



Developing *Curriculum for Excellence* in Highland Schools

**A report on the qualitative findings for
the Highland Council and the Scottish
Government**

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Executive summary

Scotland's *Curriculum for Excellence* (CfE) is generally viewed as a landmark development in Scottish education, hailed by its architects as 'one of the most ambitious programmes of educational change ever undertaken in Scotland' (Scottish Government, 2008, p. 8).ⁱ It is radical in that it calls for a shift in classroom practices towards more pupil centred approaches to education. This is accompanied by a renewed view of teachers as professional developers of the curriculum and agents of change, and a new emphasis on flexible, local planning. Despite the far-reaching implications of this innovation, there has been little research to date on the new curriculum. The research reported in this briefing partially fills this gap, primarily exploring teachers' views of the new curriculum, and the nature and extent of implementation. The briefing summarises the findings from research conducted in tandem with a Scottish Government funded partnership project, established between a Scottish local authority and the School of Education (termed the Stirling Project by participating teachers). The project contributed to the development of CfE within the authority by providing explicit support for curriculum development to a number of different networks of practitioners. These development activities provided an opportunity to undertake research into teachers' enactment of CfE. The research aimed to:

- identify effective practices of curriculum implementation and teachers' professional learning in the context of Curriculum for Excellence (CfE);
- produce insights to inform sustainable, large-scale curriculum change and teachers' professional learning.

Research Methods

The project utilised a mixed-methods approach, comprising in-depth semi-structured interviews with teachers and other stakeholders, and an online survey. The overall findings are summarised in a short report (Priestley & Minty, 2012). This more comprehensive report focuses on the qualitative data. This comprised a total of 31 in-depth semi-structured interviews conducted with 21 participants, including three headteachers, 14 teachers and four representatives from the local authority. In total, teachers from nine schools (two primary and seven secondary) were involved in the research: some from one of the Associated School Group (ASG) clusters established by the authority, and others selected from the authority's specialist subject working groups.

An online survey of teaching staff in Highland was also conducted during August and September 2011. The findings from the quantitative data will be reported in future publications. However, qualitative responses to an open-ended question which asked respondents to comment on the implementation of CfE in Highland are included in this report. Of the 716 responses to the survey, 35% provided a comment, and these are drawn upon to supplement the interview data where applicable.

Research Findings

The interviews: Emerging practices

The research explored the implementation of CfE in schools during its first year (2010-2011).

Whole-school development

At a whole-school level, interviewees' schools had achieved varying degrees of implementation. Primary schools were at a more developed stage, with interview data identifying the comparative ease with which primary teachers were able to meet with colleagues and work collaboratively. Progress in secondary schools appeared to be more piecemeal, with some faculties/departments clearly more advanced than others. Across the sectors, progress was being made with regard to collaborative and collegial professional working and schools were increasingly developing and improving their own peer observation and teacher learning partner programmes, as well as developing cross-curricular work.

Learning, teaching and assessment

There was a perception amongst interviewees that CfE is largely a pedagogical innovation. Teachers reported gaining confidence in using new learning, teaching and assessment practices, and outlined an increasingly reflective culture, in which they were more likely to question their practices. Emerging practices included greater levels of experimentation, more active and collaborative lessons, more open and exploratory styles of learning, and a general move away from traditional, content-driven forms of teaching towards the development of autonomous learners and experimenting with new forms of assessment. Such developments required teachers to move out of their comfort zone, and in some cases required a change in their mind-set. Teachers questioned whether these emerging practices came about directly as a result of CfE – instead, they pointed to the important role of professional learning and wider changes in teaching independent of, or alongside, CfE.

School-based curriculum development

We found more variable approaches in terms of school-based curriculum development. In some schools there was evidence of proactive whole-school or departmental approaches to curriculum development based around discussion of the principles, practices and 'big ideas' of CfE. This 'big picture' view potentially enables schools to make radical changes to develop practices that are fit for purpose in the context of the new curriculum. In contrast, other schools have focused on cross-referencing the Experiences and Outcomes (Es and Os) with existing content. This more conservative approach potentially minimises change, to that absolutely required to meet the perceived demands of CfE, allowing schools to 'tick the box'. Most evident in secondary schools, in a minority of cases this approach can be viewed as strategic compliance, rather than a thorough and rigorous engagement with CfE. Such variation can be attributed to the lack of a clear specification in CfE of engagement processes, combined with a lack of capacity in schools for the sorts of curriculum development required by this new type of curriculumⁱⁱ.

Developments in provision by phase

Whilst secondary schools have tended to be slower to engage with CfE than primary schools, the research suggests clear signs of implementation activity at the Broad General Education (BGE) phase. In the interviewees' schools, this often took the form of newly developed programmes or a series of lessons based around themes or projects for S1 and S2, addressing cross-curricular themes and disciplinary subject matter through inter-disciplinary provision. Some schools had introduced distinct 'CfE lessons' or courses. On the whole these were positively received by teachers. Whole-school discussion of the rationale for implementing such programmes was crucial to their success. Where this did not take place, some interviewees indicated that programmes could be contrived and there appeared to be a lack of understanding of inter-disciplinary learning. In such cases, there is the danger that both teachers and pupils see CfE as another subject, militating against the transformative change intended. There were evident tensions between approaches and strategies in the BGE and senior phase, and little evidence that inter-disciplinary approaches were transferring to the senior phase. At the time of the research schools remained unsure as to how the BGE would be applied to S3, and there was some confusion as to the structures and purposes of S3.

Progress at the senior phase level was slower in contrast to the BGE, partly because some schools were, understandably, bringing in CfE changes on an evolutionary, year-by-year basis. Due to uncertainties around the new National Qualifications, interviewees' schools were yet to finalise their senior phase curriculum models at the time of the research. Many teachers indicated they were awaiting further guidance from SQA on the National 4 and 5 exams prior to undertaking further development. There was a general lack of understanding as to the changes being introduced in the senior phase, and concerns about the implementation timetable and the potential for greater inequality as a result of increasingly diverse provision.

Perceived impact of CfE on pupils

Teachers noted the potential of CfE to produce more rounded individuals in the long term, and hoped that children would experience a more open and exploratory approach as a result of CfE. Interviewees said their pupils were more creative and confident, were better at presenting to an audience and collaborating with each other. However, they also expressed concerns about the new curriculum, particularly in terms of how it would impact on the first cohort – whom many described as 'guinea pigs' – to experience CfE and the new National exams.

Teachers' understandings of CfE and its philosophy

The extent to which the philosophy of CfE fits with the beliefs and values of the teachers charged with implementing it is vital to its success. Two levels of engagement with the core ideas of CfE can be identified:

1. **First order engagement** relates to whether or not teachers welcome the philosophy and 'big ideas' of CfE. We found that most teachers welcomed CfE in principle.
2. **Second order engagement** relates to how CfE fits with teachers' implicit theories of knowledge and learning, and whether there has been a thorough engagement with the underpinning ideas of the new curriculum. In contrast to the broadly constructivist view of learning inherent within CfE, some teachers, particularly in secondary schools, perceived knowledge and learning as the transmission of content. There was therefore a lack of

understanding of the core ideas of CfE, and/or a lack of fit between these and their beliefs and existing practices, which suggests that they are unable to implement it meaningfully.

This points to the need for a sense-making phase in this sort of curriculum development, and – as our research suggests – the time and resources to do this have been seriously limited.

Teachers' responses to CfE

The majority of teachers responded very positively to the general philosophy and ideas behind CfE, particularly those whose current ways of working already matched those espoused by CfE. However, teachers had different understandings of what CfE would mean for their own practice: some understood CfE as being mainly about new approaches to teaching and learning; others understood it in terms of extensive revision of content *as well as* new approaches to teaching and learning. How they responded to CfE was inherently linked to their views on teacher autonomy. While some welcomed the flexibility of CfE, others lacked the confidence to be able to teach outside their own discipline or without the structure provided by the previous 5-14 curriculum. Few interviewees reported being able to regularly meet with colleagues to discuss the meaning of the fundamental principles of CfE.

Tension between inter-disciplinary learning and specialist subjects

Many interviewees understood CfE as the being about bringing together and exploring links between subjects. Those teachers who had been involved in developing interdisciplinary working were highly positive about it, emphasising the impact it had on the pupils, and the potential for locally relevant learning. However, a minority of secondary teachers were opposed to it in principle, viewing CfE as a potential threat to their subject.

Tension between skills and knowledge within CfE

In some cases those same teachers who highlighted benefits of inter-disciplinary learning also emphasised the need to be able to test pupils' knowledge. There was a perception among some teachers (both primary and secondary) that knowledge was disappearing from the curriculum because of the new focus on skills. Such opinions tended to be expressed by teachers who held the transmissionist views of knowledge noted above, primarily understanding teaching as being about imparting knowledge.

Tensions around assessment

The greatest tensions that we encountered lay in the area of assessment. The changes to assessment which have arisen as a result of CfE, particularly changes to the exam system in the form of the new National Qualifications, require a substantial change in the mind-set of teachers. Teachers expressed anxiety with regard to this, as they were often unsure exactly what was being asked of them. Some teachers clearly perceived curriculum development to consist mainly of assessing, recording and reporting against outcomes, pointing to the difficulties many teachers face as they try to move from prescription to greater teacher autonomy. Such views are likely to derive from assessment driven philosophies encouraged under the former 5-14 system.

Practical implementation issues

While most teachers broadly welcomed the ideas and philosophy behind CfE, they shared many concerns about its implementation on a practical level, and identified some of the barriers and drivers to its success.

Interviewees pointed to a **lack of clear guidance**, both from national and local sources. This was seen as a barrier to implementation, with the curriculum described as ‘woolly’ and ‘vague’. Teachers frequently complained they were ‘floundering in the dark’, particularly in relation to the new National Qualifications and assessment. This uncertainty led to feelings of anxiety and insecurity among many participants.

A number of **risks** were identified by teachers in relation to CfE, including the potentially detrimental impact on pupils, and those related to greater levels of diversity and autonomy for schools and teachers, which some interviewees interpreted as a lack of consistency. The continued importance of attainment data – and its influence in teachers’ action – was widely noted. Many teachers indicated that they would ultimately be judged on a child’s academic performance, despite CfE’s emphasis on the whole child. Teachers felt accountable to the local authority and parents, and called for better communication with, and awareness-raising, amongst employers, universities and parents.

Funding was one of the most frequently identified barriers to implementation of CfE. Teachers questioned how transformational change could be achieved in an age of austerity. Staffing issues were a key source of anxiety for interviewees, and headteachers reported experiencing the effects of redundancies, reductions in management time, and temporary contracts.

Uncertainty around funding and job security led in some cases to very **low morale** among teachers. This was exacerbated by concerns about the McCormac review (being conducted at the time of the research), changes to teachers’ pay and conditions and union ballots as a result of this. Morale worsened among both primary and secondary interviewees, but especially secondary, during the course of this research. Nearly all interviewees indicated that **workload** has increased as a result of CfE. These were considered to be additional barriers to implementation.

Many interviewees displayed a **lack of confidence**, both in their own ability to take forward CfE, but also in terms of the benefits it would bring to children. They lacked confidence in moving away from previous ways of working, and the perceived lack of clarity around the new curriculum meant that even those whose philosophy and practice matched well with CfE sought reassurance. Interviewees identified a core group of teachers who resisted CfE, and spoke of the divides this has created between staff in some schools.

CPD, peer observation and collaborative working were considered to be strong drivers to help engage teachers resistant to CfE and to enhance its implementation by providing reassurance to less confident or resistant teachers, and developing reflective practitioners. Teachers on the whole highly valued the opportunity to meet with colleagues and discuss their experiences of and concerns about CfE. Various on-going initiatives in the authority to develop pedagogy and formative assessment were identified by most interviewees as having facilitated the implementation of CfE.

The **working groups** established by the local authority to support curriculum development were also considered an important means of enhancing engagement with CfE. Interviewees who were members of the working groups were largely positive about their experiences, emphasising the benefits gained from being able to meet with colleagues from other schools and to share ideas and concerns. However, members were not always clear as to their groups' remit.

Headteachers need to have a **clear strategic vision** of where they are taking CfE in their school. Where this vision was absent, or was not clearly articulated to staff, progress in implementing CfE was hindered, pointing to the need for further local authority support for headteachers.

Overall, it was felt that the **size of school** was important in terms of creating an environment where CfE could be implemented more readily. Arranging meetings between different faculties and departments in large schools was deemed to be particularly difficult. The research suggests that opportunities for teachers to collaborate are extremely important in fostering school-based curriculum development, especially when extensive innovation is required. Many schools appear to **lack the horizontal structures** required to facilitate such teacher/teacher dialogue (whether formal or informal), being organised hierarchicallyⁱⁱⁱ.

Implications for policy and practice

The research suggests that implementation has been less problematic where schools have been able to develop and articulate a clear vision for CfE. School managers have a clear role in developing such a vision, and have a responsibility to facilitate teacher engagement with curriculum reform by providing spaces and developing channels for teacher dialogue. This is both a resourcing issue, which has been problematic in the present climate of austerity, and an issue of process. Such a process should include the following dimensions.

Sense-making opportunities

Curriculum change is complex and involves encountering new and unfamiliar concepts and terminology. Sense-making, in terms of *defining curricular purposes* that are relevant to the school in question and reconciling the new curriculum with local needs and conditions, is a key part of the process of engagement which has been missing in many schools (at least in a systematic sense). At an early stage of engagement, schools should provide opportunities for teachers to engage with each other to make sense of key ideas, and informed by external resources.

Fit for purpose

Schools should spend time determining which *content and methods* (pedagogy, assessment) are *fit for purpose*. This is about, in the case of CfE, deciding what sort of knowledge young people might need in order to become successful learners, confident individuals, responsible citizens and effective learners; and determining which teaching methods are most effective in achieving these goals, and how they might be assessed. It is important that skills are underpinned by knowledge^{iv}, and that methods are closely matched to curricular purposes, rather than one-size-fits-all approaches.

Addressing barriers/developing drivers

The research suggests that many methodologies developed for CfE are difficult to implement in practical terms. A major priority for schools and local authorities implementing major curriculum change should be *to identify issues that impede the development of such methods, and to address them*.

Cycles of curriculum development

Curriculum implementation is an on-going, rather than a one-off, activity. Development of new approaches needs to be *cyclical*, accompanied by regular *evaluation and reformulation of plans*. Collaborative Professional Enquiry (CPE)^v is a useful, though complex, method for SBCD^{vi}; local authorities should develop this expertise through guided engagement in CPE.

