

Responding to concerns about online radicalisation in UK schools through a critical digital literacy approach

ABSTRACT

This article discusses the two main strategies commonly used to safeguard children and young people online, namely, internet filtering and digital literacy education. In recent UK Government guidance, both are identified as means to prevent online radicalisation in schools. However, despite the inadequacies of filtering, more attention is usually paid to technical solutions than to pedagogic ones. In this article, a critical digital literacy approach is proposed to allow students to explore and discuss the types of controversial issues they may encounter outside school within a supportive environment. Such an approach can allow schools to meet their responsibility to help young people to develop appropriate skills to engage with the internet as it actually is, not as we might like it to be.

Keywords: critical literacy; digital literacy; filtering; radicalisation

INTRODUCTION

Recent concerns about online radicalisation appear to have prompted a renewed focus on young people's online activities in school. In May 2016, the UK Department for Education (DfE) published a new version of 'Keeping children safe in education: statutory guidance for schools and colleges', covering schools in England, Wales and Northern Ireland (DfE, 2016). In part, this guidance was issued in response to concerns about online radicalisation, in particular fears about the ways in which terrorist groups such as ISIL are using social media and other online resources to influence young people (National Counter Terrorism Security Office, 2015). In the new guidance, it was claimed that "The internet and the use of social media in particular has become a major factor in the radicalisation of young people" (DfE, 2016, p. 55) and therefore, "schools and colleges must ensure that children are safe from terrorist and extremist material when accessing the internet in schools" (56). While this guidance also refers to more long-standing concerns about children's access to the internet, such as fears of cyberbullying and grooming (DfE, 2016, p. 12), it marks a change of focus from previous iterations of safeguarding guidance in order to emphasise schools' obligations under the Prevent duty (DfE, 2015). Schools' Prevent duty forms part of the Prevent strategy (HM Government, 2011) is part of the UK Government's counter-terrorism strategy and aims to reduce the threat to the UK from terrorism by stopping people becoming terrorists or supporting terrorism. Under schools' Prevent duty, "it is essential that staff are able to identify children who may be vulnerable to radicalisation, and know what to do when they are identified" (DfE, 2015, p. 5). With this aim in mind, the new statutory guidance on safeguarding requires that, "governing bodies and proprietors should ensure appropriate filters and appropriate monitoring systems are in place" (DfE, 2016, p. 17); and "should ensure children are taught about safeguarding, including online, through teaching and learning opportunities, as part of providing a broad and balanced curriculum" (DfE, 2016, p. 17-18). This language represents a change from previous guidance under which schools and colleges were only required to 'consider' teaching children about safeguarding.

This article starts by examining the two main strategies referred to in the statutory guidance, namely, internet filtering and digital literacy education. It then reports briefly on a series of focus groups with secondary school students exploring their attitudes towards these issues. Based on these, a critical digital literacy approach is suggested as a response to the Government's requirement to ensure children are taught about safeguarding, including online.

INTERNET FILTERING IN SCHOOLS

In 2012, the American Library Association (ALA) carried out a survey of internet filtering in US schools. 98% of school librarians responding said content is filtered by their school or district. Specifically, 94% used filtering software; 87% had an acceptable use policy (AUP); 73% supervised students accessing the internet; 27% limited access to the Internet; and 8% only allowed students access to the internet on a case-by-case basis. In the majority of schools, content was filtered for staff as well as students. The top four filtered content areas were: social networking sites (88%), IM/online chat (74%), gaming (69%) and video services (66%). Other types of content that were commonly filtered included: personal e-mail accounts, peer-peer file sharing and FTP sites. Although 92% of respondents indicated that sites could be unblocked on request, in 20% of cases there was a wait of a week or more (ALA, 2012).

Less is known about the situation in UK schools. As the Government admits in the Prevent Strategy, "we are unable to determine the extent to which effective filtering is in place in schools and public libraries" (HM Government, 2011, p. 79). However, in a recent survey of school librarians (n=96), only 9.4% of respondents disagreed with the statement "School librarians should ensure that access to controversial websites is restricted by filtering software or other methods", suggesting that filtering is widely accepted within UK schools (McNicol, 2016).

