technology and artificial organ substitutes. | T | |
| This paper aims to examine the medical, ethical and moral issues provoked by such alternatives and thus show that human organ transplant is still the best solution to organ failure after all. | T | |
| Body paragraph 1 | | |
| Xenotransplant, which is the use of animal organs in human patients, is perhaps one the most controversial of all alternatives attempted to date. | P1 | C S1 |
| Due to the acute dearth of human organs, there is a growing support for Xenotransplant, as evidenced by its renewed clinical trials in United States recently.(Beresford, 2004) | P1.1 | Art 2 |
| However, detractors have not failed to point out the dreadful medical problems and ethical issues involved in Xenotransplant. | P1.2 | |
| From the medical standpoint, tissue rejection remains as a formidable problem despite the use of immunosuppressive drugs. | P1.2.1 | |
| Even if successful, such drugs compromise the immune system of patients, making them vulnerable to infections and virus attacks. | P1.2.2 | |
| Moreover, concerns have been raised over the possibility of animal diseases being transmitted to patients through transplanted organs or tissues.(Ritchie, 1998) | P1.2.3 | Art 3 |
| In addition to medical problems, Xenotransplant has also raised several ethical and moral issues. | P1.3 | |
| In particular, the production of transgenic animals, which are animals with human genes incorporated into them, has been the center of controversy of late. | P1.3.1 | |

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| These animals have been genetically modified with the purpose of harvesting animal organs that are less likely to cause tissue rejection when transplanted into human patients. | P1.3.2 | |
| Such scientific experiments have invited criticisms that mankind is playing God and that scientists are merely inflicting sufferings on animals. | P1.3.3 | Art A S1.3 |
| Furthermore, xenotransplant also has grave implications concerning the desecration of patients' identity. | P1.4 | |
| Reports have shown that patients who have undergone xenotransplants often get a feeling of their identity being violated. (Beresford, 2004) | P1.4.1 | Art 2 |
| Xenotransplant is thus not an ideal substitute to human organ transplant. | P1.5 | |
| Body paragraph 2 | | |
| To many, the advent of stem cell technology in 1998 seems to offer a few rays of hope to patients with organ failure. | P2 | C S2 |
| Stem cells extracted from embryos are found to possess the ability to develop into any tissue type in human bodies, thus leading researchers to conceive the idea of cultivating organs from such cells.(CRT, n.d.) | P2.1 | Art 4 |
| Nevertheless, stem cell technology is still in its nascent stage and thus its alleged application in human organ cloning has yet to be proven. | P2.2 | |
| In spite of the fact that it holds great promise for the elimination of tissue rejection and therefore the need for immunosuppressive drugs, stem cell technology has provoked a host of ethical debates. | P2.3 | |
| Objections are based on the argument that sanctity of life is destroyed with the exploitation of human embryos and fetuses. | P2.4 | C S2.2.4 (Art A, A4.1.1) |
| Some are also apprehensive about stem cell research eventually leading to human cloning.(Lee, 2000) | P2.5 | Art 5 |
| Therefore, the potential of stem cell technology rectifying the lack of transplantable human organs is clouded by complicated ethical and moral issues, rendering it unsuitable as a solution to organ failures. | P2.6 | C S2.2 |
| Body paragraph 3 | | |
| The use of artificial organs to replace failing ones has long been plagued with daunting technical problems. | P3 | PL S4 |
| One just needs to look at the example of the Jarvik-7 artificial heart experiment during the years 1982-1986. (Fox, 1998) | P3.1 | C S3.1 (Art 6) |

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| The experiment has resulted in the death of five patients implanted with artificial hearts due to severe medical complications. | P3.1.1 | |
| The reason is that man-made machineries lack the dynamic nature of human organs, as well their abilities to self-repair and self-maintain. | P3.1.2 | |
| Besides, there is the question of whether or not the incorporation of a non-human organ into a patient debases his or her human self. | P3.1.3 | |
| This question leads a pre-rational aversion towards artificial organs among the common masses. | P3.1.4 | |
| Taking all these factors into account, it is logical to conclude that the use of artificial organs would not be viable in the foreseeable future. | P3.2 | |
| Body paragraph 4 | | |
| Therefore, even though the gap between the availability of transplantable human organs and its demand is ever rising, it is difficult to deny the fact that human organ transplant is still the best solution to organ failures. | P4 | PL T1 |
| One reason lies on the fact that as long as a compatible donor organ is found, the chances of tissue rejection are much lower than in the case of xenotransplant. | P4.1 | |
| Also, the risk of introducing animal diseases into human bodies is eliminated. | P4.2 | |
| No doubt there are also ethical issues involved in human organ transplant, but they are mainly centered on the question of procurement and distribution, (Cline, n.d.) in contrast to the grave issues concerning sanctity of life provoked by stem cell research. | P4.3 | Art 7 |
| By and large, people are relatively comfortable with the idea of human organ transplant, and often see it as an act of altruism on the donor's part. | P4.4 | |
| For instance, Pierre Png, an actor in Singapore who had donated his liver of his fiancée, is applauded for his selflessness and courage by many locals. | P4.5 | |
| Conclusion | | |
| In conclusion, even with the availability of other alternatives, human organ transplant still remains as the best solution to the problem of organ failure. | C1 | |
| It is high time for authorities to seriously look into ways of expanding the organ donor bases, before more patients who are deprived of transplantable organs die tragically in their sick-beds. | C2 | |

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F2F 5 – W

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| As society becomes more affluent, people neglect the importance of having a healthy diet and regular exercise. | B1 | |
| The consequence is obesity and they are more likely to have heart attacks. | B1.1 | |
| Other bad habits such as smoking and popping slimming pills also contribute to organ failure but the rest have this problem due to genetic inheritance or when they encounter serious accidents. | B1.1.1 | |
| In order to tackle the increased number of organ failure, a few alternatives besides human organ transplant are considered. | B1.2 | |
| These include xenotransplantation, cloning stem cells and the use of pace-maker or kidney dialysis for less serious conditions. | T | |
| However, the methods of xenotransplantation and cloning stem cells trigger off many arguments because many people feel that they are risky, unethical and immoral. | T | |
| Thus, human organ transplant is the best solution to the problem of organ failure for the time being. | T | PL T1 |
| Body paragraph 1 | | |
| First of all, xenotransplantation is the transfer of living cells, tissues and organs from one animal species to another for medical purposes. | P1 | C S1 |
| The term here is used specifically for animal-to-human transplants. | P1.1 | |
| The most commonly used organs are from pigs and baboons since they are genetically close to humans and hence, least rejection of the organ by the immune system is expected to occur. | P1.2 | W S1.3.1 |
| The backlash is that the patient is exposed to lethal animal-transmitted viruses such as Ebola and leptospirosis which damages kidney and liver (Alix Fano, Murry J. Cohen, Marjorie Cramer, Ray Greek & Stephen R. Kaufman, 2000). | P1.3 | Art 2 |
| In addition, 55 xenotransplantations have failed since 1906 and the cost of doing such operation is \$250,000 in 1995, which is more expensive than human organ transplantation. | P1.4 | Art 2 |
| Besides heavy costs and risks, most of the people feel that it is unethical to use animal organs, especially from baboons, because we are deemed to be disregarding any rights of creatures based on the fact that humans rank highest in the natural order. | P1.5 | |