Implications for policy

Our research points to a perceived lack of clarity in CfE documentation. While we accept that this is in part due to a shortage of sense-making activity in schools, we also highlight the lack of such specification in policy, and contradictions in policy documents that have created difficulties to teachers implementing CfE. We offer the following observations:

- CfE lacks a clear specification of process to guide school-based curriculum development. Future policy should be more explicit in this respect.
- While CfE implicitly endorses learning through active engagement, it does not clearly specify the principles that underlie such an approach, instead talking in often vague terms about active learning. Moreover, while it clearly emphasises the importance of learning, and the centrality of the learner, it does not clearly articulate questions of what should be learned and why. We suggest that future policy ensures greater clarity in respect of these important questions.
- Our research shows that teachers see tensions between the ‘big ideas’ of CfE, and its Experiences and Outcomes. These findings suggest that such tensions lie at the root of many implementation problems.^{vii}
- CfE places the teacher at the heart of curriculum development – as an agent of change. And yet, schools are places where such agency is often restricted by accountability practices that hinder innovation. National agencies and local authorities should carefully consider how the negative effects of accountability systems may be countered.^{viii}

We conclude this summary of key findings with the following observations. First, CfE has much to commend it, although its implementation has been far from smooth. There remains a risk that eventual implementation in many schools will not represent the sorts of transformational change envisaged by the architects of the new curriculum. Second, implementation is dependent upon the active engagement of professional and committed teachers. Our research has convinced us that Scotland has a highly professional and motivated teaching workforce; however, such engagement has been rendered difficult for many by a lack of clarity and coherence in the documents that have guided implementation, and the lack of systematic processes for closing the implementation gap^{ix} between policy and practice.

1. Introduction

This report summarises the findings, drawn from qualitative data, generated through a Scottish Government funded partnership project between the Highland Council and the University of Stirling. The project - *Building upon success: extending and sustaining curriculum change in partnership with the Highland Council* built upon previous partnership work (e.g. Priestley *et al.*, 2011), and ran from 2010 until 2011.

The project aimed primarily to support the development of Curriculum for Excellence (CfE) in Highland Council schools by providing explicit support for curriculum development to a number of different networks of practitioners. Support was largely framed around a particular approach to school-based curriculum development, based upon: a] engagement by practitioners with the big ideas associated with the new curriculum – i.e. a clear expression of curricular purposes, including the statements that accompany each of the Four Capacities; b] the identification of knowledge/content and methods which are fit for purpose; and c] the undertaking of a situational analysis – a contextual audit – to identify action required to facilitate the introduction of new approaches (see Priestley, 2010 for further details). This was targeted at:

1. *Headteachers and senior managers.* A number of half day workshops were targeted at this group in November 2010, attended by senior managers from around half of the schools in the authorities. The workshops were very well received by participants.
2. *Three clusters of schools* identified by the council as being at an early stage in the implementation of CfE. Full day interactive workshops were held in two of the clusters, and a half day session in the third. Participant feedback was again largely positive. Additionally, on-going, direct support was provided by the seconded project development officer.
3. Small groups of *secondary subject teachers representing four secondary school subjects* (English, Mathematics, Modern Languages and Science). These subject specialist working groups built upon established networks within the council, and were mainly supported by the seconded project development officer.
4. A *curriculum development group*, comprising a number of practitioners undertaking curriculum projects in their own schools. These practitioners, drawn from a range of levels of experience and responsibility, utilised a systematic approach of collaborative professional enquiry, and were supported by University of Stirling academics, with whom they met regularly during the project.

These development activities provided an opportunity to undertake research into Highland teachers' enactment of CfE. The research adopted a mixed methods approach. Qualitative data was drawn from three types of teacher networks within the Highland Council: three clusters of associated Highland schools; secondary teacher subject networks; and Council-wide curriculum development networks. The findings from the quantitative data will be reported in future publications. However, qualitative responses to an open-ended survey question which asked respondents to comment on the implementation of CfE in Highland are included in this report. Of the 716 responses to the

survey, 35% provided a comment, and these are drawn upon to supplement the interview data where applicable.

The research aimed to:

- identify effective practices of curriculum implementation and teachers' professional learning in the context of Curriculum for Excellence (CfE); and
- produce insights to inform sustainable, large-scale curriculum change and support for teachers' professional learning.

The project addressed the following research questions:

- What are teachers, school leaders, and local authority representatives' understandings of the Curriculum for Excellence? How does this differ to teachers' existing practices?
- What changes have emerged as a result of the Curriculum for Excellence, in relation to whole-school practices, school culture and teachers' personal abilities?
- What factors have enhanced or hindered teachers' implementation of the changes?
- How do teachers respond to the increased levels of professional autonomy and creative freedoms inherent in CfE?

The report is divided into several sections. The following section provides a brief summary of the methods used, before moving on to consider the findings of the research: Section 3 explores emerging practices and the nature and scope of the implementation of CfE to date in Highland; while Section 4 provides an analysis of the factors that shape these emerging curricular practices, focusing in particular on the barriers and drivers to implementation. Finally, Section 5 concludes the report with a summary of the implications of this research for policy and practice in respect of the school curriculum.

2. Methods

2.1 The interviews

A total of 31 in-depth semi-structured interviews were conducted with 21 participants, including three headteachers, 14 teachers and four representatives from the local authority. Teachers from nine Highland schools (two primary and seven secondary schools) were involved in the research: some from schools which formed part of a case study, and others selected from Highland's specialist subject working groups. Due to the small nature of the sample these data should not be considered to be representative of all teachers in the region. However, the in-depth nature of the interviews, and their longitudinal aspect allowed us to explore the issues of implementation in detail.

Each interview lasted about 45 minutes, and most were conducted face-to-face during school visits; a small number were conducted by telephone. Interviewees included teachers with a range of experience and positions of responsibility, including three Principal Teachers and a Chartered Teacher. All but three school interviewees were female. Further detail about interviews with each of the groups is provided below.

Local Authority interviews

In the initial stages of the research four representatives of the local authority were interviewed to explore contextual and background information relating to the Council's priorities, policies and strategies to engage teachers in CfE.

Case study interviews

In discussion with Highland Council an Associate School Group (ASG) cluster at an early stage of implementing CfE was selected. Three schools from within the ASG (one secondary and two of its feeder primary schools) were invited to participate in the case study. Each of the three schools was visited two to three times over the course of the project. Interviews were held with the headteacher and two to three teachers in each of the three schools. Participating teachers were interviewed twice (initially in January/February, and again in May/June 2011). In total, three headteachers and eight teachers from three schools within the ASG cluster were interviewed.

School staff interview schedules were developed in line with the research questions. Initial interviews explored teachers' professional backgrounds and personal educational beliefs; their understandings of CfE and the extent to which this matched their own philosophy and practice. We were particularly keen to explore the barriers and drivers to implementation, the processes by which they engaged with the new curriculum, and the extent to which teachers' felt more or less autonomous as a result of the new curriculum. The second round of teacher interviews were less structured. Where teachers had kept a journal, this was discussed, and key issues from the first interviews were followed up and explored in further detail. We also examined whether changes had occurred at a teacher or whole-school level since the first interview.

Specialist subject working group interviews

In discussion with the Council, two of the four secondary school specialist subject working groups (English, Maths, Modern Languages and Science) were selected and three teachers from each were interviewed in their schools. In total, six teachers from six secondary schools were interviewed (three of whom were interviewed twice). These teachers had on the whole made progress in terms of engaging with the new curriculum. Interviews with teachers from the working groups explored the same issues as did the case study interviews, and additionally explored their experiences of being on the working groups, and the perceived impact of this.

Other data collection methods

Interview data were supplemented with data from journals kept by three teachers (two secondary teachers from the subject specialist working groups and a primary teacher). These detailed some of their thoughts and observations on their experiences of implementation between the two interviews. The researcher also attended and observed various CPD events, an Associate School Group (ASG) meeting and a specialist subject working group meeting. The notes taken from these also formed part of the data collection, as did the collection of relevant policy and curricular documents during visits to schools.

Ethical considerations and analysis

All interviewees were provided with information about the research prior to being interviewed, and gave their informed consent. Assurances of anonymity were provided. Interviews were audio-

recorded, and transcribed. Transcripts were imported to NVivo where the data was coded for analysis. In order to protect participants' anonymity, throughout the report teachers' comments are not differentiated by role, sector or length of experience - only by whether they were derived from interviews or the survey. All interviewees are referred to as female to further protect identity.

2.2 Participants

Before moving on to discuss some of the findings from the qualitative data, it is useful to first briefly consider some of the contextual and background information about the interviewees and their schools. The teachers who participated in the interviews came from a range of different backgrounds. Some had always wanted to teach, and became teachers as soon as they could and have taught ever since. For example, one teacher had 40 years teaching experience. Others were less experienced, and began their training around the time CfE was first touted. Some of the interviewees had moved in and out of the profession, for example, leaving teaching soon after their initial training, working in other sectors and then returning at a later date. They highlighted the benefits of their experience and maturity when they returned. Other teachers left the profession intermittently, but said they were always drawn back. The interviewees had experience of working in a variety of non-educational areas; these included retail, the creative arts, the military, academia and business and finance. A number had experience of teaching elsewhere – in both England and abroad. These experiences shaped their responses to the new curriculum, particularly for those who had experience of teaching the comparatively more prescriptive National Curriculum (England and Wales).

The interviewees came from a range of very different schools. We visited schools which had undergone significant leadership change (in some cases with multiple headteachers over a short time), and which had experienced repeated HMIE inspections. Some schools had experienced recent redeployments and redundancies. Despite this, there were a number of significant developments underway. These included the introduction of peer observation programmes and engagement with the Council's engagement with two externally run initiatives: Tapestry and the Cooperative Learning Academy. Teachers reported that their schools were making inroads in engaging parents with the new curriculum, and some were focusing on primary-secondary transition. The following two sections explore the findings from the qualitative research: firstly exploring emerging practices, and then examining how various factors have shaped these emerging curricular practices. While Section 3 and 4 refer primarily to the interview data, we also make reference to responses, where relevant, to an open-ended question in the survey which invited teachers to add anything they wished to say in relation to the implementation of CfE in Highland. More than a third of survey respondents (35%) left a comment, some of which were highly detailed. The high proportion of respondents leaving a comment is testament to the level of interest/concern among teachers in relation to CfE, and confirms findings from the interviews that teachers welcomed the opportunity to provide feedback on implementation.

3. Emerging practices

This section explores teachers' perceptions of the progress made by their schools as they enacted CfE during the first year of implementation (2010-11). Interviewees' opinions and responses to the philosophy and implementation of CfE varied greatly (see section 4.1). As such, we advise caution in

making judgements about the success or otherwise of implementation. This analysis is confined to describing the nature and scope of the innovations encountered in the data. Nevertheless, with this caveat in mind, it was clear that teachers were engaging with the new curriculum, and developing new practices in response to the demands of CfE. Such development has occurred in respect of pedagogy, assessment and provision (curricular models). Differing approaches to curriculum development exist, and the nature of these approaches appears to exert different effects on emerging practices. We explore these emerging practices at both whole-school and teacher level, before offering an overview of emerging practices in two areas of the secondary curriculum: the Broad General Education phase, and the senior phase. We end this section by exploring teachers' perceptions as to the impact of these emerging practices on pupils.

3.1. Whole-school development

The majority of teachers were interviewed twice, with the intention of exploring their levels of engagement and change between the two interviews. Most interviewees felt it was too early to determine the level of progress in their schools between the two interviews, although there were indications by the time of the second interview that teachers in most of our participating schools were beginning to make progress and settle down into CfE.

Interviewees had varying opinions as to the extent to which their schools had succeeded in implementing CfE so far. A number of teachers used the phrase 'CfE-ish' when describing their school's progress. All the interviewees agreed that their school still had some way to go in terms of becoming 'properly CfE', and we found that some schools had developed mechanisms to help teachers engage more thoroughly and systematically than others, particularly in relation to curriculum development (see Section 3.2 below).

Despite the fact that CfE has been anticipated in schools for some time, there was a sense that some schools and/or teachers had only started to implement changes in 2010 when it became absolutely necessary for them to do so. A primary teacher noted how her school stepped up the pace in 2010. Prior to this, engagement with CfE had consisted of mainly low level engagement, such as assemblies with pupils exploring how the Four Capacities linked to the school aims. A secondary teacher noted that it was only with the arrival of the new S1 pupils in 2010 that CfE became real for some teachers.

But for as long as it was a piece of theoretical work in a green folder, it wasn't going to mean anything to anyone. And until you are actually prepared to put yourself out there and do it in front of a class of pupils then you are not going to know what the pitfalls are and what you can and can't do. And for us, we basically just said, "right, this is first year; this is the year that we're doing it". And we put ourselves out there. And there are some schools that thought "ok, this is our first year, but we won't actually do anything with them just yet". (Interview)

Another teacher pointed to difficulties in her school, where individual teachers and departments were at varying points in development. For example, she and departmental colleagues had spent time developing a shared understanding of the new reporting terms (consolidating, securing and developing). Colleagues in other departments had not held the same discussions and, as such, were at differing stages of development. In this case, lack of clarity and consistency resulted in a return to the old style of reporting to parents, negating the work done by more progressive departments. This, the teacher said, showed that her school still had some way to go in implementation, and served to act as a disincentive for her to change.

I think we need one more year. Because all of the departments are at different levels. I think about the gain but I don't think we're there yet. You are catching us just in the middle of this issue of the reporting. And for me that shows that we're not there yet. (Interview)

Such narratives are indicative of the more pronounced challenges facing secondary schools in terms of whole-school development of CfE, where implementation could be described as piecemeal in some schools, occurring in some faculties/departments and being less evident in others. Despite the varying levels of progress reported within our secondary interviewees' schools, however, it was clear that most were beginning to gradually take CfE forward.

In contrast, there was greater evidence of whole-school approaches to CfE in the primary schools that we worked with, where we found a greater focus on the development of whole-school policies. Such activity included developing an LTA folder to help teachers with their planning of interdisciplinary teaching, the introduction of new weekly planning sheets, tracking sheets for numeracy and literacy, and moves to 'revamp' the Highland Literacy Project (HLP) in line with CfE. Primary schools in the case study cluster had also recently introduced the new INCAS standardised tests, and reported greater involvement of and engagement with parents through a number of initiatives.

In both primary and secondary schools, significant progress has been made with regard to collaborative and collegial professional working. Increasing numbers of teachers had joined Tapestry, which was seen as being especially useful in terms of sharing ideas with colleagues. Alongside Tapestry, some of the secondary schools had also developed their own peer observation and learner partner programmes. Teachers spoke of the improvements that had been made to the programmes, which now have a greater emphasis on constructive criticism. Teachers reported feeling more comfortable and more amenable to having people in their classroom, because of the 'non-threatening' environment.

Teachers in both sectors also pointed to the progress made at whole-school level with regard to cross curricular developments, for example, with topics spread over the course of a week across the school – e.g. health week. A secondary school had appointed numeracy, health and literacy coordinators, which it was said had facilitated cross-curricular work.

