

Towards tomorrow's successful digital citizens: providing the critical and dialogical opportunities to change lifestyles and mindsets

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Alerting citizens to the digital issues

In recent years there has been a shift in the UK curriculum from *Information and Communications Technology* to *Computing*. The debate amongst professionals has been whether the 'softer' aspects of digital literacy and citizenship might be downgraded by a concentration on computing science and especially coding. In this chapter we recommend a rounded approach to the subject. We suggest that skilled computer experts will provide a better service to society if they are able to understand and debate the benefits and dangers of computer literacy.

We tackle the topic of digital citizenship by first defining the term based on the literature which gives the reader an outline of the different perspectives. We then report on a knowledge creation event that was attended by a number of expert educators who debated the value of digital citizenship in the classroom context. We suggest that the methods used for running the event as well as the collaborative knowledge that was created would provide a good basis for a teacher who wants to set up such a debate in the classroom. Pupils who debate this subject will develop a strong affiliation with the issues.

Defining Digital Citizenship

What is meant by 'digital citizenship'? Can it be a global concept where being a digital citizen means being a citizen of the digital world or must it remain more localised? For example, would we expect a citizen of the UK as a digital citizen, to be any different from a citizen of the USA or China, as a digital citizen? Political ideology inevitably disrupts digital boundaries e.g. China's decision to prohibit access to Google; and only 162 of the 192 countries in the world have adopted the Berne Convention on copyright (1886). The digital divide highlights lack of universal access whereas citizenship implies rights and responsibilities based on a common rule of law within the nation state. However, Selwyn (2013) draws attention to multiple metaphors like 'cloud' and cyberspace as well as to the alternative view emphasising connectivity and society as part of the "increasing tendency of dominant functions and processes within contemporary societies to be organised around networks rather than physical boundaries" (p. 3). Ribble (2014) also starts to question the possibility of

a global concept of digital citizenship in such a fragmented digital space. In education, therefore, a debate on digital citizenship needs to raise awareness of the changing nature of society and specific national standards as well as to engage with the issues at a fundamental human level.

Statements relating to Digital Literacy in the National Curriculum for England, Computing Programmes of Study, imply aspects of digital citizenship (DfE 2013). For example, one of the aims of this document is to educate learners so that they become, “responsible, competent, confident and creative users of information and communication technologies”. At first glance a competency model of teaching might be presumed sufficient; however, the terms ‘responsible’ and ‘confident’ hint at wider dimensions: identities, values, ethics, attitudes, beliefs and a sense-of-self in relation to others. Quickly it becomes apparent that education about digital citizenship must be a lived educational experience, over time, across the physical and digital landscape within and beyond the school setting: a challenge for teachers.

At key stage 3 the curriculum requires that pupils are taught to “understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns”. The phrase, “protecting online identity and privacy” within the programmes of study reminds teachers that pedagogical approaches adopted must support learners in appreciating the construct of a digital representation of themselves.

The theme of “protecting online identity and privacy” is explored in detail by danah boyd[CP1] (2014) when unravelling various dimensions of the online life of networked teens in her book ‘It’s Complicated’. It is imperative, boyd believes, to facilitate learners to reflect on their digital persona and notions of privacy as citizens operating in digital spaces. Being aware of and understanding complex procedural elements involved in protecting or constructing privacy online can in itself be a challenge for learners. Privacy is defined by external organisations, often commercial, in typical digital contexts. The locus of control, in terms of pre-defined privacy settings are often set by others although in theory users can customise within parameters or opt in or out. Online counter-cultures can ironically be equally as persuasive in terms of privacy; think no further than the glorification of anonymous hackers in films and television portrayals. Anonymity and real or assumed identities, are recurring themes for learners to consider in relation to digital citizenship. JISC (2015) is currently revisiting their digital capability model with the education community and now propose ‘identity and well-being’ as a fundamental component of digital literacy, to incorporate these themes.

Notions of digital citizenship are embedded within several popular models of digital literacy. This is sometimes related to discussions of individuals as passive consumers and/or active producers of digital content and services (Resnick 2012). The implication being that digital citizenship goes beyond a set of technical competencies and becomes a mindset or way of being and acting in the digital world: ‘I am’ (Beetham and Sharpe 2010 & 2014).