While filtering is widely employed, and may be widely accepted, in schools, there are a number of common criticisms of filtering. In the ALA (2012) survey reported above, respondents indicated that

filtering impedes student research (52%); affects the social aspects of learning (42%); and impedes collaboration (25%). In follow up interviews to the survey of UK librarians referred to above (McNicol, 2016), librarians described filters in schools as 'inconsistent' and 'aggressive'. Similarly, in work with schools in Scotland, Male and Burden (2014) reported that access to broadband was highly regulated and teachers "had to fight hard to get access to some highly desirable resources" (p. 430). Indeed, the DfE's (2016) statutory guidance recognises this issue, warning against over-blocking and in particular the importance of ensuring that filtering "does not lead to unreasonable restrictions as to what children can be taught with regards to online teaching and safeguarding" (p. 62).

In addition to the problem of over-blocking, filtering can create a false sense of security, that is, the misconception that if a site is not blocked by a filter, then the information it contains must be credible. In interviews with school and children's librarians in the UK, many were concerned that filtering did not allow them to teach internet search skills in the most effective way and gave students a false impression of the reliability of the internet. They felt that filtering promotes a false sense of security and denies parents and carers (and equally teachers) the opportunity to engage with children about their proper use of the internet (McNicol, 2005).

A vocal opponent of filtering, the ALA has identified two main concerns related to content filtering. Firstly, minority viewpoints on controversial topics are often included in the categories of what is considered objectionable or offensive, thus blocking access to alternative perspectives. Secondly, it widens the divide between those who can afford to pay for personal access and those who must depend on publicly funded (and filtered) access. A 2014 survey in the US showed that teachers in urban areas and those teaching the lowest-income students experienced the most negative impact from filtering: close to half of these teachers (48%) reported that filtering had a major impact, compared with 24% of teachers of middle- or upper-class students (Cortesi et al, 2014).

It is therefore reasonable to argue, as CILIP's (the professional body for UK librarians) Policy Officer does that, "blocking or over-zealous filtering of the internet is not an effective way to raise awareness and empower people to make their own independent judgements about material they are inevitably going to encounter at some point in their lives" (May, 2014). This empowerment is not something that can be achieved via technical measures, but requires pedagogical intervention, the other element proposed in *Keeping children safe in education* (DfE, 2016).

DIGITAL LITERACY IN SCHOOLS

As filtering is not an adequate response to safeguarding issues, there is clearly a need for pedagogical interventions, as the UK statutory guidance acknowledges. However, there has been criticism of the lack of attention paid to educational interventions in comparison to efforts devoted to technological solutions addressing concerns about access to online content (Muir et al, 2016). Supporting this assertion, a survey of UK teachers, found that 42% never taught students about online safety and only 11% did so frequently (Sharples et al, 2009, p. 77). In follow up interviews from the survey of librarians reported above (McNicol, 2016), a librarian spoke of her 'frustration' at the lack of opportunities to explore intellectual freedom issues within the curriculum. The lack of an obvious forum in existing curricula through which to teach information and media literacy is widely acknowledged (e.g Thornburgh and Lin, 2002). Furthermore, as Yan (2009) points out, little is known about the effects of the quality and quantity of various awareness strategies such as school internet safety policies, pop up safety messages, parental education, honour codes or informal instruction.

Despite the narrow ways in which the Prevent duty has sometimes been interpreted in schools (Davies, 2016), the guidance does *not* advocate the shutting down of debate about terrorism and other controversial topics in the classroom. Rather, it argues that "schools should provide a safe space in which children, young people and staff can understand the risks associated with terrorism and develop the knowledge and skills to be able to challenge extremist arguments" (DfE, 2015, p. 5). The statutory safeguarding guidance (DfE, 2016) suggests that schools may teach safeguarding issues

through personal, social, health and economic education (PSHE) and/or through sex and relationship education (SRE). However, there is little detail about how these issues might be taught with regard to digital media specifically.

Various terms are used to describe the process of teaching young people how to use the internet effectively. In the Computing curriculum in England, the term e-safety is adopted. At Key Stage 3 (11-14 years), for example, the e-safety curriculum includes recognising “inappropriate content, contact and conduct and know how to report concerns” and at Key Stage 4 (14-16 years), understanding “new ways to protect their online privacy and identity, and how to report concerns”. As this e-safety approach is already part of the National Curriculum, it seems likely that schools will use it as the basis to teach safeguarding as required by the new statutory guidance. However, e-safety, which in crude terms usually focuses on behaviours to avoid online, is just one aspect of digital literacy (although it is often the aspect that receives most emphasis). Digital literacy takes a more inclusive stance than e-safety, referring to “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills” (ALA, 2011). It supports the IFLA (International Federation of Library Associations and Institutions) (2014) Internet Manifesto, which emphasizes the importance of supporting “users, including children and young people...to use their chosen information resources freely, confidently and independently”. This definition therefore includes a wider range of skills and knowledge such as legal and copyright issues; collaboration and communication online; and information literacy.