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| Furthermore, organs from pigs cannot be used for Muslims as their religion forbids them to touch pigs. | P1.6 | |
| Hence, although xenotransplantation provides a solution to solve organ failure, it is not very effective. | P1.7 | |
| Body paragraph 2 | | |
| Next, cloning stem cells is another possible alternative to the problem of organ failure. | P2 | C S2 |
| Embryonic stem cells are used since they have the greatest potential to divide and develop into specialized cells or tissues. | P2.1 | |
| Thus, organs such as hearts or kidneys can be cloned instead of waiting for years before a compatible human organ is available. | P2.2 | |
| In addition, the stem cells can be designed to minimize rejection of the organ from the patient as the process is manipulated by humans. | P2.3 | |
| The shortcomings of cloning stem cells are that many medical, ethical and moral issues are involved because millions of embryos are destroyed during experiments and when they are used to create an organ. | P2.4 | |
| This leads people to feel that a human life is devaluated. | P2.4.1 | C S2.2.4 (Art A, A4.1.1) |
| Moreover, cloning stem cells is against most of the religions, particularly for Christianity and Islam, because every part of a human is sacred so humans themselves should not “play God” and attempt to make an organ. | P2.4.2 | |
| A hidden danger in the cloning of stem cells is that nobody is able to stop one from creating a human if the law allows this method and this is the main reason why most of the people are rejecting this. | P2.4.3 | |
| In short, if the law only restricts the method of cloning stems cells to create tissues or organs to save lives, this will be a popular solution to the problem of organ failure. | P2.5 | |
| Body paragraph 3 | | |
| Human organ transplant is obviously the best answer to solve organ failure, but despite of numerous campaigns to encourage more donors, the response is slow compared to the rising number of people with organ failures. | P3 | |
| Hence, an indirect way of solving organ failure is to reduce the shortage of organs and providing financial incentives to donors are suggested. | P3.1 | Art A |
| This will increase organ supply quickly but bring along social problems. | P3.1.1 | |

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| Poor people may sell their organs in exchange for money to support their families and the situation of human organ trafficking syndicate is likely to worsen. | P3.1.2 | Art A, A2 |
| For instance, a Brazilian man was paid \$13,000 to remove his kidney in the South Africa town of Durban. | P3.1.3 | Art 3 |
| It is also suspected that the Chinese administrators obtain money from the sale of prisoners' organs because more than 4000 prisoners were executed for minor crimes in 1997 (O'Neill Terry, 1999). | P3.1.4 | Art 3 |
| Some people may even entice dying people to end their lives faster with the aim of donating their organs for money. | P3.1.5 | |
| In other words, providing financial incentives to donors may encourage the buying and selling of organs which resemble treating them as commodities that diminishes human dignity and devaluates human life (Goldberg Carey, 10/8/2003). | P3.2 | Art A, A4.1.1; A4.1.2 |
| Some people are likely to obtain human organs immorally as a result of greed. | P3.3 | |
| Conclusion | | |
| All in all, human organ transplant is the best solution to the problem of organ failure now but people have to wait for very long period before they can find a compatible organ and usually many of them fail to survive. | C1 | |
| Attempting to increase human organs by providing financial incentives brings about social problems instead so cloning stem cells may become an available solution in future. | C2 | |
| This is because with more research and improved technology, the risks can be minimised and people may change their attitudes towards this method over time, like what they felt about vitro-fertilization in the past. | C3 | |

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F2F 6 – A

| Introduction | Idea code | Idea source |
|---|------------------|-----------------------|
| American Medical and Political leaders are considering the use of financial incentives to boost the supply of human organs. | B1 | Art A |
| These have both its pros and cons and its feasibility differs in different country. | T | |
| This depends on factors such as the extent of how effective the program could be, the availability of the organs needed and its demand. | T | |
| Body paragraph 1 | | |
| Firstly, by assigning monetary value to human organs, people could be tempted to donate the organs of their deceased family, and unfortunately, at all cost. | P1 | |
| What started of as a good intention of helping others who needs the organ, turned out to be nothing more than a corrupted business transaction. | P1.1 | |
| The family members of the deceased could possibly be tempted to declare the medical history of the deceased falsely in order to benefit from the monetary incentives offered for organ donation (Goldberg, 2003). | P1.2 | CS P4 (Art A, A4.1.4) |
| This dishonesty goes beyond than just the issue of integrity. | P1.2.1 | |
| It involves the risk the acceptor of the organ took without knowing exactly and accurately the medical conditions of the donor. | P1.2.2 | |
| This could prove to be fatal. In this point, monetary incentives proved not to be an effective method. | P1.2.3 | |
| Body paragraph 2 | | |
| On the other hand, financial incentives could indeed boost the supply of human organs. | P2 | |
| There had been a shortage of organs for transplant in recent years. | P2.1 | |
| For example, according to the United Network for Organ Sharing, more than 80,000 patients in America needed a transplant but only a dismal 24,000 transplants occurred in 2001 (Hubbell, 2002). | P2.1.1 | Art 2 |
| Patients and their doctors too got frustrated by long waiting lists. | P2.1.2 | |
| Over the years, the patient's condition deteriorated and could possibly lead to death. | P2.1.3 | |
| Between 1995-1999, about 1,000 patients died while waiting for a heart, heart and lung, lung or liver transplant (Meijer, 2000). | P2.1.4 | Art 3 |

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| Monetary incentives could increase the availability of the organs needed for transplants by encouraging the donations of the organs. | P2 | |
| Hence more patients could be saved and with the easy availability of the organs, one could expect a shorter waiting time for an organ transplant. | P2 | |
| Monetary incentives in return for organ donation thus could boost the supply of human organ especially for countries where the demand for human organ is high while its availability is low. | P2.3 | |
| Body paragraph 3 | | |
| Finally, the monetary incentives could provide financial help for the families of the deceased especially for the poor. | P3 | A S3 (Art A, F2.1) |
| For others, it could just be a token of appreciation in donating their deceased relative's organs. | P3.1 | |
| Nonetheless, the donors have nothing but to gain from the monetary incentives. | P3.2 | Art A, F2 |
| In less developed countries where the people could definitely do with extra cash, monetary incentives would certainly be a significant help. | P3.3 | |
| Conclusion | | |
| In offering monetary incentives for organ donation, it would increase public awareness of the urgency in the matter of organ donation. | C1 | |
| Monetary incentives have its advantages such as boosting the supply of human organ and providing financial help. | C2 | |
| Nevertheless, it should not be implemented if it is not particularly necessary for it too have its disadvantages such as the undermining of one's integrity that could leads to undesirable consequences. | C3 | |
| Beside monetary incentives, other benefits could also be offered such as medical benefits and tax relief for the family member of the donors. | C4 | |