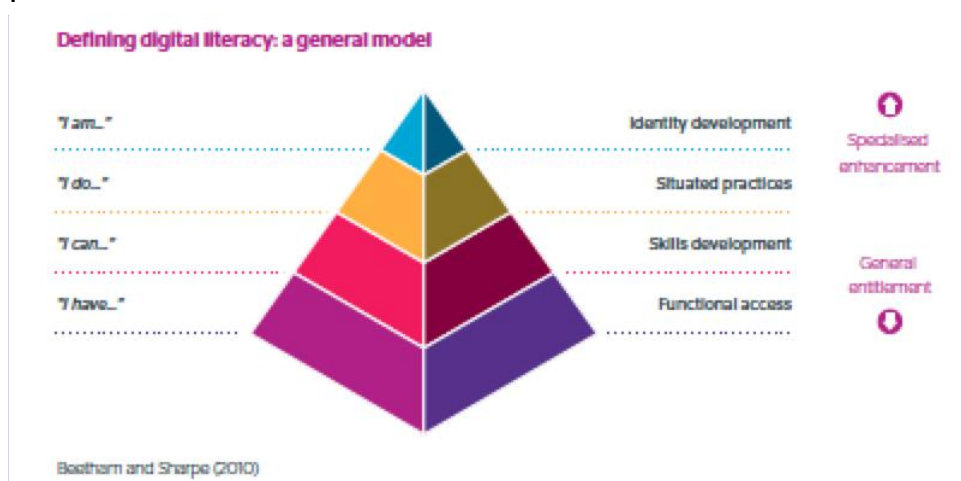


Figure One: Diagram from the JISC report: Developing Digital Literacy (2014)

The description of digital citizenship as a ‘mindset’ is also reflected in the purpose of study in the national curriculum for computing referring to pupils ‘becoming active participants in a digital world’ (DfE 2013). On a personal level; identification, interpretation and understanding of norms and patterns of interaction in varied digital environments; means engagement (consciously or otherwise) with individual and collective representations of values, beliefs and attitudes.

Joint Information Systems Committee (JISC) emphasise ‘capabilities which fit an individual for living, learning and working in a digital society’ (2014). The notion of ‘fit’ is in itself interesting and implies a sense of belonging to a group or communities inhabiting digital landscapes in terms of conformity, rebellion or independence. danah boyd’s (2014) research suggests that teenagers use of social media reflects rather than transcends basic social divisions. Facebook networks were found to be closely matched to the segregated racial groupings that characterised the Los Angeles schools and this can be easily transferred to other context such as the UK. Are the processes for humans connecting fundamentally different in the physical and digital world? It could be argued they are one in the same, especially where there is a strong affective element, positive or negative, isolating or affirming. What is potentially different can be the scale, impact and transparency of digitally-mediated social interaction and reaction across platforms. For example, a Twitterstorm would fall into this category. A Twitterstorm typically relates to a ‘sudden spike in activity on a topic, typically on a breaking or controversial topic, using a particular hashtag with subsequent retweets and tweets’ (Techopedia 2015). We can easily cite examples where social media has been used to empower and promote a cause or voice of members of society who may not traditionally have the political or economic resources to be heard by mainstream society; thereby contributing to positive change. In a classroom context learners can now easily write, publish and promote digital content to that real audience teachers often talk of when setting tasks. However, by contrast many individuals have been called to account or vilified by social media responses. As teachers we instinctively think of cyberbullying victims but equally we need to empower young people to gain a sense of the impact of taking less constructive or unkind actions as perpetrators (CEOP 2015). The educators’ challenge is to provide contexts that prompt reflection on how citizenship contains both rights and responsibilities, and importantly real world consequences on inter-personal,

social and legal levels resulting from online behaviours. It is important for educators to recognise that a lived experience of the rights and responsibilities is developed over time, evolving and not without controversy.

Belshaw (2011) echoes this notion of a digital literacy as a condition. Hobbs, (2010) similarly emphasises that there are a 'constellation of life skills necessary for full participation' including; 'making responsible choices', 'reflecting on personal conduct and communication behaviour by applying social responsibility and ethical principles', 'taking social action by working individually and collaboratively to share knowledge and solve problems in the family, workplace and community, and by participating as a member of a community (Hobbs 2010 PPP.vii-viii). Belshaw's comprehensive 8-component model of digital literacy directly highlights that digital literacy is highly 'contextual and situational with co-constructed norms of conduct' (2011 p. 207).

