

ICT AND WORLDMINDEDNESS

John Gardner and Patrick Walsh

INTRODUCTION

In this chapter we consider how information and communications technology (ICT) might contribute to values and citizenship education in schools. It is no easy task to tackle such major concepts in one chapter and the excellent treatments of them elsewhere in this book will prove valuable backdrops for the reader. In targeting this section at those who wish to integrate ICT into their values and citizenship teaching, we have tried to make it accessible both to experienced ICT teachers and non-ICT experts, primary and secondary. Most importantly, we are also aiming it at those who wish to avail of ICT to further their own knowledge and skills in values and citizenship education. The Internet sites, which are discussed later in the chapter, may act as useful sources of ideas for teaching and professional development in values and citizenship education - not only for ICT coordinators but also for teachers throughout the school.

A word of explanation on the title of this chapter will be useful at the outset. We have chosen *ICT and Worldmindedness* in recognition of one formidable aspect of ICT: the potential for the Internet to enable worldwide communications and information sharing. Whether between individuals or groups, the communications-related dimensions of the technology have the potential to break down the physical and cultural barriers that currently separate the peoples of the world. More so than either television or telephony alone, it truly opens up the world and its citizens to the concept of 'large group consciousness', enabling dialogue in a manner that simply was not possible before. But more of that later.

We take up another important challenge for ICT teachers in this chapter: the recognition, in the context of values and citizenship education, that ICT itself constitutes a social phenomenon with attendant values and social impact dimensions. Its very existence and the manner in which it is used have implications for many aspects of today's living, and its pervasive influence in the lives of citizens is set to grow.

Finally, in this introduction, a disclaimer! In an ICT chapter such as this, the use of Internet addresses for identifying the sources of teaching materials and ideas is almost obligatory as

well as desirable. However, anyone who uses the Internet regularly will appreciate that unlike ‘real’ physical resources - of the kind available from publishers, libraries etc. - the ‘cyber’ resources of the Internet have the potential to be more transient. By this we mean that a resource that exists today on a computer in Berlin, easily accessible from any school computer in the UK, may not exist tomorrow if it is removed for whatever reason from that machine. We have therefore checked all of the sites given in the text and at the time of writing they are live.

VALUES EDUCATION AND CITIZENSHIP

Of necessity, we will only be able to define briefly what we mean by values education and citizenship. We will not engage in the questions and debates surrounding values e.g. Which values are most important? Are they shared by all? etc. Suffice to say that education, in the form of schools and schooling, has long been considered to be society’s second most important vehicle (after the family) for passing on commonly held values. In The Republic, for example, Plato scripts Socrates as telling Glaucon that education:

... would not be concerned to implant sight, but to ensure that someone who had it already was turned in the right direction and looking the right way (Book VII, 518)

Perhaps it wasn’t as important in the ancient world as much as it might be today, but what Plato didn’t script was Glaucon asking: “*Whose way is the right way?*”. All teaching is value-laden but it will not be for this chapter to ask Glaucon’s questions!

ICT teachers however, like everyone else, need some kind of basis for designing their contributions to values and citizenship teaching. To begin with, then, we recognize the common sense of the view taken in the report by the National Advisory Group on Preparing Young People for Adult Life (DfEE, 1999), that curriculum time “... *for aspects of citizenship and PSHE can do ‘double duty’ particularly at primary school.*” Much of what can be said for ICT supporting citizenship education can also be said for personal, social and health education (PSHE), albeit with different resources for different issues for different age-groups. Judgement on these pedagogic matters will always be made by the teachers on the basis of what they know of their pupils’ needs.

For definitions of values in the social context of modern living, one of the main overlap areas between PSHE and citizenship, we also borrow from the Preparing Young People for Adult Life report. The statements of values, under the headings Society and Environment

respectively, are helpful in making the link between values and citizenship for this chapter.

They are:

We value truth, freedom, justice, human rights, the rule of law and collective effort for the common good.