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| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Every year, the waiting list for organs in USA increased by 12% (Goldberg, 2003). | B1 | Art A, F1.4 |
| This seems to be a significant figure and with the increasing demand for the organs, the government attempts to increase human organs donation through various campaigns. | B1.1 | |
| One of the campaigns was to provide monetary rewards to the donor's family. | B1.2 | Art A |
| In my point of views, I felt that there are many advantages as well as disadvantages of using monetary rewards to boost the supply of organs for transplants. | T | |
| The advantages include providing financial helps to the donor's family, saving more lives, reducing the waiting time for those patients with serious health conditions. | T1 | |
| On the other hand, several disadvantages may arise. This include increased of crime rates and undermine of people's integrity. | T2 | |
| Body paragraph 1 | | |
| First of all, by providing monetary rewards to the donor's family, it will increase the awareness of organs donations campaign and encourages more organs donations to everyone in a country. | P1 | A S3 (Art A, F2.1) |
| For instance, a needy family can donate the organs of their deceased family member, in order to obtain some financial assistance for the preparation of the deceased's funeral. | P1.1 | |
| In addition, this will speed up the whole funeral ceremony as time is often wasted while seeking financial assistances from relatives and friends. | P1.1.1 | |
| Body paragraph 2 | | |
| Saving more patients' lives and shortening of the waiting time for more seriously ill patients will be another great advantage of using financial incentives to boost the supply of organs for transplants. | P2 | |
| As the primary aim of organs donation is to treat more patients saving their lives, monetary rewards seems to be a motivating factor for the donor/donor's family member. | P2.1 | |
| With this motivating factor, they will be more willing and eager to donate the organs that are useable for transplants. | P2.1.1 | |
| Hence, the waiting time for the patients to have their organs transplants will be reduced and similarly, the probability of patients dying without an organ transplant will also be reduced. | P2 | |

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| Body paragraph 3 | | |
| Another advantage is that with the increasing awareness of financial incentives upon organs donation, this highlights the importance of staying healthy to the public. | P3 | |
| Apart from promoting healthy lifestyle, this increases the health awareness of the public. | P3.1 | |
| This illustrates how precious it would be for everyone to be in good health. | P3.1.1 | |
| In addition, the public will also understand the difficulties of losing their vital organs and the process of getting an organ transplanted. | P3.2 | |
| Body paragraph 4 | | |
| Despite of having many advantages of using monetary rewards to boost the supply of organs for transplants, there are several disadvantages. | P4 | |
| The major disadvantage is, as organs donation seems to be a lucrative activity, the crimes rate associating with the trafficking of organs will raise tremendously. | P4.1 | |
| This includes the murdering of a person for his organs and there will be problems arise from the trafficking of organs. | P4.1.1 | |
| For example, this will lengthen the procedures for the organs to be transplanted as investigations have to be cautiously looking into for the donated organs. | P4.1.2 | |
| Information such as the donor's identification and the condition of the organs will be verified carefully. (Dyer, 2002) | P4.1.3 | Art 2 |
| Body paragraph 5 | | |
| Another disadvantage is that with monetary rewards, it will undermine one's integrity. (Goldberg, 2003) | P5 | Art A, A4.1.3 |
| As people will not want to lose the benefits of the monetary rewards, they might conceal the health conditions of their deceases family member. | P5.1 | CS P5 (Art A, A4.1.4) |
| For example, one might know that the deceased have a close contact with a HFV patient but they continued to donate the deceased's organs in exchange for monetary rewards. | P5.1,1 | |
| Hence, the patient who has the contaminated organ transplants may also suffer from the same disease. | P5.1.2 | |
| Conclusion | | |
| In conclusion, using monetary rewards to boost the supply of organs for transplants may seems to be the best solution to the problem of shortages of organs. | C1 | |
| Despite of the disadvantages, the campaign of financial incentive in exchange for organ donation proves to be feasible. | C2 | |

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| In addition, being the fact that we are now living in a modern world, where money is the most important factor, almost every campaign will success when financial incentives are involved. | C3 | |
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F2F 6 – E

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| "Do you want to earn big bucks? Donate organs now!" | B1 | |
| "Healthy liver needed. Big reward. Call now!" | B1 | |
| These are probably the kinds of catch phrases you will soon see across the United States of America if the proposal to offer money in exchange for organs is accepted. | B1.1 | Art A |
| This proposal, endorsed by the America Medical Association (AMA) and the United Network for Organ Sharing, which is represented by 300,000 doctors across the United States, is their response to the increasingly urgent call for organ donors in the country. | B1.2 | Art A, B1.1 |
| The situation in the United States is getting desperate. | B1.3 | |
| The number of patients who died waiting for organ donations is more than 6000 per year. | B1.3.1 | Art A, B1 |
| The situation is further grieved by the steep rise in the number of patients on the waiting list by 12 percent each year, which cannot be counterbalanced by the receding percentage increase of organ donors of only 3 percent per year. (Goldberg, 2003) | B1.3.2 | Art A, F1.4 |
| This proposal raised several eyebrows and objections although it was welcomed by some such as Dr. Thomas Peters, the director of the Jacksonville Transplant Centre in Florida. | B1.2.1 | Art A, B1.3.2 |
| It ignited fierce debates that discuss the issues of ethics and morals. | B1.2.2 | |
| Here, in this essay, I have presented my personal ideas that will highlight why and why not money should be offered in exchange for organs. | T | |
| "Money makes the world go round." | B2 | |
| Body paragraph 1 | | |
| Firstly, it is impossible to live without money thus financial incentive' will definitely attract more people to step out to donate their organs. | P1 | |
| Organ donations will increase and the statistical gap between organ donors and organ acceptors will narrow. | P1.1 | |
| This will increase the patients' chances of getting a matching organ and more lives can be safe. | P1.2 | |
| Also, the money offered could be regarded as a form of financial aid for the donors' families who are facing financial difficulties. | P1.3 | A S3 (Art A, F2.1) |
| For example, the money received can be used to cover up the cost of the burial and funeral procession of the donor. | P1.3.1 | |

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| Therefore, this financial incentive is beneficial for poor families in need of money. | P1.3.2 | |
| The money can also be used to compensate the death of their close kin. | P1.3.3 | |
| Their grief, sadness and pain will partly be eased by the money received out of good will of saving a life after losing one. | P1.3.4 | |
| Body paragraph 2 | | |
| The second reason why offering financial incentive to organ donors is a good idea is that the use of cloned, artificial organs in organ transplants becomes less necessary when the number of human organs increases. | P2 | |
| Natural human organs are safer than cloned organs as even scientists nowadays cannot confirm that the latter is 100% safe and foolproof. | P2.1 | |
| The effects of having clones' organs in human body have not yet been determined and the possibility of the receiver experiencing harmful side effects is high. | P2.2 | |
| Thus, by attracting donors with money, more human organs will be available and this puts patients in less risky positions. | P2.3 | |
| Also the process of cloning organs is time consuming and requires the usage of a big bulk of the country's expertise and revenue. | P2.4 | |
| Body paragraph 3 | | |
| Lastly, the proposal should be supported as indirectly, it promotes and encourages healthy living. | P3 | |
| Money will only be given if the organs offered are accepted and these organs will only be accepted if they are in good and healthy condition. | P3.1 | |
| An example is that an alcoholic in need of money will be motivated to stop his drinking habits and improve his lifestyle so that his liver would be good enough to be donated. | P3.2 | |
| Hence this urges people to lead a healthier lifestyle in order to maintain their organs in excellent quality and condition. | P3.3 | |
| Body paragraph 4 | | |
| Despite the fact that money makes the world go round, it is too, unfortunately, the "root of all evil". | P4 | |
| The idea of giving away money to attract donors comes with a list of cons too. | P4.1 | |
| First of all, people are willing to undergo extreme acts for money's sake. | P4.1.1 | |