"In each of these contexts are found different codes and ways of operating, things that are accepted or encouraged as well as those that are frowned upon and rejected" (Belshaw 2011 p.207).

In Savage and Barnett (2015) we reflected on what this means for teachers working with learners in these hybrid physical and digital spaces. Primarily it is fundamental to realise these elements need to be lived, not talked about or speculated about from afar. Belshaw reminds us of the self-limiting technical proficiency models and that what is fundamental is providing space and contexts for learners to consider 'the issues, norms and habits of mind surrounding technologies used for a particular purpose' (2011, p.207). To operationalise this into a pedagogical approach, in Savage and Barnett (2015), we prompted teachers to reflect on the range of digital environments provided for learners to explore in the classroom. As risk-aware professionals teachers we need to navigate the tension of providing safe but sanitised opportunities in classrooms, with an awareness of beyond school digital experiences. Personal agency as digital citizens is actualised 'through immersion in a range of digital environments' (Belshaw 2011 p.207). Belshaw extends the exposure aspect and persuasively argues that 'mind expansion' comes from,

"exposure to various ways of conceptualising and interacting in digital spaces helps develop the cognitive element...it is not the practise of using tools, but rather the habits of mind such use can develop" (2011 p.208).

The communicative element of Belshaw's model highlights the forms and norms of digitally-mediated communication. Again, for teachers the tension resurfaces; to 'truly understand networks you need to be part of them' and have a sense of the lived experience rather than the perceived experience (p.209). However, the presence of teachers and adults may not be welcome in these digital spaces even if they can be identified and located.

Two final elements Belshaw draws attention to have a very direct connection to digital citizenship; critical and civic (p.212-213). Returning to the DfE requirement for educating children to be 'responsible users', the potential for individuals to 'participate, engage and act for social justice and have civic responsibility' is potentially very powerful. Criticality is closely linked in terms of recognising and challenging power relations (ibid). Table 1 below, from Savage and Barnett (2015) explores three further considerations of digital citizenship[CP3]

incorporating the work of Ribble and Common Sense Media as well as the South West Grid for Learning development (SWGfl) (p.108). Ribble (2014) defined 'digital citizenship as the norms of appropriate, responsible behaviour with regard to technology use and identifies nine key themes that are intuitively directly relevant to understanding digital citizenship' (Ribble 2014 cited in Savage and Barnett 2015 p.107). Savage and Barnett (2015) also explored the approach by Common Sense Media (CSM) in relation to digital citizenship and details of related resources are detailed below. 'The digital citizenship strand is based on five units and the South West Grid for Learning (SWGfl) has developed the CSM scheme for teaching digital literacy and citizenship in the UK using eight themes' (Savage & Barnett 2015).

Table 7.1 Key themes

Ribble (2014) Nine key themes	Common Sense Media (CSM) Planning and resources	SWGfl Linked to CSM
1. Digital Access	1. Digital Life – this relates to the impact of digital media and what it means to be a responsible digital citizen	1. Internet Safety
2. Digital Commerce		2. Privacy and Security
3. Digital Communication		3. Relationships and Communication
4. Digital Literacy	2. Privacy and Digital Footprints – this relates to personal information, both of self and others	4. Cyberbullying
5. Digital Etiquette		5. Digital Footprint and Reputation
6. Digital Law	3. Connected Culture – this relates to ethics including cyberbullying	6. Self Image and Identity
7. Digital Rights and Responsibilities	4. Self-expression and Identity – this considers communicating through digital means	7. Information Literacy
8. Digital Health and Wellness		8. Creative Credit and Copyright
9. Digital Security	5. Respecting creative work – this relates to intellectual property rights	

[CP4]

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Figure Two: Ribble, Common Sense Media and SWGfl approaches to digital literacy and citizenship compared (Savage & Barnett 2015 p.108)

Inherent in any conceptualisation of digital citizenship are dimensions relating to values and dispositions. By their nature they cannot be taught but teachers have some responsibility for providing critical and dialogical opportunities for learners to reflect on their values and beliefs in relation to others in both face-to-face and digitally-mediated contexts. For example, freedom of (self) expression is often cited as a British value but in contemporary times, and with the Prevent Duty agenda this no longer is as clear-cut for teachers. Protecting children

from radicalisation: the Prevent duty (DfE) outlines expectations for teachers and makes direct reference to social media channels. Ohler (2012) tackles the notion of character education head on challenging policy makers to, 'create academic and character education programs tailored for raising an intelligent, caring generation of students who understand the responsibilities and opportunities associated with living a digital lifestyle'. Also, it might be worth including the alternative view of digital citizens as netizens (Webster 2004) or digizens as well as the contrasting nine key themes of Ribble (2014) with the themes of Common Sense Media's curriculum, although the resources are no longer free.