We value the environment, both natural and shaped by humanity, as the basis of life and a source of wonder and inspiration. (DfEE, 1999 para 3.12, p.8)

For the most part then we will assume that it is values in these areas, augmented with issues of democracy, globalization etc., that underpin many of the themes that come under the umbrella term of citizenship. Examples of these underpinning values and dispositions from the report of the Qualifications and Curriculum Authority Advisory Group on Citizenship, chaired by Professor Crick: Education for Citizenship and the Teaching of Democracy in Schools (QCA, 1998) include:

- concern for the common good;
- belief in human dignity and equality;
- concern to resolve conflicts;
- a disposition to work with and for others with sympathetic understanding.

For citizenship education specifically, we add the definition from this report of citizenship education for pupils as being:

... an entitlement in schools that will empower them to participate in society effectively as active, informed, critical and responsible citizens (QCA, 1998 para 1.10, p.9).

VALUES EDUCATION AND CITIZENSHIP: AN ICT CONTEXT

The Crick Report, while comprehensive, is relatively restricted in its treatment of how various subjects can contribute to citizenship education. Not so with ICT though! In a special appendix (Appendix B, p 67-71), Stephen Coleman sets out the argument that ICT is “...*growing fast as an educational tool, especially among young people*” and that it would increasingly provide opportunities “...*to participate in democratic discussion*” and for “...*invigorating citizenship education*”. To consolidate his point he provides details of a variety of sources that cover aspects of political literacy, including the Internet addresses of UK government, independent and party-political information sources.

That ICT is growing fast as an educational tool cannot be disputed but what Coleman is focusing on especially is the Internet. This provides both a means of communication between people and sources of information for them. The Internet is the global network of inter-

connected computers that enables worldwide communications between people. Access to the Internet is possible from almost anywhere on earth using the telecommunications network that encompasses the globe. All conventional telephone systems, cellular microwave (e.g. mobile phone) systems, digital television cabling networks and the broadcasting ‘footprints’ of orbiting satellites provide means of access to the Internet. The Internet can therefore be enjoyed by anyone with access through any of these means, whether they are in a major city, in the middle of a desert or in the deepest jungle.

While nowhere near approaching the volume of people connected by telephone, Coleman offers figures to show that in the 18 months between December 1995 and June 1997, the number of UK Internet users grew from 1.1 to 3 million. In the period since then, the growth can only be described as phenomenal. Internet service providers (ISPs), which do not charge for access to the Internet and which provide free e-mail facilities and a variety of free software for downloading, have proven a tremendous lure for new users. The provision of such facilities is not in any manner altruistic, of course, rather it is self-serving. The ISPs generate their income from advertising on the Internet and/or from the telephone charges levied for the actual contact.

The largest development within the Internet to date has been the burgeoning of information and resources available to its users through the World Wide Web. The Web was a long-predicted phenomenon, particularly in an educational context e.g.:

With vast libraries of data available to him [sic] via computerized information retrieval systems ... and his own electronically equipped study carrel, [the student] will be freed for much of the time ... of the restrictions and unpleasantness that dogged him in the lockstep classroom (Toffler, 1970 p.244)

and as a vast virtual library it offers the second part of Coleman’s focus: the provision of information for a global readership. Over the four decades or so since the first interconnection between globally distributed computers was accomplished (i.e. the rudimentary Internet of the 1960s), the format of electronically communicated information has gone from ticker-tape and largely numerical output to sophisticated, three-dimensional graphics, high quality audio and full motion, high resolution video. The visual quality of materials currently available to schools from museums etc. is therefore outstanding.

The business community has rapidly embraced the almost limitless possibilities for e-commerce (the selling of products from interactive internet ‘catalogues’) in recent years. In contrast, the development of learning and teaching through the Internet is suffering from a

lack of investment and, it must be said, a lack of knowledge of how best to exploit the educational potential. Nevertheless, there are some major examples of sound foundations being laid for the future. In the UK, for example, the National Grid for Learning (NGfL) continues to develop, with ever increasing numbers of schools ‘connecting’ to it and, through its links, to the huge resources of the Web. As more and more homes join the global net, it is inevitable that its use in an educational context must also grow.