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| For example, a poverty stricken man may voluntarily remove his organs himself and sell them away as in the case of a poor South African man who was paid \$13 000 to have his organs removed. | P4.1.1.1 | Art 2 |
| This process of removing organs without the permission and the supervision of a certified surgeon or doctor is risky and harmful not only to the 'donor' but also to the receiver too as the organs donated illegally may not be the correct match or in the acceptable condition. | P4.1.1.2 | |
| Also, this encourages the illegal selling and handling of organs and the formation of organ transplant "black markets" and syndicates. | P4.1.1.3 | |
| Although a patient can easily obtain his needed organ from these illegal places, the organs they received may not be worthy of the hefty sum they had to pay. | P4.1.2 | |
| In addition to that, wealthier patients have the privilege of paying large sums of money for the organs leaving poorer patients waiting much longer for an organ transplant. | P4.1.3 | A P3 |
| This situation will just aggravate the already wide inequality gap between the rich society and the poor. | P4.1.3.1 | |
| Body paragraph 5 | | |
| Next, the issue of ethics and moral will often be questioned if the proposal to offer monetary incentive to donors is accepted. | P4 | |
| Organs are god-given gifts and they are therefore unethical to be compensated with money. | P4.1 | A P1 (Art A, A4.1) |
| Once organs can be obtained using money, it no longer becomes a commodity. | P4.2 | |
| Its sacred value will then be altered and it will be easily taken for granted. | P4.3 | |
| For example, in today's increasingly affluent society, god-given organs will be less appreciated as once they are lost, another one can easily replace them. | P4.3.1 | |
| Body paragraph 6 | | |
| Lastly, by giving money in exchange for organs, integrity will be undermined for the sake of money. | P5 | Art A, A4.1.3 |
| Since only healthy organs are accepted, people will go through the extent of covering up the medical history and the flaws of the organs. | P5.1 | CS P4 (Art A, A4.1.4) |
| Honesty will come into question and this puts patients/ate greater risks if the organs they received do not function as well as they had expected. | P5.2 | |
| Conclusion | | |

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| The problem of low organ donor is not just an American problem. | C1 | |
| Other countries are experiencing it too including my country, Singapore. | C2 | |
| Although I feel the idea of using monetary incentive to attract donors is possible and might even be successful, it is still not the best solution. | C3 | |
| It does provide some benefits to people but also brings potential problems. | C3.1 | |
| This idea might not be warmly welcome by societies that are more conservative. | C3.2 | |
| Hence, before this idea is being accepted, countries should experiment with other ideas involving other incentives such as tax rebates, medical benefits and privileges for donors' families, subsidised burial and funeral procession and others that are less controversial. | C4 | |

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F2F 6 – FY

| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| Based on the current US situation with a 12% increase on the waiting list for organs every passing year (Goldberg, 2003), the demand for organ supply is increasing significantly each year. | B1 | Art A, F1.4 |
| Due to the poor response from the public and unwillingness of possible donors to donate their organs, the number of deaths will inevitably increase. | B1.1 | |
| Hence, the American medical and political leaders are considering the use of financial incentives in an attempt to increase human organ donation. | B1.2 | Art A |
| Body paragraph 1 | | |
| In the world as a whole, I personally feel that there are both advantages and disadvantages of using monetary rewards to boost the supply of human organs for transplants. | T1 | |
| The advantages include helping to finance the donors' families, saving more lives, and reducing the sufferings of the patients waiting in the hospitals. | T1.1 | |
| However, this proposal may lead to an increase in crime rates and weaken donor pool's integrity. | T1.2 | |
| Body paragraph 2 | | |
| Using monetary rewards is able to help the deceased's family tide over the tough financial crisis they may encounter. | P1 | A S3 (Art A, F2.1) |
| The money comes in handy as some patients may have accumulated a lump sum of money on their hospital bills due to the long stay in the hospital before they succumb to their illness and die. | P1.1 | |
| The money can also be used to help offset the cost for the preparation for the deceased's funeral. | P1.2 | |
| In this case, the family members need not worry about which relatives or friends they have to seek help from. | P1.3 | |
| Body paragraph 3 | | |
| More lives will definitely be saved when this proposal is being approved. | P2 | |
| In the past with no incentives, people will consider whether to donate their organs. | P2.1 | |
| With these financial incentives, people will be more willing and open-minded to donate their organs and people may change their way of thinking as they are able to help the unfortunates by giving them a new leash of life. | P2.2 | FY S4; CS S4.1 |
| Body paragraph 4 | | |

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| Patients in the hospitals will not need to wait for long before they can get a transplant as the hospital will then have more organ supply to meet the increasing demand for organ transplants due to these incentives. | P3 | |
| With more supply of organs, the probability of patients dying while waiting for a suitable organ is greatly reduced. | P3.1 | |
| Also, the suffering of the patient is cut short as the waiting time for him/her to have his/her organ transplant is reduced. | P3.2 | |
| Body paragraph 5 | | |
| Although there are advantages by launching this financial incentive program, there are also disadvantages. | P4 | |
| An increase in crime rates involving this organ issue will be observed as the days pass by. | P4.1 | |
| This involves the murdering of innocent healthy people for their healthy organs and smuggling of human organs. | P4.1.1 | |
| Wicked people may just pounce on this money-spinning chance to make themselves rich. | P4.1.2 | |
| Some people are so desperate for an organ transplant, and the problem arises. | P4.1.3 | |
| They look for these types of people to pay them to hunt for a healthy organ. | P4.1.3.1 | |
| Body paragraph 6 | | |
| Another problem is that the integrity of the donor pool may be undermined (Goldberg, 2003) with these attractive incentives. | P5 | Art A, A4.1.3 |
| The relatives or donor's family members may try ways and means to conceal the donor's medical history so that they can get the benefits from this incentive program. | P5.1 | CS P4 (Art A, A4.1.4) |
| This in turn will cause harm to the patient who had this organ transplant as the organ may be affected with some unknown disease. | P5.2 | |
| Conclusion | | |
| All in all, I feel that the financial incentive program is regarded as the best way to overcome this current shortage of organ supply as we are living in a modern realistic world where money speaks power. | C1 | |
| Where money is involved, most of the campaigns launched will be deemed a success. | C2 | |
| As the objective of this campaign is to get more supplies of organ for transplantations, countries all over the world will support the launch of this financial incentive program. | C3 | |