The question of whether such changes could be directly attributed to CfE is more difficult to address. It is clear that professional collaboration, cooperative learning, AifL and HLP were already in place in some of the schools, running parallel to CfE, rather than as a result of new curricular policy. Consequently, some teachers suggested that such changes would have occurred independently of CfE.

But then again, I'm like that anyway, and as a school we are like that anyway. So that might have happened regardless of the Curriculum for Excellence if you see what I mean. (Interview)

3.2. Teacher development

While interviewees identified fewer examples of whole-school development in relation to CfE, they pointed to a number of instances of emerging changes in terms of teacher development, particularly in the areas of learning, teaching and assessment, and curriculum development approaches.

3.2.1 Progress in terms of learning, teaching and assessment

Interviewees identified a range of emerging practices in terms of learning, teaching and assessment, and their levels of confidence with regard to implementing these appeared to increase between the first and second interviews. Teachers spoke of there being more general moves towards change in this area, and suggested that CfE had helped to promote an environment, whereby teachers reflected on and questioned their practices. A teacher said, 'obviously I think there are always people that are a bit scared of changing, or stick to what they do, but overall I think it has started to change'. Another said, 'it's altering our teaching in a way, definitely with older children'.

There was a sense that teachers were becoming more open to experimentation. Teachers spoke of trying to move away from the use of textbooks, and increasingly replacing them with more active and collaborative lessons, and as one said, 'just trying different things'. Teachers from the specialist subject groups in particular described CfE as providing a mixture of new ideas, techniques and teaching styles which can be adapted to suit the needs of the class.

All primary, and most secondary, interviewees had experienced the Cooperative Learning Academy (CLA) training, to which the majority responded positively. However, some, particularly secondary teachers, complained that lack of resources and time made it difficult to convert all their lessons to this new approach. This was based on the [mis]perception that such techniques were intended to fully replace those practices already in use. Others understood it as something which should be used alongside their current approaches, as and when necessary. For a number of teachers, cooperative learning and the focus on learning styles were not new. These interviewees tended to see cooperative learning as part of a 'teacher's tool box', and noted that CLA fitted well with the big ideas of CfE.

Alongside a more collaborative and active learning approach, teachers also reported using more open and exploratory styles of learning, moving away from traditional forms of pedagogy. Greater use of discussions, different forms of brainstorming and more practical orientated work were identified. Some interviewees pointed to the justification CfE provided for doing more outdoor learning. One primary teacher spoke of how it has become common in her classroom to regularly move furniture around the room, in order 'to accommodate a change in how we're going to approach the next lesson'. In contrast, a secondary teacher explained that more active and collaborative techniques were impossible in her traditional classroom where desks were laid out in rows bolted to the floor.

Progress was reported by both primary and secondary teachers in terms of increasingly handing control and choice over to pupils as to what and how they learned. This was considered key in terms of engaging pupils further and making their learning more relevant. However, even the most enthusiastic supporters of CfE described this as a challenge, because it required teachers to relinquish control of the classroom and to 'move out of their comfort zone', as this interviewee explained:

Because they [pupils] can be much freer about how they are finding things out and what they are finding out. And that's changed the atmosphere in the class slightly. And in a way that was the movement outside my comfort zone. Because you go from a situation where you are very much in charge and you are directing things within quite limited parameters, to a situation in which you are still in charge but the kids are doing more of the moving and shaking. And you have to

accept that that's happening without losing what you consider to be acceptable control within your classroom. And that's quite scary. (Interview)

Such a move, teachers said, required a good deal of confidence on their part, and one interviewee conceded that 'we still have a long way to go in letting them [pupils] take charge of the room'. This was partly due to the fact that classrooms are seen to be 'noisier' as a result of cooperative learning and group based discussion activities. One interviewee indicated that some of her more traditional colleagues disapproved of her 'noisy' classroom, as she explains below:

But I've had to have the confidence to know if someone comes in they are not looking for that hush of everyone getting on. But I know one member of staff in particular – she will even look quite disdainfully across if we're being noisy! It's that engrained that the good classes [are quiet]. (Interview)

Interviewees also pointed to developments in assessment. Teachers reported experimenting with new forms, and coming to a growing realisation that written evidence was not always required; one said, 'I have become less reliant on being desperate to have a piece of written evidence. I am starting to back off a wee bit on that'. Primary interviewees spoke of increasingly using photos as evidence of learning; for example photographs of pupils doing practical exercises were cut out and pasted to paper by pupils who then wrote captions beneath them. In the secondary schools, a number of different teachers in one of the specialist subject groups were using photos and cameras for formative assessment. Secondary teachers also reported increased use of peer and self-assessment. In one school, which was prioritising self-evaluation, pupils were encouraged to give feedback on their lessons direct to teachers in the form of short feedback surveys. Whilst some teachers initially found this difficult, they said they were beginning to see how this information could be used to improve their teaching. Elsewhere, teachers spoke of providing pupils with, and allowing them to develop their own, success criteria; this is something which they said they would not have done prior to CfE (despite the fact that this links to the previous AifL initiative).

Interviewees emphasised the challenge that these changes brought with them, in that they had to learn to think differently and consciously try not to return to old ways of working.

I think it's a difficult thing just now; everybody is getting used to it. I think it's so easy to fall back into just teaching the way you're used to teach, but you have to make a concentrated effort to think about how to do things differently. I think that's what we find is very difficult. (Interview)

However, those who had succeeded in developing new practice spoke of the enjoyment they got from it, saying that it had 'refreshed' their teaching; 'I now actually come in and look forward to teaching', one said. Another said:

I enjoy my teaching a lot more. I don't feel like I'm fighting myself any more. And I just love seeing the kids doing things that they think are fun and interesting. (Interview)

A small number of teachers pointed to examples where new practice developed as a result of CfE was 'dripping' into classes elsewhere in the school.

Once your brain is switched on making changes, although you're not expected in that year group, it doesn't matter because you are comfortable with it. And then you use it as a draft. You're giving it a shot, see how you get on. And it's good because now I'm going to do it

completely the right way with this lot by using a little bit of what I've done in my second year last year. So it's affecting beyond just the first year, yeah. (Interview)

Again, whilst many interviewees agreed that they had changed or developed their learning, teaching and assessment approaches in recent years, they tended not to attribute this to CfE. Instead, they pointed to the important role of training and wider changes in teaching in terms of their development: 'I wouldn't say the curriculum in itself has changed my approach, no. No it would be other courses and other outside influences that have made any changes to my teaching style.' Another teacher said:

So we're improving, we're doing different things. Cross curricular we're trying harder. But is it CfE specific? No. Changes are made but not in relation to CfE. Just because you like to improve, to get the feedback from pupils. Yeah, the biggest change I would say over the last four years for me has been trying to give a bigger dimension to what I'm teaching in class. I think that's beyond CfE. (Interview)

3.2.2 Progress in terms of school-based curriculum development

Whilst there was evidence of significant progress being made in terms of learning and teaching approaches – lending support to the notion that CfE is largely a pedagogical innovation – we found more variable approaches in terms of school-based curriculum development. This is dealt with here largely as a teacher development issue, although clearly it also spans whole-school curriculum development. This is a key aspect of the CfE policy, and has significant implications for the practices that might emerge from teachers' engagement with the new curriculum. Our research suggests that in some schools, there has been a proactive whole-school or departmental approach to curriculum development based around discussion of the principles, practices and 'big ideas'. Such an approach takes a 'big picture' view of CfE, potentially allowing schools to make radical changes to develop practices that are fit for purpose in the context of the new curriculum. Other schools have focused on cross-referencing the Experiences and Outcomes (known as the 'Es and Os') with existing content. This more conservative approach is designed to minimise change to that required to meet the demands of the new curriculum (often mainly in terms of paperwork and terminology). Some schools used a combination of the two approaches.

Teachers described discussions held with colleagues, both at a school level, and with department or stage colleagues, where they tried to 'unpack certain bits and make it make sense to us'. In a primary school where teachers reported initially feeling 'overwhelmed' by the changes, the whole school met together and explored what a 'perfect' school would look like and then decided to 'build up from there'. Discovering that the aspects they identified fitted well with CfE gave staff greater confidence and from there they held assemblies with pupils and gave them the opportunity to inform the development of CfE in order to give pupils 'more control over the aims of the school'.

Whole-school curriculum development approaches were also evident in secondary schools. A teacher described how a series of new interdisciplinary lessons for the BGE stage were devised as a result of whole-school discussion instigated by the headteacher. Teachers discussed what pupils in S1 and S2 should know and what concepts and big ideas they wanted the pupils to have by the end of the course. Such aspirations are clearly in tune with the spirit of CfE. However in this case, while discussions were initially held as a whole-school activity, the actual development work came down

to the individual teachers who took on the delivery of the courses, sometimes in ways that made them feel isolated from their colleagues.

Departmental discussion of the big ideas was also identified by secondary teachers as a key curriculum development approach. A teacher described how her department had made quite radical changes to its curriculum. This is in contrast to colleagues elsewhere in the school, who in many cases continued as they were, but by 'trying to add bells and whistles here and there'.

We have done something which is quite brave and scrapped the old course completely. We have not tried to modify it for CfE. We have looked at the outcomes and decided they are just so different that we could not bolt them on. (Interview)

She went on to describe how her department has now taken a 'pragmatic view' by planning for a series of lessons with a central subject specific outcome and then fitting in aspects from literacy, numeracy, health and wellbeing etc. This of course has significant resourcing issues, meaning that teachers now plan teaching week to week which, she said, 'means we are hugely out of our comfort zones'.

The desire to stay in one's comfort zone (and reduce workload) was part of the reason then that cross-referencing the 'Es and Os' with existing content was so common amongst the schools that were part of our study. Additionally, this allowed schools to be able to 'tick the box', reassuring teachers that they were 'doing CfE', whilst making minimal change. In some of our schools, particularly in the secondary sector, an audit approach to SBCD was clearly evident, with SBCD seen largely in terms of the tweaking of content to meet the demands of the curriculum outcomes. A teacher used to working with 5-14 emphasised that '5-14 is pretty similar to what you do in CfE'. As such, she conducted an audit, matching up 'every single learning outcome to what I did. [...] So I ticked all that'. Another secondary teacher described the process as being 'like a jigsaw puzzle', checking off the outcomes that were already covered, and then seeing 'what's left over basically'. Such an approach to SBCD can be viewed as strategic compliance, rather than a thorough and rigorous engagement with the new curriculum, as illustrated in the following quotation:

I can cover all of these assessment parts in one; with one project here, one short project. It's not exactly the way they are saying it, but you are not saying we can't do it this way. And it meets all the criteria. I can tick all the boxes quite confidently. And with the S1 stuff that I'm doing as well, that is one thing that you can see with Curriculum for Excellence that the rules aren't quite as strict [so] you can tweak them without feeling too guilty. (Interview)

Some interviewees expressed concern and frustration at this type of 'tick box' approach, with audit approaches pervading school's curriculum design. A teacher felt that 'more resistant' colleagues would not look at the principles and practice, but would instead 'go straight to the Es and Os because that is what they're used to. They want to know what the kids are going to be tested on'. In contrast, she emphasised the importance of what pupils experienced rather than what they achieved. Concerns about this tick box approach were also raised in the open responses to the survey, as shown in the comment below, which points to another perceived conflict within CfE – that between the experiences and the outcomes, and the core ideas of the curriculum.

The big idea and discussion of why the need for change got lost in the practicalities of change somewhat. We became hooked on translating the structure from 5-14 to CfE instead of discussing the essence of how and why pupils learn. We did this because it is easier to work with

solids like Es and Os rather than philosophies of children's' future needs. Overall, CfE has made us go back to our own thinking on how pupils learn and we are once again reflective, dynamic and engaged! (Survey)

Some interviewees and survey respondents worried that 'adapting the old curriculum to the new' would bring little change and would ultimately result in what a number of teachers referred to as a 'repackaged 5-14'.

I got frustrated because it just felt like we were taking the 5-14 curriculum and then taking the statements from there and putting them in these three sections. Well, what's the point of that? If we're going to have to rethink it, we may as well rethink it properly. (Interview)

The 'three sections' relates to the terms developing, consolidating and secure with which the Es and Os are assessed. There is a risk of excessive bureaucratisation, inherent in this three level approach. Some interviewees – especially those in primary schools – viewed curriculum development as primarily about creating opportunities for evidencing assessment decisions. This rather narrow approach to assessing, recording and reporting against the E&Os contrasts with big picture school-based curriculum development.

3.3. Developments in provision by phase

There were clear differences by sector and, within the secondary schools, by phase in terms of developments and progress. There was a general consensus among the interviewees, both primary and secondary, that primary schools were further ahead in the implementation of CfE, and that this process has been smoother for primary staff.

Primary interviewees more frequently pointed to a close fit between their personal beliefs and values about education and the philosophy of education espoused by CfE. Primary teachers were more used to thematic ways of working, and were also more likely to embrace the idea of relinquishing some elements of control to the pupils. They also indicated that their current practices already tended to fit with CfE, particularly in terms of thematic working. All interviewees recognised that CfE entailed a greater degree of change for secondary teachers, particularly in terms of the focus on inter-disciplinary learning which was perceived to be more complex and challenging to implement under the constraints of secondary timetables. Secondary teachers, interviewees said, have to prepare pupils for exams. This engrained notion of the purposes of learning and the perceived uncertainty around the incoming National 4 and 5 qualifications made the implementation of CfE especially difficult for secondary teachers, as this teacher explains:

And differences between primary and secondary and how ultimately in secondary school we will be preparing kids for exams of one sort or another. And we are constrained by that and to an extent, personally, that's why primaries seem to be so much further ahead. That it's almost as if all our traditions haven't helped us in secondary. (Interview)

The following two sub-sections focus on emerging practices in secondary schools, exploring the ways in which those in the secondary sector have implemented the Broad General Education (BGE) and senior phases. While schools were still grappling with the challenge of moving from a 2+2+2 model (S1-S2, S3-S4, S5-S6) to a 3+3 model (S1-S3, S4-S6), it was clear that some progress was being made initially in the BGE phase.

3.3.1 The Broad General Education phase

At the S1-S3 level, known as the Broad General Education phase (BGE), schools were making a number of changes with regards to their provision. In some schools this took the form of newly developed programmes or series of lessons based around themes or projects for S1 and S2, often with local relevance or an outdoor focus, addressing cross-curricular themes and disciplinary subject matter through inter-disciplinary provision^x. On the whole, teachers clearly enjoyed developing and delivering these projects, and spoke of the pleasure they got from being able to teach outside of their subject.