This accessibility of the Internet - potentially in every home - precludes any exclusive ownership of its educational potential falling to schools. Access to such a global system will therefore increase exposure to value systems that may not be consonant with our own. And since this access will occur in the home, the shopping mall and the youth club, schools should not be surprised to hear unusual or even unpalatable views being expressed in class; opinions derived perhaps from largely unmonitored websites or Internet ‘chat-rooms’. In the same manner that television has for many years played an active role in the development of society’s and particularly young peoples’ value systems, so to will the Internet. And, it must be said, in the same manner that such a role for television has been considered in some quarters to be unwelcome, unregulated or inappropriate, the current and future role for the Internet as an educative medium also faces potentially hostile scrutiny. This scrutiny must be engaged in schools in the same manner as any other issue in citizenship or values education.

ISSUES IN CITIZENSHIP EDUCATION: THE ROLE OF ICT

The Crick Report sets out what the Advisory Group considered compulsory schooling should address in a citizenship context, and many of the concepts and issues they focus upon would find resonance with citizenship curricula around the world. They identify a series of key concepts, often mutually dependent but requiring different approaches according to the teaching context and pupil age-group. Examples of these include democracy, the rule of law, human rights and community-based volunteering. How may ICT contribute to the development, in these areas, of ‘active, informed, critical and responsible citizens’? It is here that the Internet rules supreme above all other aspects of ICT. Through the Internet, and its global library the Web, teachers and their pupils have the opportunity to:

- communicate with a variety of widely dispersed people and groups throughout the world; and to
- access and share immeasurable quantities of information, of all kinds, with people and groups distributed all around the world.

Communication and Information Sharing

Communication (e.g. discussion and debate on ideas) and the accessing and sharing of information (and experiences) form the central citizenship activities that are facilitated by ICT, in such a unique way. Using the Internet, pupils are not only citizens in their own local and national community but have the opportunity to become citizens of the world. They are able to use ordinary school computers to engage the ideas, cultures and values of their peer group throughout the world; exchanging information and developing an increased awareness, knowledge and understanding of global society and issues. The development of this 'large group consciousness' has now become a global pursuit - worldmindedness - where once it was essentially a nationally-based concept.

The quality of communication that the Internet can facilitate between pupils varies according to the resources available to a school (or indeed in the pupils' homes). It can be 'live' (both ways simultaneously) either as full audio-visual (e.g. person-to-person in videoconferencing) or audio only (computer to computer interaction with voice transfer). More simply, it can be staggered and in text form e.g. alternative 'speakers' in a 'chat-room' or discussion group. Simplest of all, it can be an exchange of messages in conventional e-mail whenever the person sending or receiving is 'on-line'. Whatever the nature of the communication, the sense of 'talking' with new friends is a clear motivation for many pupils and reluctance to engage in the interaction, at least initially, is rare. However, sustaining interest may be more problematic if the context of the 'discussions' loses its way and becomes repetitive and boring. Browsing the Web can similarly become unproductive in a learning sense. As Guy Claxton (1999) puts it: "*Surfing can be creative but it can easily become facile and disconnected, a jumble of baubles and trinkets that grab the attention fleetingly and are gone*" (p. 224). No different from any other participative activity, Internet work in the classroom therefore needs continuous priming by the teachers concerned to ensure it doesn't become dilatory and ineffective.

A 'brokerage' facility to enable schools to find partners for collaborative projects (pupils to pupils) has become an established feature of many educational websites and a variety of school networks on the Internet now exist. The Windows on the World website (<http://www.wotw.org.uk>) is an example which provides a forum for schools to find and link up with international partners for collaborative projects. Another, the European Schoolnet (<http://www.eun.org>), offers a civics section in its 'Virtual School'. This part of the site hosts

a discussion forum for teachers on citizenship matters and periodically enables contacts with members of the European parliament.

The information sources available for access and sharing on the Web would defy any attempt at quantification. The global convergence of telecommunications networks with desktop computer technology means that any information source, from the humblest small town library, or indeed school, pupil or ordinary citizen, through to the most famous of national museums and libraries, is amenable to those who can access the Internet. Very many of the more sophisticated sources have designed their websites to facilitate educational usage, often providing ideas and resources for project work, or from time to time promoting competitions or collaborative initiatives. Most websites allow printing or downloading of their materials (for storage in the school's own computers), which can then be used by teachers and pupils away from the computer, if so desired. And of course many schools now have their own websites where they post up information about themselves, their activities and their pupil interests.