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| Introduction | Idea code | Idea source |
|---|------------------|--------------------|
| As the waiting list for organ continues to grow and past attempts to increase the number of donors proved to be futile, there is an increased urgency for people in the medical field to look for ways to solve the intractable organ shortage problems. | B1 | Art A, F1 |
| While the American Medical Association regards offers of financial incentives as a feasible solution to intractable organ shortage, I strongly feel that the scheme should not be implemented. | T1 | CL T1 |
| Implementation of such a scheme may result in additional problems for the medical field such as a decrease in number of people who genuinely want to donate their organs to be turned off and thus shun away. | B1.1 | |
| More importantly, the use of financial incentives for organ donors may lead to increased societal problems such as organ sales syndicate operation to become rampant and discrimination between the rich and the poor. | T1.2 | |
| Body paragraph 1 | | |
| First of all, by offering financial incentives to encourage organ donation is like assigning monetary value to the human body or its body parts, which feels demeaning to many people and this may actually put people off and cause people who genuinely want to donate their organs to shun away. | P1 | Art A, A4.2 |
| For example, as Carey Goldberg mentioned "some families who would have donated a patient's organ out of altruism may be turned off by the money" (Goldberg, 2003). | P1.1 | Art A, A4.2 |
| This may actually cause a drop in organ donations and as a result add on to the intractable organ shortage problems. | P1.2 | |
| Body paragraph 2 | | |
| On top of having to deal with the intractable organ shortage problems, the government may have to deal with increased societal problems with the implementation of the scheme. | P2 | |
| Even at a time like now where sales of organ are illegal, there are people all around the world trying to make a fast buck by becoming middlemen for organ sales, which has become a very lucrative business. | P2.1 | QY P5 |
| By offering incentives for organ donation is like legalizing organ sales and this may results in crooks operating organ sales syndicates openly. | P2.2 | J P3.2 |

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| As mentioned by Jessica Shoemaker "offering money for organs would lead to black market organ harvesting - the exchange of money for living people's organs, which could then be sold illegally at a high price to those desperate for organs" (Shoemaker, 2003) | P2.3 | Art 2 |
| This can cause crime rates to escalate. | P2.3 | |
| For example, people may be lured by the good money offered for organ sales and resort to underhand means such as kidnapping and murder to lay hands on organs. | P2.3.1 | J P3.2 |
| Body paragraph 3 | | |
| Another societal problem that may arise from the implementation of offering incentives for organ donation is discrimination between the rich and the poor whereby organ transplants are only for the rich while the poor wait to die. | P3 | CL P5.4 |
| For example, if the scheme is implemented, the incentives will be included in the medical fees for the transplant since it is quite unlikely that the government or the hospital to be the ones paying the incentives. | P3.1 | |
| The inclusion of the incentive to the medical fees will make organ transplant even more unaffordable to the poor who are already struggling to with the basic medical fees. | P3.2 | |
| In circumstances where they are unable to afford the medical fees, they may have to forgo their chance of having a transplant to those who can afford it and it is usually the rich ones. | P3.2.1 | |
| As a result, there will be discrimination between the rich and the poor where only the rich can afford to go for organ transplant. | P3 | |
| Conclusion | | |
| Although the need to solve the intractable organ shortage problem become increasingly pressing as the waiting list grows with almost 60 percent of them expected to die while waiting, the use of monetary rewards to boost the supply of organs for transplants will create more problems instead of solving the real problem. | C1 | Art A, F1.1 |
| Implementation of such a scheme may cause new problems such as decreased donation, flourishing of organ sales syndicate and discrimination between the rich and the poor to surface. | C2 | |
| Thus the scheme of offering financial incentives to organ donors should never be implemented. | C3 | |

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F2F 7 – QY

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Ever since the technology of transplanting one's organ to another whose organ has failed was discovered, people have understood the dangers to link monetary rewards with such transactions. | B1 | |
| Our organs are given to us since birth and there should never be a price attached to it. | B1.1 | |
| In today's world where diseases are getting more complicated and prevalent, more people are in dire need of an organ transplant. | B2 | |
| Indeed, using monetary rewards will boost the supply of organs, but in the process we would not have known how many other innocent people have suffered. | T1 | CL T1 |
| The end could not justify the means. | T1.1 | |
| By legalizing the buy-sell of human organs, we are causing more discrimination between the rich and the poor, degradation of moral values and higher crime rates. | T1.2 | |
| Body paragraph 1 | | |
| Most of the criminal cases arise because of greed be it robbery, murder or the cheating of company's funds. | P1 | |
| Therefore by attaching a price to donated organs, it will encourage people to commit crimes. | P1.1 | |
| Before the buying of organs is legalized, we have already heard of so many cases of children being kidnapped in the developing countries for their organs such as kidneys, cornea and liver. | P1.2 | CL P2.1 |
| In the developed countries, there are also cases where people find themselves harvested of their organs, lying in bathtubs with a long slit at their backs after getting drunk at pubs. | P1.3 | |
| Thus we can imagine the situation worsening should these syndicates be allowed to sell the organs legally in the market. | P1.4 | |
| Yes, one might say that government organizations could be set up to determine the source of these organs. | P1.5 | |
| However, realistically, a lot of effort has to be put in by these officials before they can even get a clue of the organs' background and often the criminals get away scot-free. | P1.5.1 | |
| We also cannot dismiss the possibility of foul play involved. | P1.5.2 | |
| In China, officials remove organs from executed prisoners without proper permission from family members probably because they were bribed or blinded by greed (Parmly, 2001). | P1.5.3 | Art 2 |
| These organs could be even trafficked to other countries. | P1.5.3.1 | |

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| Thus, we cannot ensure that such problems would not occur in the bureaucracy if the law to link monetary rewards to organ donation is passed. | P1.5.4 | |
| Body paragraph 2 | | |
| Besides that we also foresee the problem of a higher tendency for people to put their ill relatives to sleep because of the added benefits. | P2 | J P5.3 |
| These patients are usually either brain-dead or have become a vegetable. | P2.1 | |
| In a few countries where euthanasia is allowed, patients were put on euthanasia because of reasons such as they are not willing to see the patient suffer, unable to provide the costs for the life support machines or that the patient is beyond cure. | P2.2 | |
| However with the introduction of monetary rewards, it becomes harder to truly differentiate between goodwill and greed. | P2.3 | |
| Subconsciously, people will be tempted by the benefits that they can get compared to the costs and all the hassle they have to bear if they continue to keep the family member on life support. | P2.4 | |
| Therefore instead of hoping a miracle would happen by keeping a vegetable relative on life support for a month, they probably would only have the patience to do so for a week. | P2.4.1 | |
| The patients on the other hand are deprived of a chance to recover which is also the argument against euthanasia. | P2.5 | |
| In this case the problem is worsened because people have additional incentives now. | P2.5.1 | |
| Indirectly, we are causing the degradation of family and moral values because people have become less willing to give their family members a chance to recover. | P2.6 | |
| Body paragraph 3 | | |
| Next, we also have to consider the problem that since these organs are "bought" then there would be a price attached to them when offered to the patients. | P3 | |
| It is rather impossible that the government would shelve a large portion of the budget to subsidise the buying of organs. | P3.1 | |
| It then poses the problem of discrimination between the rich and the poor. | P3.2 | CL P6 |
| This is because the organs will have to go to the highest bidder now. | P3.2.1 | |
| It is not even according to the priority of needs or the first come first serve policy. | P3.2.2 | |
| The price mechanism deprives the poor of getting the organs. | P3.2.3 | |