However, while definitions of digital literacy emphasise the importance of skills beyond technical competence, this emphasis is often not reflected in practice. Hinrichsen and Coombs (2014) argue that digital literacy has suffered from “an overly technocratic and acritical framing” in a playing out of the tension between perceptions of technology as either neutral or culturally-situated.

Furthermore, Littlejohn et al (2012) claim that “current frameworks for digital capacity are...missing

the idea of a situated and critical technology use” (p. 552-3). As a result, it is possible to be “technically competent but critically naïve” (Hinrichsen and Coombs, 2014).

The question of what young people are capable of learning with regard to digital literacy has been debated for a number of years, with some questioning the extent to which such skills can, in fact, be taught at all (e.g. Green and Hannon, 2007). Judd and Kennedy (2011) write of the expedient, superficial or ‘satisficing’ search behaviours on young people on the internet. However, as Colaric (2003), points out, it is not surprising that students lack these skills if they have never been taught them. Furthermore, the picture may not be as bleak as some suggest. A recent international survey of 15-18 year olds asked students how often they were satisfied with the quality and reliability of information they found on social networking sites (SNS). While their responses were skewed towards the positive end of the scale, just 5.1% said they were always satisfied. This response suggests that while information on SNS clearly has value for most students, the vast majority are conscious it needs to be treated with a degree of caution (Aillerie and McNicol, 2016).

TEENAGERS’ VIEWS ON INTERNET ACCESS IN SCHOOLS

Five focus groups were carried out with young people aged between 11 and 17 in three English secondary schools in spring 2016. Each discussion lasted approximately 45 minutes. They explored broader censorship issues, such as reading habits and access to print materials, as well as use of digital resources. Three focus groups involved students from Key Stage 3 (11-14 years; 12 students) and two involved sixth form students (16-18 years; 25 students).

Students debated the complexity of freedom of information issues and how the meaning of censorship was changing with the expansion of internet access. In their discussions, students from across the age range displayed a sophisticated understanding of the implications of access to information via the internet. Developments in mobile technology and wifi provision have led to

significant changes in the ways in which young people can access the internet, as these students clearly appreciated:

You can still get access to it [an 18 certificate film] even though you're not at that age...you've got internet so even though you're not at that age you can still watch it, so it's not censored if you know what I mean... (6th former)

*If you've got access to a phone and internet, you've got access to anything you want, and as much as your parents can try...you can't really stop anyone...because everything's so accessible, it's like there is no censorship in a way, but then there is because...ratings or 'you can't read this unless you're this age'...though they say that you still access it from somewhere else...there's so much access for everyone, it's difficult to say 'you can't do this'.
(Key Stage 3 student)*

Students were aware of the possible negative implications of the internet, but they also described positive learning experiences, often from sites that were blocked in many schools and discouraged by their teachers:

There's things on social media that can expose you to a lot of bad things, but...I've learned a lot from social media, more than I've learned in school about things like drugs and alcohol and the affect it can really have on you...There are people on social media that promote a good message...about drugs. They don't glamorise it the way a movie does.

They don't hide it; they just tell you straight...

People tell their own experience on Twitter...you learn from it, you really do. (6th formers).

However, students felt that this degree of understanding of the complexity of the internet was not recognised by their teachers and so was of little relevance in school. For example, they were not allowed to use social media sites, in some cases even when a task such as watching a YouTube video

had been set as homework by a teacher. Thus, students were only able to access resources they needed outside school, clearly disadvantaging those without easy access to the internet at home:

With our ethics [project] we pretty much had to do all of it at home 'cos it was on abortion and everything on abortion was blocked, so we basically had to do the whole thing at home.

(6th former)

Students involved in these focus groups had come to accept that the internet was heavily filtered and monitored within school, so instead, they relied on access from home not only for much of their schoolwork, but also when they wanted to find out about social and health topics of legitimate concern to young adults:

I think inside school you're more aware because you've got the restrictions...there's no point Googling something that's a bit risky... (6th former)

Students reported very limited teaching related to digital literacy in their schools. That which they could recall was felt to be overly-simplistic:

We have days in school where we talk about alcohol and drugs and get people in, but it's only a day or two in a year...not in detail...And it's not about learning; it's more about memorising stuff... (6th former)

[We should] Definitely have more time and more lessons talking about it. (6th former)

I don't think it's taught; it just happens

They [teachers] just go, "Don't use Wikipedia", that's about it!