But how does 'communication' support citizenship education? If you haven't been involved in this type of activity before, the use of ICT to foster collaborative work between pupils in your school and those in another, perhaps many thousands of miles away, may take a bit of imagination.

Consider a class that wishes to explore the type of culture or government in a country far away. Perhaps it is a society experiencing conflict (e.g. Kosovo) or facing a major social or governmental development (e.g. the Australian referendum on constitutional change). Short of organizing a visit to investigate the issues, the pre-Internet opportunities were more or less restricted to letter writing exchanges and the exchange of newspapers or perhaps audio and video tapes covering the aspects under investigation. The nearest thing to 'real-time' dialogue - discussion, explanation etc. - would have involved relatively, perhaps prohibitively, expensive telephone conferences. With ICT, however, e-mail and video conferencing opportunities put the pupils directly in touch with their counterparts in the far off country from their own school desks - assuming, of course, that the pupils in that country have access to the Internet. Whether the activities involve a fixed set of objectives (e.g. for a planned project) or an open forum for discussion and exchange of ideas, materials etc., is up to the teachers and the pupils.

Once a collaborating partner school is found, a number of options is possible for extending the interaction beyond the mere exchange of emails. These include the provision of a chat-room or discussion forum for pupils to discuss matters that interest them, including (but not always!) the topic they are collaborating on. This is not to say that teachers do not join in the discussions, which in most cases they do, but it is important to give the pupils their ‘own space’ as well. A similar forum is normally made available for the teachers to engage in discussion and to share resources, lesson plans, reflections on approaches taken to different topics etc. A ‘publishing’ area may also be available for teachers (and pupils) to publish their thoughts, pieces of work, discussion papers etc. Links to websites and other key contacts, which have relevance to the collaborative project area, are a feature of most sites and are updated regularly by the participating teachers and pupils. Very often, in addition to email facilities or ‘publishing’ areas, a simple bulletin board may be provided to enable ad hoc messages and notices of events, meetings etc. to be posted.

Clearly the most important resource in any collaborative citizenship project between schools is the sharing and discussion of ideas by the pupils concerned. The next most important activity, in the ICT context, is the sourcing of information and materials on the Web. For up-to-date discussion material, it is difficult to beat the immediacy of newspapers and one site (<http://www.webwombat.com.au/intercom/newsprs/index.htm>) offers links to over 4000 newspaper and news magazine websites around the world. Table 1 gives some examples (all English language) from this huge source:

Table 1: A Selection of International Newspaper Websites

COUNTRY	NEWS MEDIUM	WEBSITE	ARCHIVE OF PAST ARTICLES?
Denmark	Copenhagen Post	www.cphpost.dk/index.asp	4
South Africa	Natal Witness	www.witness.co.za	4
Bosnia Herzegovina	Bosnia Report	www.bosnia.org.uk/bosrep	4
Vietnam	Nh•n D•n	www.nhandan.org.vn	7
Jamaica	Daily Gleaner	www.jamaica-gleaner.com	4
India	Kashmir Times	www.kashmirtimes.com	7
Russia	St Petersburg Times	www.sptimes.ru	4

New Zealand	New Zealand Herald	www.nzherald.co.nz/nzherald99/index.cfm	4
Albania	Albanian Daily News	www.albaniannews.com	4

‘Conventional’ ICT resources also deserve a mention at this point. CDROM and computer-based learning materials, for example, can offer significant support to the teacher wishing to promote aspects of values and citizenship education. Encyclopaedia CDROMs (e.g. Encarta, Grolier etc.) offer the most accessible opportunities for stimulating discussion or assisting with project work, providing text digests and pictorial resources for a wide variety of topics. For many schools, struggling for resources and funds, the short term integration of ICT in citizenship education will be well-served by these relatively inexpensive resources.