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| It is then not surprising to see the developing countries become the primary provider of organs for the stronger, more developed nations. | P3.3 | |
| It is morally unfair to one-sidedly depend on the poorer people to be the ones sacrificing. | P3.4 | |
| Therefore, monetary rewards is undesirable as it leads to the discrimination between the rich and the poor. | P3 | |
| Conclusion | | |
| Organ donation should be something done out of altruism. | C1 | |
| By attaching monetary rewards, it complicates matters. | C2 | |
| It does not benefit the society if some of the patients are saved because of the increase in supply of organs while it has caused many others to come to harm. | C3 | |
| Officials involved would also have a hard time screening through each case to make sure there is no foul play involved. | C4 | |
| The eventual solution to solve the organ shortage problem is still through promoting public awareness. | C5 | QY P4 |
| Famous artistes can be invited to help promote the campaign. | C5.1 | |
| If they can increase the public's interest in a commodity then by the same logic, they would be able to do so for organ donation as well. | C5.2 | |
| Also, the administration could be made easier for people to sign up for the programme thus increasing the number of organ donors. | C6 | |

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F2F7 – ZY

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Organ transplantation has been carried out all around the world since it first succeeded in U.S. in 1954. | B1 | |
| By this means, many people survived their lives when their diseases traditionally had no cures. | B1.1 | |
| But the problem of the lack of donated organs has been as great as before. | B1.2 | |
| In order to make more organ donations, some Americans tried to push their government to pass the law that the government will give monetary rewards to the donors' families. | B1.3 | Art A |
| There is much debate on this issue, because it involves some moral problems and complexities. | B1.3.1 | |
| In my opinion, if this means of government subsidization really works, the moral problem and complexities are really minor things. | T | |
| Let's first examine the situation of organ availability. | B2 | |
| Organ supply shortage has been a worldwide phenomenon. | B2.1 | |
| In the U.S., every year, more than 6,000 Americans die waiting for an organ transplant. | B2.2 | Art A, B1 |
| The waiting list is growing three times as fast as the rate of organ donation. | B2.3 | Art A, F1 |
| In China, due to the large population and many, complexities, the gap between demand and supply is even much larger. | B2.4 | |
| In Singapore, I didn't find the actual data, but since the adoption of "presumed consent", the situation might be better. | B2.5 | |
| Body paragraph 1 | | |
| Then let's see some details of organ transplantation. | P1 | |
| In transplantation, normally, organs of the persons who are brain dead are used. | P1.1 | |
| Brain death is a situation when the electrical activity of a person's brain has irreversibly stopped. | P1.1.1 | |
| Brain dead persons' hearts might still be beating and they might be able to breathe at the aid of ventilators. | P1.1.2 | |
| But they don't have consciousness and won't recover. | P1.1.3 | |
| In effect, they have died. | P1.1.3.1 | |
| For the persons who are brain dead, their organs are biologically more lively and are more likely to resume functioning in the recipients' bodies. | P1.1.4 | |
| That's why in practical the organs of the brain dead persons are used instead of the cardiac dead persons'. | P1.1.5 | |

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| Brain deaths usually come from accidental injuries like car crashes or failures during operations. | P1.1.6 | |
| The donating decisions are usually made by the potential donors' close relatives immediately after the person's brain death, which is really a hard choice under that emotional condition. | P1.1.7 | |
| A person can declare himself to be a donor when he's still in good condition. | P1.2 | |
| Then if he were accidentally brain dead, the doctors would be able to remove his organs without asking his close relatives. | P1.2.1 | |
| In Singapore and several European countries, "presumed consent" has been adopted, which means unless a person opts not to donate, by law, he or she will be presumed to be willing to donate after brain death. | P1.2.2 | |
| Let's return to U.S. Problem. | | |
| The opposites of the bill argue that assigning money values to human organs degrades humanity. | P2 | Art A, A4.1.1 |
| Governments give the families of soldiers dying in the battlefield subsidies as rewards, which is the same way as in our case. | P2.1 | Art A, F2.1.1 |
| One side, it's a reward to praise good will. | P2.1.1 | |
| The other side, it's a subsidy to the family. | P2.1.2 | |
| Another problem that people argue is that for the case of potential donors, knowing the death may lead to some money, the family might unplug the ventilator early. | P3 | |
| As explained earlier, brain dead persons are already dead. | P3.1 | |
| There is no a saving or unsaving problem. | P3.2 | |
| As to how well could be achieved from implementing this policy, it is really unpredictable unless trying it out. | P3.3 | |
| Conclusion | | |
| From internet, I saw that the U.S. government is really going to make a test on this proposal. | C1 | |
| I think this is not something too bad. | C2 | |
| Let's wait and see how it works out. | C3 | |

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| Introduction | Idea code | Idea source |
|--|------------------|------------------------------------|
| Due to the severe shortage of transplant organs, more than 6000 Americans die each year (Goldberg, 2003) during the wait for their lifelines. | B1 | Art A, B1 |
| The situation is worsening with each passing year such that the authorities in the United States are contemplating a long standing taboo as remedy: using monetary rewards to increase the supply of organs for transplants. | B1.1 | Art A |
| Most probably, this pragmatic solution could be successful from the economic viewpoint since one is "more likely to get it" (Cohen quoted in Goldberg, 2003) if one is to pay for the organ. | B1.2 | Art A, F3.5 |
| Nevertheless, this is highly controversial as organ sale is not merely an economic activity - it entails other knotty ethical issues and moral values as well. | B1.3 | |
| These include the unintended advocating of an organ black market, a greater disparity between the rich and the poor and the devaluation of human kindness involved in organ donation. | T1 | J P5.2; CL P6; Art A, A4.1.2 |
| Apparently, these consequences are detrimental to social stability worldwide and therefore the use of monetary incentives for organ donors should be carefully reconsidered. | T1 | CL T1 |
| Body paragraph 1 | | |
| Presently, the sale and purchase of organs is forbidden worldwide. | P1 | |
| However, as the demand for transplant organs is much pronounced than the supply, illegal trading of organs thrive and a flourishing black market for organs is already present in many Third World countries (Lawton, 2002). | P1.1 | J P5.2; Art 2 |
| It is also believed that in the United States, there is a considerable "potential market" (Lawton, 2002) as well. | P1.1.1 | Art 2 |
| With such unlawful acts existing even before the legalization of organ sale, the speculation that they would continue and proliferate when it is legalized is highly possible. | P1.1.2 | |
| This mean that crime rates over the world might increase as murder and kidnap cases increase when people become desperate to obtain the organs for monetary rewards. | P1.1.3 | J P3; J P3.1 |
| Social order and safety would be threatened and innocent lives would be killed. | P1.1.4 | |
| Such disastrous consequences should be avoided as far as possible and it would be unwise to introduce such problems in the attempt to cure the shortage of transplant organs. | P1.1.5 | |
| Body paragraph 2 | | |