The term 'lifestyle' again is a term that relates to a Western notion of choice. The democratisation of knowledge is often aligned with the growing ownership/access of technologies and access to digital information. Whilst the digitisation of, for example, archive materials is constructive, access can still be moderated by traditional groups and how open the access is can be problematic. Raza et al. (2007) critique that 'e-learning materials are still very much European or North American centric. The potential is to give opportunities for 'revolutionary socio-cultural transformations created by elearning. In this manner knowledge is created, codified, retrieved, managed and transmitted across the boundaries of different cultures'.

Recent wars in the Middle East, particularly Syria, and the use by ISIL of social networking to entrap teenagers into active service, makes an understanding of digital citizenship even more important in UK schools. Just teaching digital citizenship at a factual, information transmission level is not enough. The central need here is for young people to relate to the issues and be able to articulate them in a way that is meaningful to their lives outside school as well as inside. Teachers have a vital role in promoting this kind of debate. The next section makes some suggestions about how to encourage engagement amongst pupils.

Setting up a digital citizenship debate

Providing critical and dialogical opportunities

In this section we suggest how dimensions relating to values and dispositions that cannot be taught can be stimulated by active debate. The aim of creating the right conditions for providing critical and dialogical opportunities is so that learners reflect on their values and beliefs in relation to others in both face-to-face and digitally-mediated contexts. One way to emphasise the digital context is to use digital tools to enrich the texture of the debate.

The debate that we are drawing on was designed to give international expert educators from different professional organisations an opportunity to contribute fully even if they could not attend face to face (Peyton and Preston (2015)).

The digital knowledge creation context

A website was set up so that all the expert opinion and contributions could be collected, analysed and published for other professionals. The day was organised on the principles of a MirandaMod (2016). This is a knowledge creation event that has been developed by MirandaNet Fellows over several years. The professional organisation of educators works on the principle that knowledge is often built and owned by teams in the world of work. This

process has been given new diameters by the social media and is an important focus of digital citizenship. In the view of the Fellows school students need to be encouraged to make the most of the richness of collaborative social opinion and understand the dangers. This kind of event could be reproduced in classrooms and in approved online communication environments in order to promote more understanding of how collaborative knowledge is formed. The members would like also to see more acknowledgement and reward for this process in education as well. Their belief is that with imagination events of this kind could arm students with techniques to understand how the crowd-sourcing of knowledge might work.

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In a MirandaMod all the contributors provide a profile beforehand and write a summary of their views about the topic for everyone to read as well as any references and publications they are recommending. This pre-session actively means that the lead speakers and the participants need only present the headlines of their arguments for 3-5 minutes in which presentation software is discouraged in order to engage fully with the audience and encourage participation. Firstly this leaves time for many more participants than 20-30 minute expositions. Secondly there is time to analyse the meeting points and the conflicts. When possible the sessions are video-streamed to those who cannot attend in person - otherwise a video is sent online. Some expert speakers also engage through an online conferencing package like Skype. This ensures input from an international profile of experts who would not be able to attend a classroom debate in person.

What makes the MirandaMod different from a conventional debate is that the participants and audience inside the room and viewing the video stream can contribute to a Twitter or Padlet wall in real time. Others record their responses in online digital concept maps that can be collaboratively developed remotely. Pre-drawn paper maps and post-it notes were also used to record their thinking by the participants in the room. This element of digital contribution provides a visual recording of the concepts as they emerge that provides a collaborative analysis for the debate if the map-makers have been primed beforehand.

Organising the event

In this case the event lasted a day but such a debate could be conducted in a half day or even a double period if there are fewer contributors. In the event under discussion day was

divided into a number of sessions, each of which consisted of presentations and position papers followed by discussion.

The proposal that was provided beforehand was:

This professional community believes the importance of ethics and values in relation to digital technologies are not emphasised sufficiently in today's digital society.