Sources of Ideas for Teaching and Learning

What should be clear from this brief discussion is that the principles of Internet/World Wide Web integration into values and citizenship education centre on two overlapping processes: communication and the accessing/sharing of information. While the former depends on the quality of connection e.g. slow computers with slow internet links will quickly stultify any attempts at interactive communication, the latter depends on identifying good sources for the information needed for the project. ‘Search engines’ and ‘browsers’ exist to help users to find what they want but sometimes the process can be tedious. Very often a continuous and protracted refinement of search criteria is needed to get to specific types of sources, assuming they exist. In the area of values education and citizenship, however, several agencies provide website links to support teachers and pupils in schools. Many of these offer ideas for lessons, downloadable resources for classwork and opportunities for pupils (and teachers) to contribute to the resource base. In the next section we consider several of these websites.

Sites of Interest

There are many sites that can provide materials for values and citizenship education and this chapter clearly could not address all of them. Many of the large corporations, particularly the BBC for example, have major educational websites and these can be sourced fairly easily from their printed promotional materials or from browsing. What follows then, is our selection of sites and we encourage you to avail of them as appropriate. However with the

sheer volume of accessible material that will exist on other sites, you should always take the opportunity to browse the web in a wider search for them.

A variety of government-backed and independent websites exists, which support democracy, human rights, law and order and other aspects of citizenship education. A few of the most notable will be considered here. The Crick Report mentions the Foreign and Commonwealth Office site (<http://www.fco.gov.uk>). This site provides information (and guidance) for the UK citizen contemplating going abroad or simply studying overseas cultures in, for example, citizenship education. It gives up-to-the-minute assessment of conflict situations, digests of UK foreign policy and texts of ministerial speeches dealing with all aspects of the UK's external relations. As a source for discussion on international issues, it is comprehensive and accessible.

The first non-government site of interest which we have chosen, described in the Crick Report (p. 68) as excellent, is the One World site, “... *dedicated to promoting human rights and sustainable development by harnessing the democratic power of the Internet*” (<http://www.oneworld.org>). Covering both natural disasters and those arising from conflict and human rights problems, the site offers discussion materials on international crises. Details of the prevailing circumstances, any humanitarian or other interventions, ongoing or proposed processes of resolution and the outlook for the future are among the information offerings available. The provision of parts of the site in French, Dutch, Italian and German translations gives further meaning to the global ‘oneworld’ flavour of the site.

Charter88 (<http://www.charter88.org.uk>) is a site which campaigns for “*a modern and fair democracy in the UK*”. It offers sections dealing with alternative types of voting systems (first-past-the-post, single transferable vote, alternative vote etc.), parliamentary reform, who's who in government, freedom of information and so on. By virtue of its ‘mission’, it is largely a UK-relevant site but does draw on international experience in various aspects of democracy and government. For citizenship education per se, it offers the Citizen21 website (<http://www.citizen21.org.uk>), an “*on-line resource for educators*” with the facility to download resources or to acquire materials in print form. The site provides a comprehensive set of links to other relevant organizations including the Citizen Foundation (<http://citfou.org.uk>), the Institute for Citizenship (<http://www.citizen.org.uk>) and the Community Service Volunteers (<http://www.csv.org.uk>).

The Citizen Foundation, supported by the Law Society, provides several offerings of immediate interest to teachers wishing to contribute to citizenship education and particularly to their own professional development. In the Curriculum Development section, internal links provide sources of information, and classroom and in-service training materials, under the headings: Rights, Responsibilities and the Law, Citizenship in Primary Schools, the Moral Education in Secondary Schools Project and the Primary Citizenship In-service Project. The Citizenship in Primary Schools section points to resources offering stories for 6-11 year olds on Friendship, Laws and Rules, Respecting Differences, Property and Power, and Community and Environment. For secondary, there is a link to the Young Citizen's Passport which offers a booklet approach (with chapters covering family, money, policing, law, travel, work, safety etc.) to support citizenship and PSHE teaching.