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| Also, should prices be attached to the donated organs, the poorer would be put at a disadvantage as they would be less able to afford the organs than the wealthier patients. | P2 | |
| This is unfair to them as they could be deprived of an available transplant organ in favour of another wealthier patient who is below them in the waiting list. | P2.1 | |
| In other words, the rich would be given priority and can "jump queue". | P2.1.1 | |
| Disparity between the rich and poor would be accentuated and social upheavals due to dissatisfaction among the lower income people could result. | P2.3 | CL P6 |
| Body paragraph 3 | | |
| Furthermore, another possible scenario could be that the plan to remedy the shortage of organ donations backfire and cause a decrease in donors. | P3 | |
| This is highly possible as the experience of the donor's families would be changed by introducing money into this exchange (Robinson quoted in Lawton, 2002). | P3.1 | Art 2 |
| They have decided to pledge their organs after their deaths and for others, their families have agreed to donate their organs out of altruism. | P3.1.1 | |
| By allocating a price tag to their acts of humanity could then be seen as undermining their kindheartedness as the "gift is turned into a sale". | P3.1.2 | |
| The importance of altruism become less worthy and the number of donors actually drop as their families get "turned off by the money" (Goldberg, 2003). | P3.1.3 | Art A, A4.2 |
| Conclusion | | |
| From the above illustrations, it is evident that there are serious adverse consequences in legalizing the use of financial incentives to boost transplant organ supply. | C1 | |
| It is certainly unwise to establish such a new ruling that could backfire and result in other detrimental secondary problems. | C2 | |
| Alternatively, the various authorities could try to step-up further on the existing campaigns to rally public awareness and support to pledge their organs after their death and to educate the public on the issue. | C3 | |
| In addition, as technological advances allow greater medical breakthroughs, living organ donations are becoming more safe and feasible (Kahn, 2002). | C4 | Art 3 |

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| <p>Such possible solutions, though still inefficient to meet the huge demands of transplant organ today, should be reviewed upon thoroughly with more effort before the plan to legalize organ trading materialize and cause latent far fetching impacts on the society.</p> | <p>C4.1</p> | |
|--|-------------|--|

| Introduction | Idea code | Idea source |
|--|------------------|--------------------|
| Money makes the world go round. | B1 | |
| It is alright if you have an ugly nose, you can go for a plastic surgery to make it as beautiful as Cindy Crawford's, as long as you have the money. | B1.1 | |
| Money is deemed to be the utmost valuable possession that one can ever have. | B1.2 | |
| The more money you have, the better. | B1.3 | |
| With money, you can get anything you want, in most cases, all the time. | B1.4 | |
| However, is it plausible when it comes to getting organ transplantation? | B2 | |
| This is what the American authorities have in mind, to test on whether offering financial incentives will lead to a rise in donations. | B3 | Art A, F3.1 |
| Personally, I do not think that it is a good idea because it may have loopholes and bad effects on the human population as a whole. | T | |
| Body paragraph 1 | | |
| First of all, I feel that the whole idea of assigning monetary value to organs is not ethical. | P1 | |
| It is as if human body and its parts are treated as commodities that can be exchanged for money. | P1.1 | |
| According to the bible, 'organ donation gives dignity to the person who in death becomes a life-support for another; it shows noble concern for the respect of the life of others; and it implies a sense of communion with humanity. The Gospel proclaims that there is no greater love than to give one's life for another.' (Flaman, 1994: 2) | P1.2 | Art 2 |
| However, when money is involved, it raises issues which question the motives of the donors: are they making the donation out of true self-altruism or for the monetary incentives? | P1.3 | R P4.6 |
| This devalues the real meaning of a charity act. | P1.3.1 | Art A, A4.1.3 |
| The involvement of money may also raise some complications. | P1.4 | |
| As organ transplantation is already an expensive operation, most poor people definitely are not able to go through the process, what more pay for the organs? | P1.4.1 | |
| Thus, I feel that this system of using financial incentives to boost the supply of organ donations is violated with the ability to pay rather than medical need determining the distribution of the organs. | P1.5 | |
| Body paragraph 2 | | |
| Secondly, I feel that it can corrupt peoples' minds. | P2 | |
| The saying, "money is the root of all evil" which comes from the writings of the Apostle Paul, is somewhat true when one ponders on how money can drive a person to become greedy and obsessed on getting rich. | P2.1 | Art A |

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| There have been kidnapping cases in Bombay where victims were drugged and their organs were removed and sold at high prices. (Wallace, 1992) | P2.2 | Art 3 |
| The number of occurrences of such acts of cruelty is quite likely to increase if no measure of precaution is taken and the public widely accepts the idea of using monetary rewards to boost the supply of human organs. | P2.2.1 | |
| This is inevitable especially in rural areas of the Third World Countries where people are in desperate need of money. | P2.2.2 | |
| And at such circumstances, they will do possibly anything even if it means resorting to crimes. | P2.2.3 | |
| Therefore, if any country approves this method of using financial incentives, it faces the risk of having her people's minds getting corrupted. | P2 | |
| Body paragraph 3 | | |
| Lastly, I strongly feel that this method of increasing human organ donations degrades human life as it is capable of exploiting the human race on the whole. | P3 | Art A, A4.1.2 |
| In particular, the exploitation of the poor to provide for the rich has been vastly practiced, even before such program of rewarding the organ donors with money is being carried out. | P3.1 | R P1.1.1.1 (Art A, A3) |
| For example in Rio de Janeiro, a doctor who does kidney transplantation said that he is not involved behind the private arrangements between the kidney patient and the living donor but he 'had to suspect something when the patient is a wealthy Rio socialite and her 'donor' is a poor, barefoot cousin from the country.' (Hughes, 1998) | P3.2 | Art 4 |
| Often, it is the rich who has the power over the poor and those kinds of private arrangements which may be deemed to be mutual agreements are most probably just another form of exploitations of the poor. | P3.3 | |
| Thus, if the government allows such programs to be implemented, am I right to say that more 'private arrangements' will be carried out now that it is legal? | P3.4 | |
| Conclusion | | |
| Hence to conclude, I am against the idea of using monetary rewards as an attempt to increase the supply of human organ donations because although the idea may seem feasible, it is not justifiably acceptable due to the many negative possibilities that it brings. | C1 | |
| In general, donating our organs and getting monetary incentives in return, causes complications. | C2 | |
| It corrupts minds, exploits fellow human beings and by far, unethical to many. | C3 | |
| Instead, we should consider other alternatives (e.g. xenotransplant) to overcome this shortage problem of human organs for organ transplantations. | C4 | |

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F2F 8 – SZ

| Introduction | Idea code | Idea source |
|---|------------------|---|
| Using financial incentive to increase organ transplant is a hot and disputable topic recently. | B1 | |
| For those who propose this idea get some supports from that it will indeed increase the supply of cadaveric organ donation while those with a opposite stance may say it will definitely corrupt people's moral standard since human being's body is so divine that cannot be dimmed by the scent of dollars. | B2 | |
| Body paragraph 1 | | |
| It seems that everyone commenting on this issue get some points but what is our criteria to agree with using financial incentives to increase organ transplant or not assuming you are a senator who are going to vote for the legislation that proposes the use of financial incentives. | B3 | |
| But the major criterion is simple but critical, that is whether the benefits of using financial incentives will bring us more benefits than loss or vice versa. | B4 | |
| Body paragraph 2 | | |
| First we need to know that only in the USA, there are 80000 people waiting for organ transplant, about 16 die each day because an organ never arrives. | B5 | Art A, F1 |
| That is really miserable scenery, just imagine one of closest need.an organ urgently while he or she just cannot live longer because of the lack of cadaveric organ donation. | B5.1 | |
| Definitely you will criticize those government officials for their inability to get more organ donations. | B5.2 | |
| Now there is a way provided here for us - using financial incentives which indeed can increase the supply of organs. | T | |
| Giving people a suitable amount of financial incentives will always encourage more people to donate organs, especially for those who are on the edge of donating for free or not since they do not have a high sense of altruism. | P1 | SZ P1.1.1 |
| Give them a certain amount of money no matter the way of using this sum of money, they will feel that at least their contribution is acknowledged by his government and people and his or her relatives will also more willing to do so, most probably they can use this sum of money to cover the dead person's funeral expense or make it more spectacular. | P1.1 | SZ P4 (Art A, F2.1); AD P3 (Art A, F3.1) |
| That is just out of people's common sense. | P1.2 | |
| There are also a lot of people who do not want to donate their organ just because that they just do not want to give something to a person he even has never met without return. | P1.3 | |