The following definitions of five key terms that relate to digital citizenship were sent out to the debaters beforehand so that they started with a common understanding of the concepts under discussion:

Digital literacy is the ability to find, evaluate, utilize, share, and create content using information technologies and the Internet (Cornell University 2016).

Digital citizenship is the norms of appropriate, responsible behaviour with regard to technology use (Digital Citizenship 2016).

A Digital society is characterised by three cultures:

- Digital tools which allow humans to maintain his/her social life in the digital society and considered as the ground for other elements of the digital culture.
- Digital values which form a belief system that provides meanings or goals for human behaviours or social activities in the digital society.
- Digital norms which represents normative procedures and rules that are socially acknowledged in carrying out digital activities (Kwon et al. [CP5]).

Digital Equity is the social justice goal of ensuring that everyone in our society has equal access to technology tools, computers and the Internet. It is when all individuals have the knowledge and skills to access and use technology tools, computers and the Internet.

Digital wisdom is the ability of individuals and/or societies to make informed decisions in relation to the appropriate use and exploitation of information technology in all its forms.

Some invited experts were invited to present their headline views on the day about the four questions:

What is important today with regard to digital literacy, digital citizenship and digital wisdom?

- . What do we mean by a digital society?
- . What will be important in the future?
- . How do we get to that future?

Analysing the data

This event generated significant quantities of data that anyone can read on the public website. However, the important element of this activity is to assemble a group of students who learn to analyse the data and publish a collaborative report.

The report below is compilation of the thinking and insight of the experts who gathered to contribute in this area, the wording of each emerging message, question and area for further exploration is given in the words recorded at the event. While this leads to a certain inconsistency in linguistic style and wording, it was decided that, in exploring a new area in this way, it was important to use the language of the contributors rather than creating a more consistent but less accurate record of the discussions. A discussion of this approach will challenge the usual convention of a report with a single author that is to find a middle way and leave out the contradictions. Are contemporary opportunities to share through digital networking demanding new ways of expressing the collaborative results? Does it matter that the report raises more questions and is not conclusive? These questions should be asked about the way in which this report is presented below:

This professional community believes the importance of ethics and values in relation to digital technologies are not emphasised sufficiently in today's digital society.

Overview

The conference explored three key themes – the concept of Digital Citizenship; the interplay between Computers Science, Social Informatics and Digital Wisdom, and the implications these questions have for professional development.

A significant outcome of the discussions was a series of key questions that should be considered if we aspire to ensure the technology revolution can deliver better outcomes for all. These include:

- 1. Do we need the term Digital Citizenship, or is it just Citizenship?*
- ~~1.2.~~ Do different countries, cultures and institutions play a part in influencing in how Digital Citizenship is evolving or people's perception or their role as a Digital Citizen?*
- ~~1.3.~~ Must a computer scientist be literate in social informatics and digital wisdom?*
- ~~1.4.~~ Is it possible to infuse "soft" technological systems into very "hard" educational systems?*

Some of the conclusions (which require further exploration) reached were:

Digital Citizenship

Instead of asking, "Does the digital world need to have a concept of wisdom?" we can reverse the question and ask, "Does our understanding of wisdom need to include understanding of the digital world?" The latter question leads to a much more conclusive outcome and call to action.

What is the relation between Computer Science, Social Informatics and Digital Citizenship?

As well as looking at the overlap between these disciplines, these discussions explored the purposes behind the different fields and the integration of values into their objectives. While this is a complex area that led to much debate, the most important conclusion of this section can be summarised very simply and succinctly: You cannot abstain from the ethical or technical debate.

How can we ensure the professional development of Digital Citizens?

Schools teaching of the use of ICT tools, as they have in many case done over the past twenty years, falls short of preparing children for successful digital citizenship. We need to move from an emphasis on digital literacy towards digital empowerment, where people of all ages, individually and collectively, are able to harness digital tools to enhance their lives and the lives of others.

Responses

As is common in these explorations, the discussion and responses generated a number of key questions that can be used to evaluate the underlying issues and the impact of current approaches or alternative proposals.

While the discussions then continued to reach some important conclusions and to identify areas for further exploration, the questions generated are in many cases the most important insight into issues around Digital Citizenship.

The diagrams below highlight these key questions, conclusions and areas for exploration against the three key themes.