You kind of figure it out on your own... (6th formers)

In one school, students described an assembly when the police had been invited into the school to tell students about online safety, but as they were 16-17 years old at the time, students felt that this intervention was “a bit late”, coming several years after they might have found it useful.

THE POTENTIAL OF CRITICAL DIGITAL LITERACY

Therefore, while filtering can be seen as presenting an easy solution, it is clearly not an adequate answer to address concerns about internet access in schools, and more widely, for young people. Access is controlled in school using filters, but these are often so crude and aggressive that many young people are forced to perform most internet research, even for topics set by their teacher, outside school. Thus, filtering merely gives the appearance that something is being done, rather than being an effective solution. Young people themselves are aware of how much more complex access issues have become with the prevalence of mobile devices and public wifi access. However, schools are doing little to respond to students’ increasingly sophisticated interactions with the internet in more considered ways than by adopting a crude filtering approach. Students themselves feel that the support currently offered by schools is too little and too late. This finding emphasises the importance of developing a pedagogical approach that enables young people to make informed choices when accessing the internet not just in school, but also beyond.

Critical digital literacy might be viewed as a possible approach to teaching safeguarding that does not attempt to simplistically block access to the internet in schools, but instead recognises and values the experiences of young people themselves and allows for the sophisticated understandings displayed in the focus groups reported above. While critical digital literacy has existed as a concept for at least two decades, as Pangrazio (2016) points out, it “requires rethinking in the light of the fast-changing nature of young people’s digital practices” (p. 163).

Critical digital literacy develops the idea of digital literacy, as outlined above, a stage further to emphasise the importance of learning to recognise underlying messages in all types of resources

(written, images, film, multimedia etc), critique them and produce counter narratives when engaging with online materials. It is based on the notion of critical literacy, which can be described as a process that, “challenges the status quo in an effort to discover alternative paths for self and social development” (Shor, 1999). There are two key components of critical literacy. Firstly, it is concerned with the social and cultural contexts in which all types of resource are both created and read or viewed. Secondly, critical literacy has a focus on practical action and community engagement. Closely related to Freire’s (1970) critical pedagogy, critical literacy involves a commitment to equity and social justice and focuses on issues of power. It is intended to develop the skills, dispositions and strategies to enable readers to challenge “text and life as we know it” (McLaughlin and DeVogd, 2004, p. 17).

A fundamental notion of critical literacy is that all texts or resources are constructed and serve particular interests. This notion means it is important to consider who constructed a resource and for what purpose. Furthermore, resources contain value messages; as they are constructed by people, who all have their own views of the world, no resource is completely neutral and objective. For example, when they write, an author or creator makes conscious and unconscious choices about what to include and exclude and how to represent the things or people they depict. However, it is not just the author who has an important role: equally, the reader (or viewer) is an active participant in creating meaning. Just like authors, all readers have different experiences and knowledge which help them to make meaning from the resource. Each person therefore interprets a resource differently and multiple ways of reading a single resource are not just possible, but inevitable. In contrast to more conventional approaches to resource evaluation, with critical literacy there is no single ‘correct’ way to read and respond to a resource. The critical stance does not accept what is depicted by the author as truth, but questions who has the power; whose viewpoint is being presented; and what the author appears to want the reader to think. This stance also considers whose voices are missing and how these alternative perspectives might be represented. Readers are encouraged to question the assumptions made within resources; to discuss different possible

meanings; and to examine how authors can attempt to influence readers. A critical reading (or viewing) therefore becomes an inherently reflexive activity that encourages readers to recognize and question their own assumptions.