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| Actually in real life, there not much people like those who strongly oppose using financial incentives for most people just get some material comfort and the acknowledge of other people while not acting exactly what some religion doctrines tell us to do. | P1.4 | |
| Therefore, there should be no doubt that using financial incentives can increase cadaveric organ donation and there should be also no doubt that more people' life will be saved with using financial incentives. | P1 | |
| Body paragraph 3 | | |
| Obviously, using financial incentives will have a significant negative side just like every coin has two sides. | P2 | |
| One of the major problems is that it may trigger organ trade or even black market of organ trading which is not acceptable by the society. | P2.1 | SZ P1.1.1.7 |
| Some malicious people may even murdering other people just want to earn some profits since financial incentives will be given thus the amount or degree of financial incentives is playing a important role since we need economists to predict a certain amount of financial incentives that will encourage people to donate while not large enough to entice people to commit criminal to earn a tidy profit. | P2.2 | |
| Conclusion | | |
| In sum, with proper restriction of the financial incentives, we can maximize the benefits of using financial incentives while lowering possible losses to the least degree. | C1 | |
| Also the benefit we can get is far more important than the contingent loss which may be incurred. | C2 | |

F2F 8 – AD

| Introduction | Idea code | Idea source |
|---|------------------|-----------------------|
| Organ failure is the malfunctioning of the organ to perform its usual functions in the body leading to serious illnesses. | B1 | |
| There is an overwhelming increase in the number of people in the world suffering from organ failure. | B1.1 | |
| Thousands of people are put in the organs waiting list to wait for the suitable organs for their transplantation, but many could have died while waiting for the suitable organs. | B1.2 | Art A |
| There could be even more people in the world who suffered from organs failure and did not even make it to be on the waiting list. | B1.3 | |
| Human organ transplant is the solution used by many countries to save the lives of people who suffered from organ failure. | T | |
| However, the available organ in the world could not make up to the demand of the numbers of people who needs organ transplant. (Goldberg, 2003). | T | Art A |
| Hence, there are alternatives such as the use of xenotransplant and cloning to help solve the problems but it has also raises many medical, ethical and moral issues. | T | SZ S1.1.1; AD S1.3 |
| Body paragraph 1 | | |
| One possible alternative to the solution of organ failure would be xenotransplantation, which is the transferring of animals' organs into the patient. (Ho&Cummins, 2003). | P1 | AD S1.3; Art 2 |
| However, this method of organ transplant has raised many objections by people due to the ethical, moral and medical issues it raises. | P1 | |
| First of all, there is the fear by the scientist of the risks of new viruses crossing from the animal to the humans and eventually spreading to the whole human population. (Mae&Cumming, 2003) | P1.1 | Art 2 |
| An initial start of transplanting organs to save human lives could end up taking up more lives. | P1.1.1 | |
| Secondly, the use of pigs' organs is strongly against the religion of Muslims. | P1.2 | |
| How would the Muslim feel to have their life save but their beliefs in the religion ruin? | P1.2.1 | |
| In addition, people would also feel uneasy to have the organs of animals in them. | P1.3 | |
| Are they considered to be a human, animal, or a half human half animal species after the transplantation? | P1.3.1 | |
| Furthermore, it is not ethically human's rights to exploit the animals. | P1.4 | |
| We are already killing animals for food as our necessity for survival thus we should not take the animals for granted. | P1.4.1 | |
| Any further exploitation of them would eventually lead to their extinction. | P1.4.2 | |
| There are many cases of xenotransplantation that have taken place in the world. | P1.5 | |
| However almost all of these procedures have lead to multiple post transplant infection complications. | P1.5.1 | |
| Even though xenotransplant could be one possible alternative, until more research is done, it proves to be of no help in solving the shortage of organs. | P1.6 | |
| Body paragraph 2 | | |
| Another possible alternative is the use of stem cells. | P2 | SZ P1.1.1 |

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| Stem cell is a type of therapeutic cloning which extract the embryo to create specialized cells. (Anonymous, 2002). | P2.1 | Art 3 |
| These specialized cells eventually form different organs that can be use in the organs transplant. | P2.1.1 | |
| However, the formation of the stem cells would mean to kill an embryo which is equal to killing a fetus, a living thing. | P2.1.2 | |
| The problem here is similar to the problem in xenotransplantation. | P2.2 | |
| We are killing a life in order to save another life. | P2.2.1 | |
| To what extent is it worth the trouble of doing so? | P2.2.2 | |
| 'The ethical issue here are not unique but this has raise a significant of public attention' (Chapman, Frankel&Garfinkel, 1999). | P2.2.3 | Art 4 |
| Furthermore, the use of therapeutic cloning in organ transplantation is unaccepted by many people who feel that the scientist is trying to act as god. | P2.3 | |
| Though the scientists are bringing new technology to save more people, many feels that live and death should be decided by god and not by the human race. | P2.3.1 | |
| Currently, there is a 90% failure in the creation of organs by stem cells thus showing that stem cells are still unable to provide a solution to patients in need of organ transplant. | P2.3.2 | |
| Body paragraph 3 | | |
| Human organ transplant is the transfer of organ from the donor to the patient. | P3 | |
| At the moment, it is the only solution with high success rate in organ transplant. | P3.1 | |
| In human organ transplant, though there may be cases of rejection between the organs of the donor and the body of the patient, it is still safe to the whole human population as new viruses would not be created and spread as in the case of xenotransplant. | P3.2 | |
| Moreover, unlike the xenotransplant or therapeutic cloning, the donors of organs donate their organs only after their deaths or when the donating of their organs do not affect them living. | P3.3 | |
| As compared to xenotransplant and the use of stems cells, human organ transplant not only did not raise serious issues by the public, it is also the only successful organ transplant that we could resort to. | P3.4 | |
| Conclusion | | |
| In conclusion, human organ transplant is the best and only solution to the problem of organ failure. | C1 | |
| There should be an increase in the efforts of countries prompting their citizens of the agreement of human organ donation. | C2 | |
| In addition, more research should be done for the known alternatives such that they could be use to solve the problems of the shortage of organs in the world. | C3 | |
| At the moment, the best solution would be to encourage people of acknowledging the agreement to human organ donation after death. | C4 | |
| This would be the most effective solution to the urgent problems face by the shortage of organs. | C5 | |

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