Digital Citizenship

<p>How does all this fit into education?</p>	<p><i>Questions this raises</i></p> <p>Do we need the term “Digital Citizenship”?</p> <p>What about different countries, cultures and institutions? Do these things play a part in influencing in how Digital Citizenship is evolving or people’s perception or their role as a Digital Citizen? What about languages? Does the language spoken influence Citizenship perceptions and possibly even disenfranchise Digital Citizens?</p> <p>How important are awareness, and understanding of the systems (e.g. in relation to Privacy and Data collection?)</p> <p>Are we digital citizens? – or Digital Participants, Digital Subjects or Digital Servants?</p> <p>Do we need norms and rules? Who forms these?</p> <p>Can we separate citizenship from the idea of nation-state?</p>	<p><i>Conclusions form Discussions</i></p> <p>Exploring ideas such as Digital Literacy, Digital Citizens, and digital empowerment allows us to look at how the Digital revolution is having an impact on our role as Citizens.</p> <p>Citizenship is normally defined in terms of a nation-state. In the digital world, some thought has to be given to the “state” to which a citizen belong, and whether this is just one digital world state.</p> <p>Whether the digital world needs a concept of citizenship is open to debate. Whether the concept of citizenship needs to include reference to the digital world is not.</p>
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Areas for further exploration

<p>Do we need a concept of Digital Citizenship - or is it just Citizenship?</p> <p>How do we identify society in a digital world where the nation-state has less relevance? Is there a danger of digital ghettos - or tribalism, where people identify only with their own tribe?</p> <p>How different is the digital world – is for example anonymity different, and does this lead to different behaviours?</p> <p>Does the digital revolution lead to a change in what we need to achieve in terms of: confidence; self-belief; empowerment; resilience etc?</p>

What is the relation between Computer Science, Social Informatics and Digital Citizenship?

Questions this raises

Can any task be value-free?

Must a computer scientist be literate in social informatics and digital wisdom?

How do the different terms inter-relate – Digital Literacy, Digital Fluency, Digital Citizenship, Digital Wisdom?

If wisdom is the ability to make a decision for positive outcomes, are these outcomes personal, local to a group, or global?

What is acceptable, and who decides?

Is there a risk of a mechanistic rather than a humanistic approach to the teaching and learning of computer science and ICT?

Conclusions from Discussions

There is considerable overlap between Computer Science, Social Informatics and Digital Wisdom. None can exist in isolation, and none can exist apart from the moral dimension.

Teaching internet safety is more like teaching swimming and water safety than teaching smoking-related safety. It is knowledge and skill that saves lives, not avoidance.

Computer systems should not be built without involving the social context.

Digital/blended wisdom comes from a humanistic perspective and that of understanding the broader impact of change, decisions, leadership, drive and motivation in developing education change towards the improvement of lives of others.

You cannot abstain from the ethical or technical debate.

Areas for further exploration

How do we move the teaching of internet safety away from a smoking-related safety approach (i.e. - can't be our fault, we don't allow it here – must have learned it at home) to a swimming-based approach (i.e. - the more experience and knowledge you have, the safer you will be)?

How do we minimise the risk of a Mechanistic approach (e.g. coding, machine level control/instruction, silo-based learning etc.) rather than a humanistic approach (e.g. computational thinking and system thinking, lateral thinking, project-based learning etc.) to the teaching and learning of computer science and ICT?

With computers being an inseparable part of our everyday life, it is necessary that the systems they employ should be constrained by ethical and legal standards. How do we ensure that those consigned with the task of designing and developing these systems are aware of the necessity of these constraints?

Conclusions

The conclusions and key aspects for further exploration from the debate are outlined in the different boxes above. Some of these were succinct summaries of key points, while others were very open-ended areas for exploration. In spite of the breadth of the issues explored, some key themes did emerge. We expect to see these continuing to shape the debate going forward.

The need for citizenship

- Whether the digital world needs a concept of citizenship is open to debate. Whether the concept of citizenship needs to include reference to the digital world is not.

The need to recognise different cultures and societies

- How do we identify “society” in a digital world where the nation-state has less relevance? Is there a danger of digital ghettos - or tribalism, where people identify only with their own tribe and do not contribute to wider society?
- What about different countries, cultures and institutions? Do these things play a part in influencing in how Digital Citizenship is evolving or people’s perception or their role as a Digital Citizen? What about languages?