Practical issues with regards to the implementation of the broad general education included timetabling, funding, and time to meet colleagues. In some cases, extra IDL classes were introduced at the expense of specialist subjects, leading to resentment among some teachers. While such barriers were identified as making the development of IDL work difficult, an interviewee suggested that instead teachers needed to focus on 'practic[ing] out of the doable', pointing to her own successful small-scale professional collaboration which was possible without requiring changes to timetabling.

In schools which had clearly taken time to develop more coherent programmes via whole-school discussion, the development of inter-disciplinary learning tended to carry more meaning. This is in contrast to those schools where such discussion was absent; some interviewees suggested that the delivery of such courses was designed to 'tick boxes'. Teachers deemed some inter-disciplinary work to be contrived, represent a lack of understanding of IDL, and as an interviewee said, 'contribute little to understanding'. Interviewees referred to examples of cross-curricular projects which they conceded could not really be considered inter-disciplinary; for example, projects around health related themes, which included input from PE, science and maths, or country-themed weeks. A survey respondent referred to the over-emphasis on IDL, which had led, they said, to 'ad hoc "project" days', which were 'essentially tokenistic'. This was partly due to the confused rationale for implementing such programmes. A teacher noted the lack of discussion around adopting these projects.

As I said in our school we have this massive thing about interdisciplinary projects. Nobody's looked at the theory of what is a good interdisciplinary project. What should it have? What's the characteristics of it? They've just gone 'oh well, we're doing this one and we're going to say these people are involved and tick that box'. That's not getting anywhere any further.
(Interview)

In some schools inter-disciplinary work for S1 and S2 was introduced as distinct 'CfE lessons' or courses, which separate off CfE from the rest of the curriculum (for example a weekly CfE morning where the curriculum can be addressed outwith the normal timetable). We suggest that there are inherent risks relating to this fragmented approach, whereby 'CfE' becomes another distinct subject, rather than being seen as wholesale change throughout the school, militating against the transformative change which CfE aims for. Open-ended responses to the survey also conveyed a sense that some schools are doing IDL because they feel obliged to, rather than actually exploring meaningful links across subjects. Interviewees reported some of their students attaching 'less value' to their 'CfE work'. A teacher explained:

It's just CfE; it's not a subject, so I think they see it as something different, whereas if it was integrated and, as I say, part of the science course or linked to all of it that wouldn't happen.
(Interview)

This highlights a fundamental tension within secondary schools between core CfE ideas (particularly inter-disciplinary learning) and existing practices framed around the teaching of discrete subjects, framed as content to be delivered (see section 4.1.2). This points to the risks of a disjuncture between the core ideas of the curriculum and classroom practices; in this case evident in the focus at a macro school level on big ideas, but their minimal translation into meaningful classroom practices.

While schools had clearly made some progress with regards to the broad general education for S1 and S2, there was general confusion with regards to S3. The majority of interviewees were unsure what their school would be doing with the current S2 once they moved into S3. It was unclear whether this was as a result of difficulties in moving from the mind-set of the traditional model of 2+2+2, or whether it was due to the fact that most schools were bringing in CfE changes on an evolutionary, year by year, basis. Nonetheless, teachers complained of a lack of guidance in relation to S3 structures, and questioned the purposes of S3. They varied greatly, with some sticking to the traditional view that S3 should remain as a preparation for later exams, while others welcomed the idea that it should be kept separate from exams. Teachers did, however, point to the inherent tensions in moving from the BGE to the specialist subject and exam focused senior phase, which was seen to be in conflict with the inter-disciplinary emphasis in S1-S3. Some secondary interviewees tended to see CfE as something which only affected S1 and S2 – after such time, there would be a return to subject specific work with an emphasis on exams. There was little evidence that inter-disciplinary approaches were transferring to further up the school. Some teachers who welcomed the breadth of experience provided by the BGE worried of a return to 'business as normal' once the new qualifications were implemented, and that BGE could be forgotten as schools return to the core focus of working towards the exams.

3.3.2 The Senior Phase

Progress in the senior phase was understandably slower than the BGE and was hampered by uncertainties around the new National Qualifications. Interviewees' schools were yet to finalise their senior phase curriculum models at the time of the research, and as such it was unclear what breadth of subject choice would be available. Most secondary interviewees indicated they were awaiting further guidance from SQA about the National 4 and National 5 exams, the details of which were due to be published in April 2012, prior to undertaking further development. Policy makers stated that there would be no further guidance, however, on the National exams, emphasising that teachers were expected to prepare S3 courses based on the existing Es and Os. This information had evidently often not permeated to teachers, however. Hence the majority of secondary interviewees reported feeling left 'in the dark' in terms of what they should be working towards for the new exams. Many participants, both interviewees and those responding to the survey, asked 'where are we going?' In particular, teachers expressed concern about the 'gap in the middle':

I know Curriculum for Excellence is 3 to 18. But we've got a massive gap at the moment sitting there. And until that gap is clarified, people will be really negative because you don't know what you're aiming for. It's all very well me feeling that I'm giving the S1/2 a really good experience and that they're really enjoying it and that they're really positive and that they're progressing

with skills and concepts and whatever. If I don't know what I'm preparing them for I'll never know whether I'm doing it right or not. (Interview)

I feel that the information about the exams in S4, 5, 6 has been poor. In less than 12 months we have to start preparing our S3 for what is to come, but we know nothing about them ourselves at the moment. (Survey)

The implementation timetable was a key concern as teachers awaited publication of this latest information, giving them, they argued, little time to prepare their senior phase curriculum models and timetables. Interviewees described the timetable for implementation as 'rushed' and emphasised the need for time to develop curriculum models. In contrast, some interviewees argued that the new exams would not look overly different to the current Standard Grades, and suggested that teachers needed to act upon the information they already had, rather than waiting in the hope of further guidance which may not arrive. A number of interviewees and survey respondents called for a Highland wide approach to timetabling/senior phase model design.

Some teachers displayed a lack of understanding as to the changes being introduced at the senior phase. For example, a teacher responding to the survey wrote: 'It's a mess! Parents want to see pupils getting a good education and qualifications. When they hear there are no grades/levels or exam at the end of S4 they can't believe it...' This is not the case. Whilst the diversity of the new curriculum allows students to study for National 4 and/or 5 but without necessarily sitting the exam before moving on to Higher, it is up to individual schools to decide. Additionally, teachers also referred to the potential for a narrowing of the curriculum at S4 due to a misunderstanding/miscommunication that only five subjects may be studied, as opposed to the traditional eight.

This led some teachers (interviewees and survey respondents) to raise concerns that increasing diversity in terms of senior phase provision would create greater inequality, in that what students study will depend on what their schools are able to offer. This was seen to be diametrically opposed to the aims of CfE, and therefore risked adversely affecting the progress of already disadvantaged young people to positive destinations.

3.4. Perceived impact of CfE on pupils

Whilst we did not collect evaluative data from teachers as to the impact of CfE on pupils so far, interviewees did, in our discussions, explore their own perceptions as to whether and how CfE has changed the pupil experience. Most indicated that their pupils would already be able to see the difference in terms of their experience of school, particularly in terms of the learning, teaching and assessment methods outlined in Section 3.2.1. Primary teachers said that children would see a difference in that they are doing more cooperative learning, peer assessment and discussion, as well as learning from each other and teaching each other things. Interviewees reported having more creative and confident children, who were better at presenting to an audience and collaborating with each other than previously. A survey respondent said: 'I see CfE as a very positive change and have seen many positive effects of the new curriculum on the motivation and engagement of our pupils'.

However, on the whole, interviewees spoke about the changes that would be seen in learners in the future, given that it is as yet too early for impact to be observed. Interviewees, particularly those in

primary schools, noted the potential of CfE to produce more rounded individuals at the end of their education. They expressed hopes that children would experience a more open and exploratory approach as a result of CfE. Group work, the emphasis on pupil input and identifying areas for self-improvement were seen to be especially useful. Topic based learning was also seen as a means of making it more relevant to pupils, and ultimately to improving their enjoyment.

Whilst teachers were keen to point out some of the potential and observed benefits for children, they also outlined some of the more detrimental impacts that could arise as a result of CfE. In interviews, teachers were asked to discuss their perceptions of risk in relation to CfE. The biggest risk identified by teachers related to pupils, and the possibility that CfE might, in the long run, have a detrimental effect on their education. This applied to the effect on Scottish education in the long term, but greater concerns were also raised in terms of the more immediate effect it would have on the first cohort to go through CfE and the new exams, whom many described as 'guinea pigs'. The diversity (or what was perceived by some interviewees to be lack of consistency) in the new system left many teachers worried that pupils could be disadvantaged when changing schools. Some teachers saw CfE as posing the greatest risk to high achievers. While some secondary teachers saw the potential in CfE for reaching and engaging de-motivated children, others felt that it would adversely affect those with special educational needs; particularly as they may find group work challenging.

In the open-ended survey responses a number of teachers spoke from the perspective of being parents also, and their fear that CfE would be ultimately detrimental to their child's education was especially prevalent. Comments to the survey included:

I struggle to back CfE as I think it will create more problems for many children because of the lack of clarity in the qualifications system, more children will leave school with few qualifications, bringing us to a situation where young people will get jobs because of the school they went to rather than the qualifications they have. The emphasis on group work and cooperation will disadvantage those with learning difficulties and the growing numbers of pupils with ASD. (Survey)

Overall I think we are sailing in some very choppy waters over the next few years and despite our best efforts it is the pupils that will suffer. (Survey)

4. Factors shaping the implementation of CfE

This section explores the factors that have shaped the implementation of CfE. Firstly, it addresses the issue of whether (or not) CfE is congruent with the beliefs and values of teachers charged with implementing it. Secondly, it examines practical issues that impact upon the implementation of the curriculum. Here, we focus in detail on several barriers and drivers that seem to be significant in shaping the enactment of CfE in schools. Implementing CfE was seen as challenging by all interviewees. Even those teachers whose practice and beliefs fitted well with CfE recognised that it demanded a lot of schools and their teachers. The language of CfE, the perceived vagueness of it and uncertainties around assessment and the new qualifications, combined with issues such as funding and staffing, appear to have made it especially problematic for teachers in our study.

4.1. Teachers' understandings of CfE and its philosophy

This section explores the extent to which the philosophy of CfE fits with the beliefs and values of teachers. The question of congruence is addressed at two levels of engagement with curriculum change:

1. **First order engagement** is related to whether or not teachers welcome – in general terms – the philosophy and 'big ideas' of CfE;
2. **Second order engagement** relates to how CfE fits with teachers' implicit theories of knowledge and learning, and whether there has been a thorough engagement with the underpinning ideas of the curriculum.

This is an important distinction, as it is quite possible that teachers welcome CfE – and our research suggests that they do – while remaining unable to implement it meaningfully because of fundamental tensions between its core ideas and their beliefs about and existing practices of education. This in turn points to the need for a sense-making phase in any curriculum development, and – as our research suggests – the time and resources to do this have been seriously limited. In analysing the data we were concerned with whether there is congruence between old and new, and with exploring the nature of practices that emerge from teachers' engagement with new policy.

4.1.1 Teachers' responses to CfE

First Order engagement

In terms of first order engagement, teachers generally responded very positively to the philosophy and ideas behind CfE. The majority of interviewees welcomed CfE, and said that it tied in with their own ideas and beliefs about education. Most interviewees, both primary and secondary, described the purpose of schools as being to educate the whole child, to 'teach children to learn', and for them to enjoy learning. Some also highlighted the importance of helping prepare young people to cope with the real world and of providing opportunities for them to achieve. A primary teacher typified this, stating that schools should create 'well rounded citizens, equipped with practical things to help them lead a good life and have their own ideas or opinions on things'.

Such beliefs about education fitted with many teachers' understandings of CfE. Teachers described the Four Capacities as 'a strong hook'; 'exceptionally important'; and 'a brilliant idea'. CfE was seen as having the potential to 'refresh' teaching and to encourage teachers to reflect on their own practices. A number of interviewees, particularly those who were part of the specialist subject working groups, indicated that they had been working in ways similar to those advocated by CfE for some time. For them, CfE enabled them to feel justified that they were 'along the right lines'. One teacher described feeling vindicated after having 'battled' with colleagues for some time to try to introduce new approaches.

Interviewees had differing understandings as to what CfE would mean for their own practice. There were those who understood CfE as providing new ways of working, to which they could adapt and tailor their teaching, improving upon their existing practices. Their understanding was largely based on the notion that CfE was about new approaches to teaching and learning, rather than content. In contrast, others understood it in terms of extensive revision of content and new approaches to teaching and learning. For those interviewees whose understanding of CfE was based on the need for complete change (as one teacher put it: 'you are going to have to change everything you do in

some way, shape or form') the prospect was very daunting, and generated a lot of anxiety and uncertainty. A teacher noted that 'too much good practice has been thrown out as everyone interprets CfE in their own way due to the woolliness of the documents'. Some interviewees were of the opinion teachers should 'just get on with it [implementing CfE]', while a minority held negative views and continued to resist the idea of the new curriculum, describing it as 'change for change's sake'. One interviewee repeatedly said, 'if it ain't broke, don't fix it'; she saw the former 5-14 curriculum as being fit for purpose and without need of change. Some teachers agreed with this view, describing both CfE and the new qualifications framework as 'reinventing the wheel'.

How teachers responded to CfE was inherently linked to their views on teacher autonomy. It was clear in the interviews that teachers held considerably varied views about the level of autonomy achieved as a result of CfE. For a number of interviewees, CfE's lack of prescription was highly welcome, particularly after what was perceived to be the over-prescribed nature of the *5-14 Curriculum*. These teachers welcomed the flexibility CfE brought; there was a sense from some that it had rejuvenated their teaching, and allowed them to enjoy teaching again. They spoke of being able to 'go off on tangents', to be creative, or to teach as they always had done but to feel justified in teaching in this way. For example, a primary teacher spoke of building dens in the wood with her class during orienteering. Another primary teacher explained that, within constraints, 'we're probably free to go wherever we want and then do extra things as the kids want to'. Crucially for these, mainly primary, teachers, CfE handed greater autonomy to the learners, and they saw CfE as allowing them to tailor learning to their pupils' needs. Such changes would, it was felt, have the potential to engage and motivate young people in their learning. Moves towards topic-based and thematic learning were considered as taking teaching 'back to what we used to do long ago' according to a highly experienced teacher, making learning more relevant for children. A primary teacher described how her identity as a teacher has changed as a result of CfE, shifting from imparting to facilitating knowledge. While such comments were more common among primary teachers they could also be found amongst secondary teachers. One secondary teacher described how teachers are moving away from the notion of being the 'expert' who tells students what to do, and are instead taking the place of learner alongside the students.