The Institute for Citizenship site quotes its mission as promoting "... *informed, active citizenship and greater participation in democracy and society*". It offers details of projects it supports in local communities and nationally, and provides links to external sites for information. One of the most useful of these is the MORI poll site with access to a wide selection of public attitude polls in the UK since 1996. The Public Attitudes to Citizenship survey of 1998 (<http://www.mori.com/polls/1998/citizens.htm>), for example, makes interesting reading for citizenship discussions. The questions were designed to collect data on such matters as the respondents' views on what made a good or a bad citizen and whether they considered themselves good citizens. The site gives a summary of the findings.

The Community Service Volunteers' site promotes the concept of volunteering for the common good: "*We believe that everyone has something to offer*" and in 1998, according to their site, they facilitated the volunteering of some 100,000 people in UK and worldwide projects. The site offers support for piloting local volunteering schemes and provides details of ongoing projects, including major environmental projects around the UK.

The 'common good' has been mentioned as an underlying concept in citizenship and values education and a site of this name i.e. The Common Good, is run by the Australian Broadcasting Corporation (<http://www.abc.net.au/civics>). This wide ranging site offers support for teachers "... *in developing strategies that will prepare students to play their part as active and informed citizens*" i.e. citizenship and values education for primary and secondary classes. There are details of ongoing school projects on citizenship (primary and secondary), a bulletin board for recording peace quotations for the International Year for the

Culture of Peace (2000) and advice on how to deal with contemporary issues. Curriculum resources, syllabus links, teacher forums, discussion papers, key contacts and external website links are all available. One of the latter is to a British Council (Australia) sponsored site called Montage (<http://www.bc.org.au/montage>).

Montage provides a “... *series of interactive curriculum projects for use by teachers around the globe. The projects are designed to develop and maintain international collaboration between students and teachers using the latest communications technologies*”. Schools, teachers and pupils are kept up-to-date on a variety of projects and are facilitated in finding partners and joining projects with other schools nationally and internationally. Projects include inter-school discussions on cultural celebrations and commemorations, environmental work on life in the oceans and a novel Internet-based mock trial. In this project two schools, under the stewardship of a senior member of the law profession, conduct the prosecution and defence of a trial through a ‘real-time’ text-based discussion system. Another interesting project links schools in Wales with schools in New South Wales “... *exploring the nature of government, democracy and the rights and responsibilities of citizens. They are sharing their findings and understandings, and exploring their differences ...*” (http://www.abc.net.au./civics/wales_nsw/).

Further browsing across the Web will undoubtedly reward the determined searcher with many ideas and possible partnerships for project activities.

ICT AS AN ISSUE IN VALUES AND CITIZENSHIP EDUCATION

As discussed in the introduction, the impact of ICT itself on society must also be considered as a citizenship-related matter and we turn to this issue now. Here again our brief is to be brief! But there are a number of ‘big’ issues in relation to the role of ICT in today’s world and in its use in education. ICT itself is changing society in a manner that is in some respects obvious and in others more subtle. We are reminded of John Dewey’s words of a century ago:

I make no apology for not dwelling at length upon the social changes in question. Those I shall mention are writ so large that he who runs may read. The change that comes to mind, the one that overshadows and even controls all others, is the industrial one - the application of science resulting in the great inventions that have utilized the forces of nature on a vast and inexpensive scale: the growth of a world-wide market ... of cheap and rapid means of communication and distribution between all its parts. ... One can hardly believe there has been a revolution in history so rapid, so extensive, so complete. ... political boundaries are wiped out and moved about, as if they were indeed only lines on a paper map ... habits of living are

altered with startling abruptness and thoroughness ... that this evolution should not affect education ... is inconceivable. (Dewey 1900 p.5-6)

Indeed. We will not dwell on the changes either but we acknowledge the resonance that this statement from yesteryear has today. The globalization and the cultural and political changes that have taken place in recent times are very much the result of the communication and information sharing which telecommunications provide for more and more people. Tom Stonier, for example, (cited in Evans, 1979 p. 209) considered this lateral communication between people rather than to people, by governments etc., to be a major dimension of the strides being made in electronic communications in the late 1970s. He projected that it would destabilize autocracies by promoting an open society and, indeed, on that basis he predicted the disintegration of the Soviet Union. The Internet, and its Web resources, is essentially an open system allowing access to anyone who has the necessary hardware and communications media (telephone, satellite etc.). Arguably, therefore, it is inherently democratic. But therein lies another discussion point for the ICT class. The counter-argument is that those with the wherewithal for access are privileged. Owing to social circumstances, individuals, communities and whole peoples will remain disenfranchised from access to it for perhaps many years to come. What effect or importance this has for the world cannot be addressed here but is certainly an issue about ICT that could be appropriate for discussion in a values discussion (equity, opportunity etc.) in class.