The need to develop new pedagogies

- There is an urgent need to reflect and elaborate around Digital Pedagogies.
- Teachers are teaching every day, finding ways of using digital technology, discovering what works and what does not. They are in the crucible of innovation learning from and with their students.

The need to design assessment around the learning, not the learning around the assessment

- -Everyone involved need to design assessment systems flexible enough not to constrain pedagogy.
- -How can approaches such as Constructive Technology Assessment, Value Sensitive Design and other iterative, multi-stakeholder approaches be used to support a more interactive approach to assessment?

The need to ensure the ethical dimension is included in all disciplines

- Computer systems should not be built without involving the social context.
- With computers being an inseparable part of our everyday life, it is necessary that the systems they employ should be constrained by ethical and legal standards. How do we ensure that those consigned with the task of designing and developing these systems are aware of the necessity of these constraints?
- None of the experts in the field of computers who are engaged in schools can be allowed to abstain from either the ethical or technical debate about citizenship.

Looking ahead

By presenting a digital knowledge creation approach to exploring a debate we have intended also to challenge some of the conventions of reporting that include a linear approach and a unified approach. Whereas the digital media provide ways of collaboration and networking that have not been available to digital citizens in the past the new media also challenge the ways that we report agreement and disagreement. In this context, the report about Digital Citizenship above is compilation of the thinking and insight of the experts who gathered to contribute in this area, the wording of each emerging message, question and area for further exploration is given in the words recorded at the event. While this leads to a certain inconsistency in linguistic style and wording, it was decided that, in exploring a new area in this way, it was important to use the language of the contributors rather than creating a more consistent but less accurate record of the discussions. A discussion of this approach will challenge the usual convention of a report which is to find a middle way and leave out the contradictions. Are contemporary opportunities to share through digital networking

demanding new ways of expressing the collaborative results? Does it matter that the report raises more questions and is not conclusive? These issues about collaboration and responsible reporting are issues of digital citizenship that teachers can argue with their pupils.

From perspective of the concerns expressed at the start of this chapter there was a high level^[CP7] of agreement in the data provided by invited experts about the need to achieve a balance in the new school curriculum between the 'softer' aspects of digital literacy and citizenship and concentration on computing science and especially coding. This was expressed most clearly in the analysis of ethics in which this community agreed that:

"None of the experts in the field of computers who are engaged in schools can be allowed to abstain from either the ethical or technical debate about citizenship".

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Resources

1. A good starting point for teachers engaging in classroom activities is the **Digizen** website at <http://www.digizen.org/> . A detailed glossary and a range of classroom activities are included. The resource is also something that can be recommended to parents; for example, there is a useful 'home agreement' document at <http://www.digizen.org/digicentral/family-agreement.aspx> . All parties can obtain accurate knowledge to help evaluate popular social networks <http://www.digizen.org/socialnetworking/evaluating-sns.aspx> .

"The Digizen website provides information for educators, parents, carers, and young people. It is used to strengthen their awareness and understanding of what digital citizenship is and encourages users of technology to be and become responsible digital citizens. It shares specific advice and resources on issues such as social networking and cyberbullying and how these relate to and affect their own and other people's online experiences and behaviours".
accessed 18/9/2015

2. **Common Sense Education** is an American educators site offering age appropriate lesson plans and resources relating to digital citizenship. Appropriately they give teachers and learners open questions to promote reflection and discussion; for

example, 'what is the place of digital media in our lives' and 'what are the consequences of over-sharing online' at an introductory level to more philosophical questions about 'collective intelligence' online at <https://www.common sense media.org/educators/lesson/collective-intelligence-9-12>

The home page is located at

<https://www.common sense media.org/educators/curriculum> and they describe their Digital Citizenship Curriculum by stating, " *our materials are designed to empower students to think critically, behave safely, and participate responsibly in our digital world*" .accessed 18/9/2015

3. **Thinkuknow Toolkit for KeyStage 3&4**<https://www.thinkuknow.co.uk/teachers/> accessed 18/9/2015. Many educators will be aware of CEOPs Thinkknow e-safety resources. These are continuously updated and ' *the Thinkuknow Toolkit, is a new downloadable set of lesson plans for education practitioners to use with young people aged 11+.The Toolkit helps you transform the Thinkuknow website from a reference tool into an interactive resource to get young people thinking and talking about key issues related to sex, relationships and the internet; encouraging learners to return to the website in their own time*'.