In contrast, a number of interviewees (both primary and secondary) lacked the confidence to be able to teach out of their own disciplines, and echoed the comments of a teacher who described the new curriculum as having moved 'from extreme prescription to extreme woolliness'. Interviewees, including those who were very positive about CfE and who described the various ways they engaged with it, frequently used the term 'floundering in the dark' to describe their situation at the time of the interviews. The perceived vagueness and lack of clarity around the new curriculum was a concern which was raised repeatedly throughout this research. While the move away from the 'regimented' 5-14 was welcomed, interviewees and survey respondents indicated that CfE has moved too far in the opposite direction. This was largely perceived to be due to the 'woolliness' of the Es and Os, which made teachers feel uncomfortable and generated fear and anxiety, particularly, according to one headteacher, for older teachers not used to this way of working. For those interviewees who saw their role as teachers as being to impart knowledge, the move to CfE was especially difficult. Even teachers who were developing their practices in line with CfE and who had embraced change still looked for reassurance that what they were doing was *right*. Despite CfE positioning teachers as agents of change, our interview data shows many teachers are not yet ready

for such a sudden shift from prescription to autonomy. The majority of interviewees agreed that while CfE espouses greater autonomy for teachers, this has not yet been achieved.

Second order engagement

Whilst most teachers welcomed the underpinning philosophy of CfE, we found the fit between CfE and teachers' theories of knowledge and learning (second order engagement) more problematic. There are a number of facets of this. Firstly, there is the issue of whether the teaching workforce has been able to take the time to make sense of the big ideas of the curriculum. We found only occasional examples of teachers who had had the chance to meet with colleagues, and in one case with pupils, to discuss the meaning of the principles of CfE. A secondary teacher identified this as an area of development which would bring benefits.

I don't think we do enough of 'let's look at the philosophy behind it'. How often in a school would teachers sit down? You just said to me 'have you got philosophy of education?' I'm sure most people have. But we don't talk about it. We don't ever sit down and say 'right let's all share our philosophies and come up with a philosophy for our school'. We just look at minutiae. And there's no background to it. (Interview)

Secondly, and perhaps more fundamentally, one should question whether the assumptions within CfE about learning and knowledge are congruent with teachers own implicit theories of learning and knowledge. CfE advocates a broadly constructivist view of learning, at least implicitly. Thus, there are notions that students learn best through active engagement and experience, and through dialogue with other learners. Our research suggests, conversely, that many teachers, particularly in secondary schools, harbour implicit transmissionist views of knowledge and learning, viewing it as delivery of content, whether or not organised into discrete subjects.

Thirdly, and linked to this, are notions about of assessment relating to whether teachers see their role in terms of assessing or educating young people. These points should not obscure the fact there it is probable that there will be a continuum of practice and philosophy in each case, and that most teachers will be influenced by a combination of beliefs and values. There are likely to be tensions between conflicting beliefs and forces, which may be exacerbated if teachers cannot make time to make sense of new curricular ideas.

The following subsections explore these second order issues in more detail. Specifically, we explore tensions in teachers' understandings of CfE relating to interdisciplinary learning and subject specialism, the position of knowledge in the new curriculum, and assessment.

4.1.2 Tension between inter-disciplinary learning and specialist subjects

For many interviewees, their understanding of CfE was centred around the idea of the 'grouping' or 'bringing together' of subjects, and of helping children to 'see the links between things'. By 'broadening' education in this way teachers said they hoped CfE would have the potential to remove boundaries and allow children to see cross curricular links. On the whole, interviewees agreed that Scottish education needed to be updated in order to meet the needs of today's fast-paced society. Moving away from traditional subject divides was seen to tie in with the changing needs of society, and increasingly over-crowded curricula.

However, evidence of first order engagement with these issues risks obscuring deeper [mis]understandings of inter-disciplinary working. While the data do not provide a clear picture of

how teachers understood inter-disciplinarity, it was apparent that tensions existed between the perceived push for interdisciplinary learning and knowledge specialism. Despite acknowledging the need to be inter-disciplinary, a minority of secondary teachers were opposed to it in practice, viewing CfE as a possible threat to their subject, and resenting emergent practices of inter-disciplinary learning.

A secondary teacher, who had enjoyed the breadth of subject matter that she was able to bring to the inter-disciplinary courses she developed for S1-S2, emphasised the need to ultimately prepare students to pass exams for which, she repeatedly said, you 'still need to have your experts'. Another interviewee queried whether teachers should be able to teach outside of their discipline; 'very few people will go into a field without sufficient training from educated professionals and do things correctly', she said. Part of the perceived threat to subjects discussed above also arises from the fact that, in some cases, subject time was lost to new cross-curricular projects in S1 and S2, developed as part of the BGE entitlement.

Another secondary teacher referred to the development of an integrated science course, where her colleagues remained concerned that pupils undertaking theme based work in the sciences would not know if they were doing biology, chemistry or physics. She described being 'up against this brick wall' trying to change their opinion so that this did not matter. In contrast, a primary teacher spoke of the benefits of not having a specialism; 'trying your hand at everything and always meeting new challenges yourself because you have to maybe teach something that you don't always feel entirely comfortable with', she said. We emphasise that those interviewees who had been involved in developing and/or delivering interdisciplinary work were highly positive about it, emphasising the impact it had on the pupils; the potential to make learning more locally relevant; and the enjoyment they experienced in being able to veer away from the norm. As a teacher explained, the potential to make pupils 'aware of the bridges between subjects' was of greatest importance, 'whereas before there were bridges but nobody really paid attention to them'.

4.1.3 Tension between skills and knowledge within CfE

A further tension is that relating to the balance between skills and knowledge. In some cases those same interviewees who highlighted the benefits of inter-disciplinary learning also emphasised the need to be able to test pupils' knowledge. Similar themes were evident in the survey responses, as this comment shows:

The ONLY plus I see from CfE is interdisciplinary learning- something I have advocated for a long time. But in order to fully link with other subject and make meaningful and relevant connections then pupils need to understand subject first. At every level in its implementation CfE dumbs down subject specialism BUT it is only through subject can we really make wider links and judgements about all other areas. (Survey)

Teachers expressed a number of [mis]understandings with regards to this. There was a perception among some teachers (both primary and secondary) that knowledge was disappearing from the curriculum at the expense of skills. Such opinions tended to be expressed by teachers who held transmissionist views of knowledge, and was in conflict with the more constructivist views of knowledge implied within CfE.

Whilst the development of children's skills for life as well as their academic performance chimed with interviewees' own beliefs, it became clear during our conversations that many, especially

secondary, interviewees primarily saw teaching as being about imparting knowledge. As one secondary teacher said, 'at the end of the day you're going to be looking at kids trying to get those qualifications to get a job or further study. And you have to make sure they get there.' Another teacher suggested that colleagues were reluctant to go outside of their comfort zone because they held the view that 'I am here to teach and you will learn what I am going to teach you'. A primary teacher spoke of teachers having to come round to new ways of looking at skills and finding new ways of thinking about 'how you assess that end result'.

Concerns were raised by some teachers that there is too much emphasis on soft process outcomes, group learning and active learning at the expense of content, as shown by this response to the survey:

"IT'S NOT WHAT WE LEARN BUT HOW WE LEARN". Who coined that disaster? In order for there to be any meaning in the acquisition of knowledge then what we learn HAS to be as vital and important as how we learn. (Survey)

Secondary teachers in particular raised concerns that specialist subject knowledge was being 'watered' - or 'dumbed down', possibly to the detriment of higher ability pupils. Primary teachers, who were generally more comfortable with this way of working, also raised concerns that basic skills such as arithmetic are not taught properly or in enough detail. Some secondary teachers noted that this is inevitable when teachers are judged according to their results, and that the attainment agenda worked against teachers in this regard.

4.1.4 Tensions around assessment

The greatest tensions we encountered in this research were in relation to assessment. This was an area of concern for all interviewees – both primary and secondary – and for many survey respondents also. The changes to assessment which have arisen as a result of CfE, and also as a result of changes to the exam system in the form of the new National Qualifications, require a substantial change in the mind-set of teachers. Teachers expressed anxiety, and in some cases fear, with regards to this, as they were often unsure exactly what was being asked of them.

Teachers expressed a number of [mis]understandings of assessment in relation to CfE. For example, a minority of interviewees' understanding of CfE was based on the erroneous idea that it required the replacement of summative assessment with formative assessment. This led them to see CfE as having an over-emphasis on formative assessment; as one teacher said 'we have swung too far the other way'.

Of greater consequence was evidence that curriculum development is perceived by interviewees to consist mainly of assessing, recording and reporting. Such a view existed among a number of interviewees, including some who had clearly engaged with CfE, and is indicative of the culture of performativity within which teachers work (see Cowie et al., 2007; Priestley et al., 2012). According to one primary teacher:

At the end of the day a parent still wants to know where exactly their child is in language and maths. Are they on a par with their peers? Are they below or above and although we shouldn't be labelling children in these ways, there is still pressure to do so. And it doesn't just come from parents. It comes from the authorities as well. E.g. the INCAS [standardised] tests. (Interview)

Significantly, this points to the difficulties many teachers face as they try to move from prescription to greater teacher autonomy. Such views are likely to be remnants of the 5-14 system. Some teachers reported becoming so 'engrained' in this way of working that they now find it hard to think in the ways required of them by new forms of assessment.

We had possibly become so engrained in the 5-14 and everybody knew that at 100 paces, where we stood with that ... it really gelled for us. We were kind of getting frustrated at not knowing what we were supposed to be doing and where we were going. Why they didn't give us materials that would could just go out and use? [...] All that kind of worry, and it was getting to the point last Easter that we were getting really up-tight about it. ... I was quite concerned about that, that things were not going to go right because we haven't got the right kind of frame of mind for this. (Interview)

Such concerns were most prevalent among primary teachers who expressed frustration in relation to the move from 5-14 to CfE levels. These were considered to be too wide and too vague to be meaningful. Some teachers said they continued to keep the 5-14 levels at the back of their minds so they had something to refer back to. There were, however, examples of teachers who had got to grips with the new system, but they too admitted that it had required a change of mind-set: 'It's just different now. CfE is just completely different. So I've let go of my hang ups and this is where we are. And that's what we're supposed to do.'

The issue of assessment was the greatest concern for secondary teachers also. Teachers who were involved with inter-disciplinary projects as part of the BGE often puzzled over ways to assess, record and report on children's learning in these classes. Some had introduced portfolios (a few were considering e-portfolios) which charted children's progress. However, teachers remained unsure as to how best to assess such information, and teachers said the children's work would stay in folders until this was resolved.

The perceived lack of clarity around the details of the National Qualifications generated great frustration and confusion among many interviewees. A teacher who had thoroughly engaged with CfE sympathised with her colleagues who found CfE more difficult; 'taking away every frame of reference' for teachers used to working towards exams was bound to make people feel unsure, she said. Another interviewee said:

We have been preparing and knowing about the assessment in Scotland for years and years, and to suddenly change it... we don't know what it is like yet. We are not prepared and not experienced in it yet; never mind getting the students to actually do as well as they can in it. (Interview)

In secondary schools then it is clear that the possibilities for curriculum development were being limited by the way teachers viewed their role as being ultimately to prepare students to pass exams, which goes against the principles of CfE. This was further hampered by the 'wait and see' approach taken in some secondary schools, where teachers waited to see the details published of the National Qualifications by the SQA before the development of senior phase curriculum models. Teachers in both primary and secondary described the development of assessment in CfE as an 'afterthought', and complained that it has been developed 'back to front'. Allied to this were worries in relation to continuity and progression, 'because one teachers' interpretation of [assessment] could be different to another'. Such issues all served to confound interviewees understanding of assessment.

Reporting was another related tension for interviewees. Participating schools had various reporting systems, and the local authority was trying to introduce a more uniform system at the time of the research. Teachers referred to new systems which required them to use the terms 'consolidating', 'securing' and 'developing' (briefly discussed earlier). However, teachers reported that they did not feel secure in using such terms, partly because they were considered subjective and open to interpretation. Most teachers had not had the opportunity to discuss meanings with colleagues, leading to them feeling anxious about communicating the meaning of them to parents. Primary teachers reported finding writing the new style of reports 'challenging'. In one school, the terms were dropped from the new reports until parents had been consulted on the issue; 'we decided we wouldn't really mention if they were level 1 or level 2, because we're not that certain ourselves'. In a secondary school, the terms were replaced with numbers until such time as all departments had been able to reach agreement as to how they should be used.

In summary, it is clear then that one needs to be cautious in accepting at face value the fact that many teachers appear to welcome the principles of CfE. Our data suggest that if we think in terms of first order engagement, then a great many teachers do indeed welcome the new curriculum. However, a look at second order engagement suggests that the terrain is significantly more complex than it initially appears. The research suggests that teachers have different [mis]understandings of the purposes and philosophy of CfE, which relate inherently to their experiences of the *5-14 Curriculum*, and to their own personal beliefs and values about education. We now explore some of the factors shaping the implementation of CfE on a practical level.

4.2. Practical implementation issues

As we have shown, teachers broadly welcomed the ideas and philosophy behind CfE, and praised the drive to make learning more engaging and relevant. However, both interviewees and survey respondents shared concerns about the implementation of the new curriculum, which was widely believed to not take into account the complexities of delivery in the classroom. The over-riding view we encountered amongst teachers was that, while the philosophy and the reasoning behind CfE were deemed to be sound, implementing such a flexible and diverse curriculum raised a number of issues on a practical level. As one teacher said, 'I like the ideology behind it. I just don't think it's addressed some of the realities of life'.

Many teachers variously described the implementation of CfE as 'flawed'; 'a shambles'; 'a struggle'; 'a train crash' and 'a disaster in waiting'. The most frequently used phrase was that teachers were 'floundering in the dark'. It should be noted that such comments were made across the board, by interviewees and survey respondents alike. Even those teachers who were most engaged with the new curriculum identified issues linked to its implementation; for example, some interviewees reported feeling let down by the practicalities of CfE. They described their initial feelings of excitement ('this is what we've been waiting for'), particularly in terms of looking at the whole child, and saw the potential for it to transform education in Scotland. However, in a few cases this initial optimism turned to scepticism and disappointment that the most hadn't been made of the opportunities it promised.

The following sections explore some of the practical issues identified by teachers which were perceived to enhance or impede implementation of CfE in Highland.

4.2.1 Lack of clarity

A key barrier to implementation was the perceived lack of clear guidance, from both a national and a local perspective. Interviewees and survey respondents repeatedly referred to CfE as ‘woolly’, ‘vague’ and ‘wishy washy’. The lack of clarity was seen to apply not just to official guidance relating to CfE, but also to assessment; the new qualifications; the structure of the curriculum; and the Es and Os. The concentration on what were seen as abstract ideas in a language which was not easily translated or understood by teachers was felt to be too open to interpretation. Teachers referred to the ‘over use of acronyms and jargon that no one really understands’, and which did not ‘fit’ with the language of the classroom. Some teachers described the four capacities as a ‘mantra’. Teachers said they were unsure what was being asked of them.