In terms of promoting democracy as a world ideal, still an aspiration in some places and perhaps only in a restricted variant in others, the Internet may also be found guilty of preaching largely to the converted i.e. pupils in western democracies. Those who govern in a less than democratic way are unlikely to find the challenging freedoms of the Web attractive but Stonier's words may well continue to echo for them: *"No dictator can survive for any length of time in communicative society as the flow of information can no longer be controlled from the centre"* (Stonier, 1983, p. 203). On the other hand, there are those who see the coming to pass of the Orwellian scenario for technology: an insidious means of invading the privacies and freedoms of the individual through state monitoring of email and internet communications.

In his appendix to the Crick Report (Appendix B, QCA 1998), Stephen Coleman raises a number of sensible cautions (including the divide between information-rich and information-poor societies above) and these are well worth bearing in mind in the ICT classroom. The development of critical skills i.e. skills that enable outdated, trivial or biased information to

be identified and appropriate judgements made, in much the same way as conventional library resources might be used, is clearly necessary. In providing on-line discussion forums teachers may also need to foster simple debating skills by introducing protocols based on listening to others before responding, tolerance of counter-viewpoints and so on.

Importantly, a degree of monitoring of the Internet websites being used is necessary. Pupils are generally very responsible but accidental straying into areas that are unsavoury is always possible. Controversial topics will inevitably arise in class discussions on citizenship, values and morals e.g. racism, pornography, substance abuse, violence, extreme politics etc. and any unsupervised follow-up website searches may produce sites that are offensive and perhaps illegal. Equally they could produce sites that are legal but insensitive or upsetting, or which treat important events and issues in supercilious and sensationalist ways. Such sites would include some of the on-line news services which rush camera teams to the locations of disasters or other tragedies to beam on-the-spot video footage around the world on-line. No different, of course from the broadcast satellite versions but they at least are not as accessible as the Internet is on a classroom desk. The existence of such sites, and their creators' values, or lack of them, may well find a place in a discussion of values in the media. A helpful guidance document in relation to schools' Internet usage has recently been issued by the British Education and Communications Technology Agency and Department for Education and Employment (BECTa, 1999: <http://vtc.ngfl.gov.uk/vtc/library/pub.html>).

CONCLUDING REMARKS

Throughout this chapter we have attempted to address the use of ICT to support values education and citizenship, and we have broached the issue of ICT itself having an impact on these by virtue of its own all-pervasive impact on society. The Internet is not just facilitating the exploration of alternative value systems and various dimensions of citizenship throughout the world (e.g. democracy, human rights, law and order etc), it is in many respects contributing to change as its almost limitless potential for globalizing the issues enables our young, upcoming citizens to become more worldminded. In closing this chapter, we should therefore like to focus briefly on the responsibilities facing teachers in the provision of an education that is becoming more 'information' oriented. In an echo of Coleman's cautionary comments about the quality of information on the Internet and the use it is put to, we leave the last words to Guy Claxton:

The most widespread applications of information technology powerfully and insidiously invite us to think of learning in terms of the acquisition and manipulation of information. ... Yet, if it is true that everything comes to look like a nail to a man who only has a hammer, it is equally the case that everything will come to look like information to a person who only has (or predominantly relies upon) a laptop. ... Access to avalanches of information loosely connected by threads of casual associations, does not of itself bring about the transformation of that information into knowledge or wise judgement, nor the development of the requisite skills and dispositions for doing so. It is the business of education to foster the development of the ability to select, integrate and evaluate theories and opinions, not to drown in information - however glitzy. (Claxton, 1999 p.224-225)

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