There are a number of reasons why critical literacy can be argued to be particularly well-suited to a digital environment. Firstly as Burnett and Merchant (2011) point out, new media differs from traditional print media in important ways, such as the possibility for multiple authorship, constant updating, dense connectivity to other resources and multimodal elements. These factors mean that “multiple meanings, readings and interpretations are a feature of digital environments” (Burnett and Merchant, 2011, p. 47), as well as a core component of critical literacy. Secondly, it has been argued that, in the digital environment, sources of knowledge are shifting from artefacts (texts) to users who act as knowledge producers (Hartley, 2010). However, this conception of knowledge is already accepted as being the case in critical literacy, which stresses the importance not of the resource as a neutral entity, but of the author and the reader. Critical literacy does not view any resource, digital or otherwise as “an abstract force” (Burnett and Merchant, 2011, p. 51), but one which is shaped by social and cultural attitudes. Hinrichsen and Coombs (2014) outline a model for critical digital literacy based on the four resources model by Luke and Freebody (1990). They draw attention to features of the internet such as the various codes and conventions of a variety of text forms; hypertextuality and fluid network texts that may lack a clear internal consistency and may change over time; and the challenge to traditional academic value hierarchies.

Finally, critical literacy requires not merely critique, but action. This notion does not mean mitigating “the political orientations of critique under the guise of ‘creativity’” (Pangrazio, 2016, p. 167); rather design, or action, is an inherent component of critical literacy. As Martin (2008) writes, the point of critical digital literacy is “to enable constructive social action; and to reflect upon this process” (p. 167) and the availability of Web 2.0 and other digital tools provides many opportunities for students to do so by creating their own videos, blogs and so forth (as indicated in Maddux et al 2008).

As stated above, much of the recent concern about school internet access stems from fears that students may access jihadist websites in school. In discussing the appeal of jihadist, or other terrorist, websites, Durodie (2016) claims that “People select and reject content according to previously developed interpretations and models of the world that they have already internalised” (p. 28). This argument suggests that it is students’ models of the world that schools need to influence if they wish to prevent students ‘selecting’ such websites, which they are likely to be able to find outside school even if access is not possible on school premises. A much more sophisticated approach than filtering or basic e-safety messages is therefore required. Critical digital literacy can help students to question and critique different interpretations and models of the world and to develop a greater awareness of the ways in which media is used to influence young people. As Durodie (2016) further points out, framing young people “as vulnerable to ‘being drawn into terrorism’ is...a passive formulation that implicitly removes their autonomy and agency” (p. 27). He criticises “this projection of people as fragile” (p. 28). O’Donnell (2016) develops this argument further, describing such an approach as “a de-legitimising and depoliticising strategy that removes considerations of questions of injustice, politics and violence from the public domain” (p. 60). In this context, a method such as critical digital literacy, which affords young people agency, is necessary to support them in making choices about resources they choose to use, not just in school, but also in their lives outside of formal schooling.

Teaching critical digital literacy in schools

While it is easy to argue that the concept of critical digital literacy may be helpful in theory, the issue of how to teach critical digital literacy skills, especially in the context of concerns about the radicalisation of young people, is less straightforward. While there are many teaching resources available for the teaching of e-safety (e.g. Thinkuknow¹, UK Safer Internet Centre²), there are fewer

¹ <https://www.thinkuknow.co.uk/>

² <http://www.saferinternet.org.uk/>

resources to support critical digital literacy. SWGfL's Digital Literacy³ is an example of a set of resources that, alongside basic e-safety skills such as creating strong passwords and protecting private information, introduces some more critical activities such as, 'Retouching reality' in which students think critically about the different purposes and contexts of digital image editing and 'The reality of digital drama' whereby students draw connections between young teens' perceptions of digital drama and stereotypes of men and women on reality television. However, even here, there is little that could be used to address the Government's concern about preventing the radicalisation of young people (DfE, 2015).

The Canadian organisation, MediaSmarts⁴, provides teaching resources on topics such as online hate, for example, a lesson exploring the different ways that hate organizations disseminate their messages using digital media and how this medium offers the potential to work against hatred and intolerance. Students visit and analyze the supporting websites of five anti-hate initiatives and then apply what they have learnt to the development of their own anti-hate campaigns.

In addition to such packages of teaching resources, there are also examples of approaches being developed by within individual schools. Jones (2016), a librarian at a UK school, describes how a student on a Communications and Culture course engaged with the online attacks that women face when using dating websites and apps to uncover the underlying messages conveyed in the language, narratives and mode of address being used on the internet. The student created a video piece that called for action and appealed for women to claim the space created on the internet and use it to develop a strong voice. As Jones (2016) explains, "In this respect, the course does not simply identify bias but examines the binary oppositions created by texts and how they position the reader...the subject provides pupils with real opportunities to question the constructs of their cultural backgrounds and society" (p. 109). It is possible to imagine similar approaches being taken towards issues related to radicalisation if students are supported in critiquing the underlying messages

³ <http://www.digital-literacy.org.uk/Home.aspx>

⁴ <http://mediasmarts.ca/>

conveyed by the issues chosen (and not chosen); language used; modes of address; and positioning of audiences by extremist groups.