The practice of it is another story. I just think it is a huge amount of work to ask of teachers ... It's like someone asking you to do something but they are not quite sure what they want you to do. Therefore you have to define what they want you to do. (Interview)

At this stage it just feels a bit like floundering in the dark and kind of being left to get on with it, a wee bit. Because, I mean, with the 5 to 14 everything was there and I do feel it probably was too prescriptive, but at least you knew roughly what you were expecting to do and when you were expecting to do it. (Interview)

Lack of clarity around assessment was of greatest concern. Large numbers of open-ended responses to the survey requested the need for guidance from the LA regarding assessment. Teachers called for more centralised assessment and tracking information, but yet very few mentioned having used the tracking template available from the Council. It was unclear whether this was because they were unaware of this, or whether it was deemed not fit for purpose.

There was a sense, however, that by the time of the second interview teachers were becoming increasingly clear about, or more willing to engage with, CfE. Teachers reported feeling clearer about what CfE means in terms of methods and approaches to teaching and learning, but, as a teacher explained, there was still confusion as to ‘what is in the actual document I have got to teach. That’s where the problem is’.

4.2.2 Risk

Interviewees identified a range of different risks they faced when implementing CfE. The most frequently expressed were those identified in Section 3.4 relating to concerns that pupils may be adversely affected by the new curriculum.

Other examples of perceived risk were those relating to the idea of promoting greater diversity and autonomy for schools and teachers. Some interviewees felt hindered by the perception that all teachers are supposed to be developing curriculum differently. Instead of promoting diversity, some interviewees described this as a lack of consistency. This was an added concern for teachers, who worried that a lack of standardisation could disadvantage children, particularly those moving between schools. Diversity also impacted on perceived levels of teacher workload, with some describing a lack of consistency as duplication, with ‘every single teacher reinventing the wheel’ as they tried to make sense of CfE and plan and develop new assessments, courses and resources. Teachers emphasised the substantial amount of time and energy required of them in order to bring about changes in both their own practice and within their schools as a whole. Interviewees and

survey respondents repeatedly pointed to the need for standardisation/exemplars of assessment so that everyone is 'singing from the same hymn sheet'.

The importance of attainment data was particularly prevalent throughout this research. Teachers commented that while CfE has many facets, and is concerned with developing the whole child, rather than focusing purely on their academic performance, ultimately teachers and schools, will be judged on their attainment results. Teachers said they felt accountable to the local authority and the collection of attainment data. They described the pressure they felt under from the Quality Improvement (QI) team at the Council and HMIE inspectors with regard to attainment. A number of schools had experienced repeat inspections and described the adverse effects of this on staff morale. Teachers spoke of the danger of implementing CfE in particular ways which had been discussed and agreed with colleagues, but which inspectors might criticise. It was felt, rightly or wrongly, that the inspection regime was not necessarily in step with the philosophy of CfE.

When it comes down to it schools are ultimately assessed by HMIE. So they're really the ones that are going to come in and say, 'yes, this looks good'. Or 'why have you been wasting your time on this?' (Interview)

There was also evidence of innovation fatigue with some interviewees questioning whether it was worth changing their practices, given that a new initiative may come along again soon. Interviewees spoke of the risk that parents would not understand the new ways of teaching, learning and assessment, and described the pressure they felt under from parents. Whilst interviewees in the sample described having good relationships with parents, they were clearly fearful of how parents might respond to cooperative learning, for example. To tackle this, one school invited parents in to observe lessons. In a secondary school which had developed textbook-free lessons, they felt they had to return to the text book after objections from parents. Teachers also raised concerns that employers, universities and parents have little knowledge or awareness as to what CfE or the new qualifications are, and called for further communication and engagement with these groups.

4.2.3 Funding and resource issues

One of the most frequently identified barriers to the implementation of CfE was funding and the perceived adverse effect that cuts had on staffing and resources. Teachers (both interviewees and survey respondents) questioned how transformational change could be achieved in an age of austerity. Open-ended responses to the survey included:

If there is no money to fund this then it's down to the goodwill of staff: many of whom are fed up of being seen as doormat! [sic] (Survey)

Even if CfE had an appropriate timetable, the current Budget Cuts prevent any sort of effective implementation. (Survey)

Everything is [being] done on the cheap. With all the cut backs then the whole vision thing is going to fall flat on its face. Unless there is an increasing budget then schools are not going to provide the experiences for today's children. (Survey)

The school visits were conducted at a time when austerity measures were beginning to take effect. A number of participating schools had already lost staff due to falling pupil numbers or were planning redundancies. Headteacher interviewees reported how reductions in management time had impacted on the size of senior management teams. Greater use of temporary contracts for new staff

and staff turnover were also an issue in some schools, impacting on the extent to which staff were able to engage with CfE. As an interviewee explained, such issues often took priority over curriculum development.

We're still very much dealing with the practicalities of day to day existence in a school rather than thinking of the bigger picture in a big way. And sometimes, day to day stuff does get in the way. (Interview)

Staffing issues were then a key concern and led to significant levels of anxiety among both primary and secondary interviewees. At the time of the research, the position of support staff within the local authority was also being debated. Whilst this issue has since been resolved, it is clear that it affected teachers' relations with the local authority. The possibility of increased class sizes in the future was also deemed to have a potentially detrimental impact in terms of teaching and learning approaches, and would reduce the potential for outdoor learning. Budget cuts were noted as having impacted on CPD provision, constraining the extent to which teachers from across the region are able to meet.

Problems relating to ICT were also regularly raised by interviewees and survey respondents, and were perceived to impact detrimentally on the implementation of CfE. Interviewees worried that they would lose ICT equipment not covered by the local authority's new ICT contract with a private contractor, and emphasised the importance of well-resourced ICT in order to implement CfE as intended. Survey respondents commented:

With the current financial climate and the huge changes Highland have made i.e. ['private contractor'] and their management print service, successfully implementing CfE is getting more difficult. Staff morale is very low. (Survey)

Also trying to create new, valuable, engaging and enjoyable lessons is made near impossible with insufficient ICT resources and the continuous staff cuts. (Survey)

Interviewees indicated that resources need to be more centrally controlled due to the perception that many teachers were duplicating each other's work and 'reinventing the wheel'; however, Glow was not considered the most appropriate means of sharing resources. Few interviewees reporting using it as it was considered too complex to access the 'overwhelming' amount of information it contained. Similarly, teachers also commented on the need to make the Highland Virtual Learning Community (HVLC) more user-friendly. The Council is currently looking at trying to 'disentangle' its websites to make them easier to access and use.

4.2.4 Teacher workload and morale

The uncertainty around funding and job security outlined above led in some cases to very low morale among teachers. This was hampered by concerns about the McCormac review (being conducted at the time of the research), changes to teachers' pay and conditions and union ballots as a result of this. We found evidence of morale worsening among both primary and secondary teachers, but especially secondary, in between the two interviews. This was considered an additional barrier to implementation, as explained by this teacher:

The biggest barrier is one that has appeared recently - the absence of goodwill due to imminent changes in pay and conditions. I honestly think that if CfE had been offered 5 years ago it would have been a done deal. Now, thanks to the backpedalling, I'm much more cynical. (Interview)

The pace and complexity of change was seen by our interviewees as an issue contributing to staff negativity towards CfE. There was a perception from nearly all interviewees that workload had increased as a result of CfE introduction. This was mainly due to the amount of time it took to unpack the Es and Os, both individually and with colleagues, and to plan and develop new lessons and resources. Time was of greater issue for teachers in smaller schools, where staff tended to have to take on multiple roles. Many comments in the survey also relate to stress, workload and morale issues. Interviewees noted that this was inevitable because CfE requires whole new ways of approaching things and getting pupils to interact with each other, but it was nonetheless an area of great concern. A respondent wrote:

Teachers are overloaded and don't have the time to write new courses. Pupils will suffer in the long run and that is not what teachers want. They are striving to do the best they can for their pupils but the system is failing them (both teachers and pupils). (Survey)

We refer back in this context to our previous discussion about how sense-making processes facilitate second order engagement with the big ideas of the curriculum.

4.2.5 Teacher attitude and confidence

Of particular note in relation to barriers to the implementation of CfE was lack of confidence among interviewees, both in taking forward CfE themselves, but also in terms of lacking confidence in the system to bring about espoused benefits for children. Teachers' personal lack of confidence was linked to the lack of clarity around CfE, and in particular in relation to uncertainties among secondary teachers in relation to the new qualifications and assessment. The frequent use of phrases such as 'floundering in the dark', 'walking blindfolded' and 'scary' point to low levels of confidence amongst teachers. Some interviewees expressed reluctance to move away from what they were used to. The lack of clarity around the new curriculum meant that even confident teachers used to developing their own curricula, and whose philosophy and practice matched well with CfE, sought reassurance that what they were doing was correct; 'it's thinking you could create something and then be totally wrong, that's I think the fear'. This tended to militate against change in some cases, as shown by an interviewee who said, 'a lot of what's holding people back is the thought that what they are doing might be wrong'.

Teachers spoke of the pressure they placed on themselves to 'do the best' for their pupils, and of not wanting to 'look stupid' in front of their colleagues. This was compounded by the volume of change some teachers indicated was expected of them.

I think we will accept it more - the whole spectrum of it - if we just try to do a bit at a time. I think it's a good idea, I just feel as if teachers feel a lot of pressure on them just now. (Interview)

A teacher responding to the open-ended question in the survey emphasised the need for clarity and discussion: 'until the spirit of CfE is properly and comprehensively explained to teachers, guilt and the fear of being held accountable will stifle free-thinking and innovation'.

All our interviewees engaged with CfE to some degree at least, although to varying levels. Some interviewees referred to a minority of resistant teachers who were seen as a further barrier to implementation of CfE. An interviewee referred to some colleagues who would 'never in a month of Sundays' engage with CfE. This issue was much more prominent in our interviews with secondary teachers. Another teacher referred to the 'polarisation' between two groups in her school which were 'at loggerheads'. She described her own group as 'moving forward and examining all the ideas',

while the other stuck to traditional teaching methods and 'rejects it [CfE] out of hand'. The issue of divided staff was also raised in a third secondary school:

It's in the staff. It's written all over their faces. People standing up and blatantly refusing to take part. [...] 'This won't work, I won't do this'. And that's another problem. It's creating a divide in the staff. (Interview)

A teacher discussed some of the reasons for this:

It's almost as if there's a group of people who are constantly looking for someone else to solve their problems. But they are not prepared to do enough to find out what is actually out there to help them. (Interview)

The staffing make-up of some of the schools was one of the reasons put forward for teachers' resistance. It was noted in some schools that there had been little staff turnover in the past, leading to inertia. Interviewees described coming up against resistance from colleagues who were of the opinion, 'we have always done things like this, why change?' Interviewees did, however, indicate this was beginning to be addressed by recent or imminent staff retirements.

Some, mainly younger, interviewees appeared to place the blame for this inertia on the oldest and most experienced teachers. An interviewee teacher said, 'it's very hard to change the way that experienced people do things, which is not to say that they're bad teachers, you know, some of them are very good teachers'. There was a sense that once more probationers who have been trained in CfE come into schools this will start to have effect on implementation. Headteachers spoke of the impact of retirements in their schools, and how their staffing make up was becoming more 'balanced' as a result of bringing in 'new blood'. An interviewee said: 'we have quite a few new staff here, and they've revitalised it. And made people think about what they are doing and kept everyone on their toes.' It should be noted that perceptions of older/more experienced teachers being resistant to CfE are refuted by the survey data (see Priestley & Minty, 2012), as well as by the sample of interviewees – those who engaged with CfE most thoroughly tended to be more experienced teachers.

4.2.6 CPD and collaborative working

The use of Continuing Professional Development (CPD), peer observation and collaborative working were considered vital in engaging teachers in CfE and in enhancing its implementation by providing reassurance to those teachers lacking in confidence, and potentially helping to bring on board more resistant teachers, and develop reflective practitioners.

It was felt that involvement in Teacher Learning Communities (TLCs) was one such way of engaging teachers, because of the perceived 'non-threatening' format, which as one teacher said, 'gets them to engage in a way that doesn't harm their confidence'. Teachers on the whole highly valued the opportunity to meet with colleagues and discuss their experiences of and concerns about CfE, mainly because, as an interviewee noted, 'people just don't get the time to think, share ideas and perhaps allay the fears that there are amongst some staff'. Encouraging teachers to take ownership by having them develop units of work for example (as in the Highland working groups) was also seen as important.

If you put yourself into it then you become more confident as you try it and you don't mind getting things wrong and going back because you have a supportive group of teachers behind

you to say what's going wrong. But that ability to be able to talk and sit down and go over things, that's really important. (Interview)

Teachers' requested more opportunities for CPD, but that which is more focused. The content of some of the in-service events was sometimes described as 'piecemeal' and 'vague'. A minority of secondary interviewees indicated that discussions held as part of the Associated School Group (ASG) CPD events would have been better spent working with department or stage colleagues, or having extra time in the classroom to be able to 'get on with it'. Some secondary interviewees resented working with primary colleagues from feeder schools. There was a perception that in-service training tended to be focused in Inverness, making it difficult for teachers to travel to in terms of time, expense and staff cover.

The 'Stirling Project', Tapestry and, in particular, the Cooperative Learning Academy (CLA) training were identified by most interviewees as having driven the implementation of CfE in highland. A local authority representative emphasised the fact that 'teachers engage teachers'. The CLA training events, which had been attended by all primary and most secondary interviewees were especially valued. Its success was deemed to be due to its 'simplicity' according to one interviewee, which had reportedly won over even sceptical colleagues. While CLA was seen as distinct to CfE, it was perceived to fit well with the principles of CfE, and was seen to help teachers enhance the way they use CfE.

Progress was being made with the introduction of Tapestry, which was identified as a strong driver in the case study cluster in engaging teachers in dialogue about strategies with peers, and in developing confidence. Efforts were being made to embed and share this across the schools, particularly in terms of exploring ways of engaging with those who would not normally engage with such an initiative. Interviewees praised these initiatives, but it was noted that 'the people who are interested go. And the ones who aren't don't'. It was suggested that only by forcing resistant teachers to join Tapestry would this have an effect, but then this was seen to be in conflict with the voluntary ethos of the groups.