3.4. Digitalme<http://www.digitalme.co.uk/> is primarily about offering educators and learners a tool, based on Mozilla's Open Badge scheme, a way of recognising and rewarding engagement in digital activities. It is included here as throughout the emphasis has been on facilitating constructive lived experiences in digital spaces. " *Badge the UK is a new project which will enable learners to demonstrate all their achievements using digital badges*" . - See more at: <http://www.digitalme.co.uk/home#sthash.4JvwSn7V.dpuf> .accessed 18/9/2015

Recommended Reading:

1. Shelley, M (2004) Digital Citizenship: Parameters of the Digital Divide, Social Science Computer Review, 22 (2) 256-269.
- 1.2. Gorman, G E (2015) What's missing in the digital world? Access, digital literacy and digital citizenship, Online Information Review, 39 (2).**

1.3. _____ (2015) "Digital citizenship through game design in Minecraft", *New Library World*, Vol. 116 Iss: 7/8, pp.369 - 382. Here the researchers undertook a study to explore the effectiveness of employing a gamification approach to provide learners with an opportunity to explore digital citizenship. The usefulness of an abstraction approach using Minecraft is an interesting point to reflect upon in light of previous discussions. *"The students designed and built a 3D virtual world library game for younger students to help them learn digital citizenship and information literacy."* (Hill 2015).

1.4. _____ Mossberger, K, Tolbert, C, McNeal, R and Ramona, S (2008) *Digital Citizenship: The Internet, Society, and Participation*. Cambridge, MA: MIT Press. A north american text examining the historical context, economic and civic implications of digital citizenship for a diverse national population. The implications of a digital divide are explored and many considerations are equally applicable to a UK context. This is not written for teachers as a classroom guide but poses questions for educational policy makers and societal observers.

1.5. _____ Ribble, M (2012) *Digital citizenship for educational change*, 48 (4) *Kappa Delta Pi Record*, 48:4, 148-151. In this article, it is identified that *"a process needs to be in place so that all teachers can learn and understand the skills and concepts involved in digital citizenship"*. Further, *"as the impact of technology continues to grow, both inside schools and out, the skills needed to become effective digital citizens will be ever increasing. Educators can no longer wait for the next digital tool or federal mandate to be released. Digital citizenship education is needed today"*.

Acknowledgements

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<http://mirandanet.ac.uk/blog/2015/08/digital-citizenship-report/>

Christina Preston

Christina has been at the forefront of education and technology for over 25 years. She founded the MirandaNet Fellowship in 1992. Knowledge sharing and managing the change process to ensure impact is at the core of the MirandaNet Fellowship's philosophy. MirandaNet Fellows research into the impact of technology and learning and report on their findings for the global community. They also run action research professional development programmes in schools. The Fellowship has become a global thought leader in education innovation with over 1,000 members in 80 countries. Christina has won 5 international awards for her contribution to education innovation and community. A full programme of events is held in partnership De Montfort University where as Professor of Education Innovation, she also advises the Future Learning Centre.

Christina is the Chair of Trustees of World Ecitizens charity established by the MirandaNet Fellows in 2002 after the events of 9/11 in New York. This charity provides a web space where learners across the world can publish for an international audience.

Malcolm Payton

Malcolm's is a highly respected educational leader and consultant who delivers effective transformation programmes at a local and national level. His experience includes the direct management of schools as an Executive Head and a Director of Education, the creation of leadership resources used by national agencies in the UK and elsewhere, speaking at conferences and training events in a number of countries.

In this work, Malcolm has been at the forefront of the use of ICT in schools. He has established ICT departments in schools, created communities of practice and led a number of innovative projects at classroom level. As a result of this work, he was seconded to a Professional Advisor role with the Scottish Government for three years, leading the Digital Content programme and helping set up GLOW, the world's first national intranet for schools. He was subsequently engaged as head of transformation for a large education authority in England and then led the Digital Content procurement programme for the Supreme Education Council in Qatar, working with Qatari schools to create and procure digital content that would support 21st century learning. He was also Head of E-strategy at Becta (the UK agency for ICT in education), where he managed a portfolio of over fifty ICT in education projects. His key objective is to build local leadership capacity so that transformation is continuous, sustainable and effective.