One means of tackling inertia among staff has been to implement programmes of peer observation both in teachers' own schools and in others, which were deemed very successful and praised by all interviewees involved. Efforts were being made to implement and embed peer observation in all the schools we visited. This was being done on both an individual and school cluster basis. The opportunity to visit colleagues in other schools was especially valued, though it was recognised that this was difficult logistically. On the whole, there was a sense that teachers were becoming much more comfortable with, and confident about, their colleagues coming into their classes, and identified the benefits of this:

What made a difference to us was we were made to go and start observing each other's lessons. Now that's cheap really; you take a free period and you give up your free period to go and watch somebody else teaching, but my goodness what you can learn! (Interview)

It's making us question ourselves and how good we are as teachers. (Interview)

It makes you think about the what, why and how of teaching. (Interview)

Probably I think the most useful thing I find [in helping implement CfE] is talking to my colleagues in school or being able to go and see what a teacher in another school is doing. (Interview)

Teachers also spoke of there being a more reflective atmosphere in schools. They were far more likely to talk to colleagues now about learning and teaching and to query practices than previously. This, however, was seen as something which would have likely happened despite CfE.

4.2.7 Specialist subject working groups

The specialist subject working groups were also considered an important means of enhancing engagement with CfE. These groups originated via the Council policy of seconding subject leaders for a part of each week, to provide support to colleagues, and have continued to be supported by the Council in tandem with the Stirling project. Each of the four working groups linked to the project (science, maths, English and modern foreign languages) has been given funding to provide cover for teachers from throughout Highland to meet and share ideas. Each group identifies an area to work on, for example the development of resources or assessment.

The six interviewees who were part of the working groups were largely positive about their experiences, and identified the groups as drivers in their implementation of CfE. They appreciated the opportunity to meet with colleagues from other schools and to share ideas. One interviewee saw her working group as a means of gaining recognition for her work by promoting her school's activities to teachers elsewhere. Most of the working group interviewees looked to the groups as a means of gaining reassurance that they were on the right track. Some of the teachers spoke of the working groups as 'support groups', where they could go to discuss their concerns, particularly in relation to CfE and assessment, with like-minded teachers.

And the improved confidence that you come away with from a group like this where you can see that other people are maybe doing different things, but along the same lines, and you can then go back and talk about it. It's really, really helpful. (Interview)

Brilliant, absolutely brilliant. So many ideas, such a good exchange. You think that you're the only one with a problem and then you meet other people who've all got exactly the same problem. (Interview)

Three of the working group interviewees were incredibly proactive, and had fully engaged with CfE. Two of these interviewees, however, conveyed a sense of isolation in their schools, both geographically and ideologically. For a teacher in a small secondary school the working group was seen as 'vital' in allowing her to have discussions with other subject specialists. Amongst the working group members there was a perception that those on the groups would have done their projects, or something like them, whether or not they were part of a group, because they were already that way inclined, but that the group had provided them with the impetus for this work.

However, working group interviewees were not always clear as to the remit of the groups. There appeared to be a lack of communication and strategic direction in terms of what they were expected to do as a group. Part of this it seemed was linked to the fact that the partnership went under the name of the 'Stirling Project' within Highland. It was suggested that it may have been better to have given them a name more appropriate to the task the groups were undertaking.

4.2.8 Leadership and departmental support

Nearly all the teachers we spoke to said they felt very well supported by their colleagues and by their senior management. Interviewees explained that they felt comfortable going to management for help and support, and some indicated that headteachers and senior management teams more

widely were working very hard to take CfE forward. Secondary teachers also identified Principal Teachers in their departments as having enhanced implementation. Headteachers expressed concern that the 10% reduction in management time would also hinder implementation, and were anxious about how this would impact in their schools.

Generally, interviewees agreed that senior management had been supportive in implementing CfE and promoting new ways of working. Some comments from survey respondents differed, however, with a small number of respondents complaining of a gulf between senior management and teachers.

One of the main obstacles to fuller and more meaningful implementation is the lack of appreciation of what is actually required by most senior managers who tend to talk a good game but have no real understanding of what they are actually trying to get their staff to implement. (Survey)

It is important for heads to have a clear strategic vision of where they are taking CfE in their school. In schools where this vision was absent, or was not clearly articulated to staff, progress in implementing CfE was hindered, pointing to the need for further local authority support for headteachers.

4.2.9 School factors

Overall, it was felt that the size of school was important in terms of creating an environment where CfE could be implemented more easily. A number of interviewees in smaller schools commented on the benefits of being part of a close-knit group of teachers, where it was easier to arrange meetings with colleagues in other year groups and departments. Arranging cross-curricular meetings in large schools was deemed to be particularly difficult, whereas smaller primary schools noted they could be more flexible in this respect. On the other hand, survey comments from a number of respondents highlighted the difficulties they have encountered in terms of a perceived lack of support, especially in the smallest one or two teacher schools. In such cases, teaching heads suggested that further support could be provided by the local authority.

4.2.10 Highland support and guidance

Teachers tended to locate their confusion around CfE with external agencies, including school inspectors and the government. However, the Highland Council was also seen in particularly negative terms by some teachers. Part of this emanated from the current situation in respect of budget cuts and possible redundancies. However, the Council was also criticised as having created barriers in terms of their lack of structure at a strategic level. There are multiple different structures in place facilitating the implementation of CfE in Highland. These include the Quality Assurance Team made up of Quality Improvement Officers (QIOs), subject supporters, specialist subject working groups, a Curriculum Group, and a Learning, Teaching and Assessment Group. Alongside these, there are also TLCs, Tapestry groups and the 'Stirling project' as well. This caused confusion for both headteachers, who were trying to implement so many initiatives at once, and teachers.

Since I have arrived there have been huge changes [...] We had, obviously, implementation of Curriculum for Excellence; we had the Highland Council policies coming out left, right and centre; HMIE. It's been a lot of change, a lot of admin and it is hard to put the brakes on and say 'I just want to get back to doing my job now'. (Interview)

Whilst Council working groups (including subject teacher networks), the Quality Assurance team and subject supporters were described as strong drivers in many respects, there was a perception that there were too many groups which duplicated or overlapped each other's work. A teacher described the 'piecemeal' approach as something which further added to disengage staff from the process of implementation.

There is no umbrella. [...] no central point to refer that to. So all these groups are doing great work, but not matching things up. [...] You can have three groups working on all these areas to develop a strategy for all three, and come out with three completely different documents. [There is] no council wide structure which concerns me quite greatly. [...] Staff become discontented. (Interview)

A number of open-ended responses to the survey also emphasised the need for greater direction from the Council.

It would be useful to have a clear and shared Highland vision of CfE instead of each school working independently. (Survey)

Lack of strategic leadership within the authority to support schools is an issue. Also not a clear vision which is clear to all about where we are as an authority. We need a clear road map supported by CPD and an authority that has specific expectations and schools and leaders and not a situation where goal posts keep changing. We are in this together – or should be! (Survey)

Some primary teachers talked of 'conflict' between policies within the local authority, for example, the Highland Literacy Project which some interviewees deemed very prescriptive in contrast to CfE. Primary teachers also raised concerns about the introduction of INCAS standardised tests. Such tests have been introduced across Scotland in recent years. INCAS was piloted across ASG clusters in Highland, with the intention to roll it out across the local authority. Whilst the need for some kind of benchmarking for the local authority was recognised, some interviewees found it hard to reconcile the introduction of INCAS with CfE, expressing concerns that there was a gap between the values espoused by CfE and those of INCAS, and that it prepared the way for SAT style testing. A teacher commented that the Council was sending out conflicting messages about autonomy by introducing this system.

On the one hand they want us to be thinking outside the box and doing more creative stuff which is great. But on the other hand they are saying 'well, they also need all of these skills and you also need to have this percentage pass the test by here'. And the two don't really marry together. And that's why teachers feel that they are pulled in all directions. And I really do quite strongly think that's something that's got to be addressed. (Interview)

The *Highland Model of Engagement* and the *Learning, Teaching and Assessment (LTA) policy* were described by Council representatives as being central to the local authority's work in engaging teachers with CfE. The documents are published on the Highland website and promoted at in-service and CPD. However, we found that while the Engagement Model was well known among headteachers, it had failed to penetrate to teacher level; few teacher interviewees had actually read these documents, despite being aware of their existence. The primary reason for this was due to its perceived complexity and lack of time to engage with it. As one teacher said, 'you almost need a degree in social science to understand it. My honest feeling is teachers feel they don't have time to read'. However, interviewees who had spent time making sense of the 'triangle' and the 'big

diagram’ commented on the benefits of the materials and how they could be applied to their teaching. Teachers in one school used the *Model* for lesson observations.

There was a request for more practical, ‘hands on’ CPD with regards to the engagement model, perhaps showing in a practical way how it could be applied to the classroom. A teacher referred to CLA training, in which teachers were told that CLA fits in with the Model, but they were not told ‘how or why’. Part of the problem for teachers was that the volume of information on the HVLC and sent to them as multiple attachments in emails could sometimes be overwhelming. Teachers suggested a one-page summary with bullet points would be more manageable.

Interviewees also commented on the types of literature that was sent out by email. They questioned whether teachers would have time to engage with the more ‘academic’ articles they were sent. Again, these sentiments point to a need for systematic sense-making by teachers of new ideas and policies.

5. Implications for future practice and policy

We preface this final section of the report with a number of points. We remain convinced that CfE has considerable potential to improve Scottish education. We concur with Sutherland (2011, p. 204) that ‘CfE in the hands of an experienced and knowledgeable pedagogue would have much to offer’. However, it is clear that while the majority of teachers welcome CfE in principle, they are anxious and insecure as a result of their more negative experiences of the implementation of CfE. Teachers form part of a wider system of education, and it is clear that there are systemic issues which have impacted upon the form that the new curriculum is taking in practice. These include a lack of clarity in CfE documentation (particularly in respect of process), uncertainty about the future shape of assessment and the new National Qualifications and a climate of education cuts, pension changes and poor resourcing for curriculum development. It is important to bear in mind that it is teachers who are being charged with enacting the new curriculum, thus taking on the role of agents of change. Thus, it is vital to listen carefully to teachers’ concerns in order to identify how school-based curriculum development might in future be facilitated and enhanced, and how teachers might be engaged more fully and positively with new curricular policy. While CfE has much to commend it, some of the implementation problems appear to have their roots in the structure of the curriculum, and the processes formulated for its development at a national and local authority level. This inevitably raises uncomfortable questions about funding and resourcing.

This section identifies and analyses some of the issues raised by this research in respect of teacher engagement with CfE, and provides some implications for policy at both local and national levels. It concludes by offering a potential model for school-based curriculum development that might avoid some of the issues encountered within the development of CfE, and identified above. This report represents the culmination of the most significant piece of research completed to date on this major curriculum initiative. Whilst it has explored teachers’ responses to CfE, there remains an urgent need for sustained research funding for a longitudinal evaluation, exploring the impact of CfE on pupils’ – both in terms of attainment and softer skills.

5.1. Teacher engagement with CfE

A number of themes emerge in respect of teacher engagement with the new curriculum.

5.1.1 Rate of progress in implementing CfE

The data suggest that teachers' levels of engagement with CfE are highly variable and there remains considerable confusion and anxiety about the new curriculum. Some teachers, especially those involved with Highland working groups and other external bodies, have clearly engaged proactively, and demonstrated a high level of understanding of both the concepts behind CfE and suitable means for achieving curricular purposes. However, such teachers clearly did not form the majority, and elsewhere engagement was more varied and less sustained (particularly amongst teachers in the secondary sector).

5.1.2 Curriculum development approaches

It is clear that in schools and departments which have taken a long view of CfE, there is more evidence of clarity and purpose, and, we suggest, greater likelihood of more effective school-based curriculum development (SBCD). The research suggests also that these contrasting trends are linked to the mode of curriculum development utilised within schools. Clarity, purpose and focused innovation appear to be more evident where schools have adopted a holistic approach to curriculum development-based upon the big ideas of the curriculum. Conversely, as the data shows, the frequently used audit approach, involving the cross-referencing of current practice to Experiences and Outcomes, can result in (often tokenistic) changes being undertaken only where absolutely necessary. This audit approach has been also seen to be associated with key themes such as IDL, for example through the development of a sometimes contrived activity that 'ticks the IDL box'.

The research suggests a combination of reasons for this minimalistic approach to enacting CfE. Some teachers associated this approach to SBCD with a perception that the enactment of CfE was an incremental matter, and that it was adding to workload and the complexity of their work. CfE was seen by some respondents as something additional to implement on top of the already established core business of the school, rather than as a holistic framework within which coherent educational practice might be developed. Related to this is the issue of how CfE articulates with existing practices and teachers' beliefs. As previously noted, while a great many respondents welcomed the core ideas of CfE (first order engagement), more fundamental tensions emerged as the curriculum has been implemented (second order engagement). This was particularly evident in the ways in which interdisciplinary approaches jarred with pre-existing notions of essentialist bodies of knowledge encapsulated in subjects and transmission pedagogies. It was also visible in teachers' views about the role of assessment in curriculum-making. Such issues are supported by previous research on CfE, conducted by the University of Glasgow (see Baumfield *et al.*, 2010).

Associated with this were issues of risk. In a context where teachers' work is largely judged by success in rates of examination passes, such change represented a considerable threat. Consequently, the implementation of CfE was seen by a minority of teachers as a matter of strategic compliance.

Regardless of various motivations to develop the curriculum in this way, it is clear that the audit approach represents, in many cases, an overt attempt to maintain the status quo within CfE where possible. We suggest that the situation described above has its roots in an ambiguity and a lack of specification of process within the policy of CfE. The curriculum is framed in terms of two types of outcomes – both the long-term outcomes suggested by the Four Capacities as well as the more immediate outcomes specified in the Experiences and Outcomes. This has three potential problems. First, it creates multiple starting points for SBCD (see Priestley & Humes, 2010, for a fuller discussion

of the issue). Second, this sets up the potential for a disjuncture between the core ideas of the curriculum and classroom practices; the focus at a macro school level on big ideas, but their minimal translation into meaningful classroom practices. We suggest that this is a particular problem in secondary schools, where there is a more fundamental tension between core CfE ideas (particularly inter-disciplinary learning) and existing practices framed around the teaching of discrete subjects, and as content to be delivered (see section 4.1.2). Finally, there is a lack of a clear articulation of any process for SBCD within CfE policy. This situation inevitably results in a diversity of practices; some good and others less effective.

The variability of approaches to developing CfE described above has clear implications for Scottish education. Linked to this is the potential for what has been called (in the similar Australian national curriculum) a downgrading of knowledge (Yates & Collins, 2010) due to lack of clear specification of content in Experiences and Outcomes. This can lead to a selection of content based upon short-term, instrumental reasoning (e.g. making it interesting for pupils); and the selection of content based upon the fact that it is already taught. Such methods do not link content to curricular purpose, and they risk fragmenting the knowledge base for young people leaving school, potentially resulting in significant gaps in what they should know.

5.1.3 Sense-making in primary and secondary schools

As stated above, the research suggests that primary school teachers have on the whole engaged more positively and confidently with CfE than have those in secondary schools. Leaving aside the issue of differing philosophies, we suggest that a major factor in innovation lies in the potential for collegial working between teachers. It is evident that clarity and confidence are increased when teachers have had the opportunity (in a guided manner) to make sense of what are often new and different ideas. Understanding breeds confidence, and allows teachers to reconcile apparent differences between the old and the new. While many teachers attributed their lack of clarity to the materials accompanying the implementation of CfE, one might equally attribute it to the lack of opportunities for them to make sense of new ideas. The interview data show that in schools where teachers routinely had the opportunity to make sense of the new curriculum, in collaboration with colleagues, then there was greater clarity about what needed to be done, and less anxiety.

Small schools appear to provide greater opportunity to bring staff together. Conversely, in large primary and secondary schools, the situation is more problematic because there is greater structural fragmentation, more teacher isolation, and less well-developed channels for fostering horizontal relationships between teachers. In schools where peer observation has developed, these problems appear to be lessened. Moreover, where teachers' networks extended to beyond the school (for example, through involvement in council-wide working parties), we saw more confidence and a higher level of positivity towards CfE. It is of course difficult to establish whether this is due to the groups increasing teacher confidence, or whether it is because they attracted more confident teachers as members in the first place. We suggest that it is probably a combination of the two. This is supported by previous research (e.g. Howes *et al.*, 2005; Supovitz & Weinbaum, 2008). Teacher networking, both internal and external, has been widely noted to bring considerable dividends when teachers are faced with innovation; these include peer support, validation for their own innovations, access to new ideas and a dialogical forum for sense-making. Such impetus is important in innovation, to provide an interruption to habitual forms of practice and to prevent school-based discussions from becoming inwardly focused on what is already there, to the detriment of other

worthwhile ideas. Moreover, such impetus has been shown to be most effective when accompanied by access to expert knowledge and research findings (Coburn & Russell, 2007; Priestley *et al.*, 2011). It is evident from this research that, while Tapestry, TLCs and the subject specialist working groups have been positively received by those who were involved, they have not always permeated throughout the schools. The challenge is to find a way to engage those resistant teachers who tend not to be involved with these various groups.

5.1.4 Teachers' mediation of policy

The extent to which the philosophy of the new curriculum fits with the beliefs and values of teachers is not simply an academic issue. Research shows that successful implementation of curriculum change is highly dependent upon the teachers who enact it. For example, Osborn *et al.* (1997), in their analysis of England's prescriptive national curriculum, demonstrated clearly that even where there is a high degree of prescription, teachers are successfully able to mediate the curriculum to meet local conditions. The authors pointed to instances of 'conspiratorial mediation', where teachers actively subverted curricular policy, and 'creative mediation', where the provisions of the policy were used in imaginative ways to enhance the educational experiences of young people. To paraphrase Cuban (1998), schools change reforms as much as reforms change schools. Teachers' beliefs about teaching, learning and the purposes of schooling are a significant factor in shaping – and limiting – the processes by which teachers enact new curriculum policy. In respect of Scotland, this has been documented previously; for example, Swann and Brown (1997), pointed to the tendency for 5-14 to be implemented in many schools largely in terms of paperwork and terminology, with little resultant change in pedagogical practice.

5.1.5 Support and guidance

All of this points to the importance of ensuring that teachers have the time and resources for sense-making in respect of new policy. Clarity in terms of support materials is important. This observation applies not just to the centrally generated policy documents (for example the *Building the Curriculum* series), but also to the materials produced by Highland Council. The *Highland Model of Engagement* and the *Learning, Teaching and Assessment policy* were seen as good resources by those who had used them. However, many interviewees had not used them, citing their complexity and the time and thought needed to engage with them in order to be useful. In both cases – government and council – guidance materials need to be concise, clear and timely. Moreover, they need to focus on processes as well as outcomes. The importance of leaders – both within school and at a council level – is manifest here too. We suggest that this role is multi-faceted:

1. to provide support and encouragement;
2. to protect teachers in risk-taking, and to mitigate risk;
3. to actively create spaces for generative collegial dialogue;
4. to facilitate relational working, actively opening up formal and informal channels within schools and externally for horizontal working; and
5. to get actively involved so that they develop a first-hand perspective on the practical issues that shape implementation.

We remain convinced that CfE offers considerable potential for transforming Scottish education, and are heartened to some extent that the majority of respondents welcome the new curriculum, at least in principle. This is exemplified by comments such as: the 'long term benefits are definitely

there', 'it is the right way to work'; and 'benefits outweigh the cost'. Benefits were perceived to include its impact upon the confidence of children, its open-endedness and potential for teacher autonomy, and the fact that it is pupil-centred. Nevertheless, we note that these comments are in contrast to those which questioned whether the benefits outweighed the costs. Some concluded that the work, time and stress was not worth it, especially given concerns about how CfE might impact on children in the future. If such perceptions are to be mitigated, it is clear that there needs to be a more systematic approach to implementation – one based upon the articulation of clear processes by which teachers might make sense of new ideas and engage in school-based curriculum development – and that this needs to be accompanied by a greater degree of clarity in documentation. We need to move to an engagement strategy that facilitates second order engagement with the underpinning ideas of CfE, and which in turn allows schools and teachers to explicitly address tensions between policy and practice. This also involves finding the right balance between structure and autonomy, and identifying the areas where there are tensions between and within policies that impact upon teachers by creating irreconcilable contradictions in their day to day work.

The need to engage grassroots teachers in this new development is possibly the biggest challenge facing those currently implementing CfE; and in a time of budget cuts, staff reductions and low teacher morale. In the next section we offer some practical suggestions for achieving this, and outline a model for school-based curriculum development.

5.2. Implications for policy

This research highlights a number of fairly specific actions that teachers wish to see at the levels of the national and council administration of the new curriculum. We list here a number of points that have implications for both local authority and national policy, while noting that some of these points have already been addressed in various respects since the research was undertaken.

The Highland Council might consider:

- The development of a clearly articulated vision for CfE in Highland (this has been partially developed since the research was undertaken, but we believe that more work is required – see the model for curriculum development outlined below).
- Continued funding of the working groups, but alongside the development of a more strategic overview of the various groups in order to avoid duplication and confusion.
- The development of more and clearer guidance on assessment, that is specific to Highland.
- A need to be more selective with the material that is sent out to teachers, in terms of volume, focus and relevance to practice.

The Scottish Government, Education Scotland and SQA might consider:

- The development of more school-based CPD, with a greater focus on working with department and stage colleagues, and an emphasis on generative, collegial dialogue, with external input to generate new ideas and new practices.
- Providing further guidance to teachers on the transition between the BGE and senior phase, and in particular on the position and purpose of S3.
- Providing more specific guidance on curriculum models for the senior phase.

- Developing more and clearer guidance on assessment –especially in relation to the new qualifications and reporting procedures.
- Funding independent and systematic longitudinal research to evaluate the impact of CfE on pupils.
- Being more explicit about processes of curriculum development in future innovation of this nature.

A potential model for school-based curriculum development is outlined in the next section of this report.

5.3. A model for school based curriculum development

In particular, this research points to the need to find ways of engaging those that don't engage – extending the reach of the working groups and TLCs, and facilitating a higher incidence of second order engagement with CfE. The report concludes with the outline of a process model for SBCD which could achieve this. While in some schools, it may be too late to engage with CfE in this way; the utility of the model perhaps thus lies in future curriculum innovation. The model is suitable for both whole-school curriculum development, as well as more limited (e.g. departmental) projects. It has been trialled in Highland as part of the Stirling/Highland collaborative project and has been positively received by the groups of teachers working on small scale curriculum development projects. As a process model for curriculum development, its starting point lies in the big ideas of the curriculum – those long term goals about what a young person might become/achieve through education. There is a heavy emphasis on defining process (pedagogy/methods that are fit for purposes) and suitable content. The early stages of this model thus involve making sense of curricular purposes and identifying content and methods that are fit for purpose. This initial process has much in common with earlier, more linear SBCD models (for example Tyler, 1949; Thijs & van den Akker, 2009). However, the model differs in two important respects: 1] it pays attention to the context within which curriculum innovation, via the notion of a contextual audit; and 2] it employs a systematic and collaborative approach to professional enquiry that enables teachers to make sense of and implement innovation. Because the context itself is subject to change, and because the process of professional enquiry inevitably raises new questions, undertaking school-based curriculum development in this way through collaborative professional enquiry is fundamentally an iterative process – cyclical and long-term.

The successful application of the model depends on several factors:

- A clear specification of the process to be followed – ideally in the government/council guidance to schools concerning the implementation of curriculum.
- The availability in schools of teachers who have been trained to lead this sort of activity and who are fully familiar with processes of professional enquiry. These teachers should have access to externally available networks and expertise.
- Access to suitable resources – for example, research findings, theoretical models for structuring the curriculum (such as inter-disciplinary approaches).
- School-based structures and time available to facilitate professional collaborative dialogue, joint data gathering and analysis, and the creation and sharing of professional knowledge.

- Clear procedures and timescales for planning, implementation and evaluation (feedback and feed-forward loops – see Imants, 2002).

The advantages of the model are that it allows groups of teachers: to experiment with an innovation that they have discussed and agreed to trial with their students; to test new ideas in their classrooms in the context of a supportive group who understand and are interested in what happens; to pay attention, in a more rigorous and structured way alongside their students to evidence of learning; to make meaningful connections between the purpose of the curriculum and the daily practicalities of classroom activity; and to collectively construct professional knowledge about what constitutes an effective pedagogy for a constructivist, student-centred curriculum. Collaborative professional enquiry also enables teachers to work on key aspects of curriculum development in “doable” chunks since any intervention should be of relatively short duration 6-8 weeks.

The model follows the process outlined below:

1. **Initial sense making phase.** At this stage it is useful to bring all staff together to discuss the key concepts underpinning the innovation in question. In the case of CfE, these clearly include the Four Capacities (the underpinning components rather than the headline slogans) as well as concepts such as active learning. At this stage discussion needs to link the concepts to broader issues surrounding the purposes of education (i.e. why are these concepts important?), as well as clearly identifying how and why such concepts are similar or different to existing modes of practices. Enhancing understanding of key issues in this way forms the basis for subsequent [informed] curricular experimentation.
2. **Identification of methods and/or content that are fit for purpose.** At this second stage, the focus should be on identifying how the aims of the innovation might best be met. In some respects this exercise is about contrasting current realities with an ideal world scenario. Thus in terms of CfE, one might ask what types of pedagogy might best achieve the need to develop, for example, elements of the successful learner capacity such as the ability to think creatively and independently, and what knowledge might be required to achieve this.
3. **The collaborative professional enquiry phase.** At this final stage, teachers will move beyond discussion of concepts and to planning, implementing and evaluating curriculum development (see Reeves and Fox, 2008). This will involve translating the big ideas into classroom practice, through the following steps:
 - a. *The formulation of the intervention:* what is planned; how does it link to the purposes of the innovation; what are the timescales?
 - b. *A gathering of baseline data to inform the intervention.* This might include interviewing pupils and/or colleagues. It is a systematic audit of the general context within which the innovation needs to be enacted. This will involve the identification of barriers and drivers to the innovation, and the formulation of action to address these where possible. Thus, for example, it might be decided that more information is needed about different models for inter-disciplinary curriculum, and suitable resources identified; or that a new role of coordinator is needed in school to facilitate an action.
 - c. *A further sense making phase.* This process is a necessary part of the cyclical process of curriculum development, where each stage of the enquiry will highlight new issues to address. It is important in ensuring that teachers are fully engaged in defining, leading and evaluating innovation.

- d. *The intervention.* For example, this might be the implementation of new processes for assessing or moderating pupil work for National 4 qualifications, or the introduction of cooperative learning to improve pupils' collaborative skills.
- e. *A gathering of further data.* At this stage, the effectiveness of the innovation is evaluated.
- f. *A reformulation of the innovation.* Plans are modified at this stage on the basis of the evaluative data, and the intervention is revised if necessary (with a further time frame for additional evaluation).

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ⁱ Scottish Government (2008). *Building the Curriculum 3: a framework for learning and teaching*. Edinburgh: The Scottish Government.

ⁱⁱ For further detail, see: Priestley, M. (2010). Curriculum for Excellence: Transformational change or business as usual? *Scottish Educational Review*, 42[1], 22-35.

ⁱⁱⁱ See also: Priestley, M., Biesta, G.J.J. & Robinson, S. (2012). *Understanding teacher agency: The importance of relationships*. A paper presented at the Annual Meeting of the American Educational Research Association, Vancouver, Canada, 13-17 April 2012. This paper derives from a parallel research project, the ESRC-funded *Teacher Agency and Curriculum Change* project (RES-000-22-4208). Available at http://www.ioe.stir.ac.uk/events/documents/Teacheragency_AERApaper_final_000.pdf

^{iv} The apparent downgrading of knowledge in modern curricular policy has been subject to systematic critique by scholars within the social realism school of thought. For example, see: Yates, L. & Collins, C. (2010). The absence of knowledge in Australian curriculum reforms. *European Journal of Education*, 45[1], 89-102. Note that while we share the concerns of these authors in respect of the place of knowledge in the curriculum, we do not endorse their position on pedagogy, or their approach to deriving curricular content from the corpus of human knowledge. Instead we advocate a process driven approach (see note 7 below).

^v For example, see: Reeves, J. & Fox, A. (Eds.) (2008) *Practice-based Learning: Developing excellence in teaching*. Edinburgh: Dunedin Academic Press.

^{vi} Scottish Government (2011). *Teaching Scotland's Future: Report of a review of teacher education in Scotland*. Edinburgh: The Scottish Government.

^{vii} For further discussion of these issues, see: Priestley, M. & Humes, W. (2010). The Development of Scotland's Curriculum for Excellence: Amnesia and déjà vu. *Oxford Review of Education*, 36[3], 345-361.

^{viii} This issue is discussed at length in the following publications: a] Reeves, J. (2008). Between a rock and a hard place? A Curriculum for Excellence and the Quality Initiative in Scottish Schools, *Scottish Educational Review*, 40[2], 6-16; and b] Priestley, M., Robinson, S. & Biesta, G.J.J. (2012). Teacher Agency, Performativity and Curriculum Change: Reinventing the Teacher in the Scottish Curriculum for Excellence? In B. Jeffrey & G. Troman (Eds.), *Performativity across UK education: Ethnographic cases of its effects, agency and reconstructions*. Painswick: E&E Publishing.

^{ix} Supovitz, J.A. & Weinbaum, E.H. (Eds.) (2008). *The Implementation gap: Understanding reform in high schools*. New York: Teachers College Press.

^x Inter-disciplinary learning has become commonly known by its acronym IDL.