CONCLUSIONS

The potential of online radicalisation is undoubtedly a problem and it is not surprising that this issue has recently given a further emphasis to online safety issues for young people. Statutory guidance issued by the UK Government suggests that a combination of filtering and pedagogic approaches is needed, but there is little detail about what form the latter might take. Although there are many resources available to teach e-safety, there are few that take more sophisticated approaches to digital literacy, such as the notion of critical literacy outlined in this article.

At present, most schools choose to rely heavily on internet filtering. This reliance is not surprising as a technological solution is easier to implement and gives the appearance that the problem has been addressed. The consequence, however, is that internet use is increasingly driven outside the school, into locations where students may have less support available and few opportunities to discuss issues of concern that they encounter online. Current filtering restrictions in many schools deny students access to the types of materials they are likely to come across outside school, and therefore deny them opportunities to develop the type of critical digital literacy skills described above, which would support them in respond critically to controversial resources and ideas.

Schools have a responsibility to help young people to develop appropriate skills to engage with the internet as it actually is, not as we might like it to be. The emphasis on technical solutions, and the neglect of pedagogic ones, mean that, at present, as Willard (2010) writes, “trying to prepare students for their futures as effective users of online information is like trying to teach children to swim without a swimming pool” (p. 55).

REFERENCES

Aillerie, K. and McNicol, S. (2016). Are social networking sites information sources? Informational purposes of high-school students in using SNSs, *Journal of Librarianship and Information Science*, doi: 10.1177/0961000616631612

American Library Association (ALA). (2012). *Filtering in Schools*. Retrieved from http://www.ala.org/aasl/sites/ala.org.aasl/files/content/researchandstatistics/slcsurvey/2012/AASL_Filtering_Exec_Summary.pdf

American Library Association (ALA). (2011). *What is Digital Literacy?*. Retrieved from <http://connect.ala.org/files/94226/what%20is%20digilit%20%282%29.pdf>

Burnett, C. and Merchant, G. (2011). Is there a space for critical literacy in the context of social media? *English Teaching: Practice and Critique*, 10(1), 41-57.

Colaric, S. (2013) Children, public libraries and the internet: Is it censorship or good service? *North Carolina Libraries*, Spring, 6-12.

Cortesi, S., Haduong, P., Gasser, U. Aricak, O. T., Saldaña, M. and Lerner, Z. (2014). *Youth Perspectives on Tech in Schools: From mobile devices to restrictions and monitoring*. Berkman Center Research Publication No. 2014-3. Retrieved from <http://ssrn.com/abstract=2378590> or <http://dx.doi.org/10.2139/ssrn.2378590>

Davies, L. (2016). Security, extremism and education: Safeguarding or surveillance? *British Journal of Educational Studies*, 64(1), 1-19.

Department for Education (DfE). (2016). *Keeping children safe in education: Statutory guidance for schools and colleges*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/550511/Keeping_children_safe_in_education.pdf

- Department for Education (DfE). (2015). *The Prevent duty: Departmental advice for schools and childcare providers*. Retrieved from https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/439598/prevent-duty-departmental-advice-v6.pdf
- Durodie, B. (2016). Securitising education to prevent terrorism or losing direction. *British Journal of Educational Studies*, 64(1), 21-35.
- Freire, P. (1970). *Pedagogy of the Oppressed*, New York: Herder and Herder.
- Green, H. and Hannon, C. (2007). *Their space: education for a digital generation*. London: Demos.
- Hartley, J. (2010). Where money and meaning meet: Theorizing the emergence of new values in media and education. In K. Drotner & K.C.Schroder (Eds.), *Digital content creation: Perceptions, practices and perspectives* (pp. 91-108). New York, NY: Peter Lang.
- HM Government. (2011). *Prevent Strategy*. London: HMSO.
- Hinrichsen, J. and Coombs, A. (2014). The five resources of critical digital literacy: A framework for curriculum integration. *Research in Learning Technology*, 21.
- International Federation of Library Associations and Institutions (IFLA) (2014). *Internet Manifesto 2014*. Retrieved from <http://www.ifla.org/publications/node/224>.
- Jones, R. (2016). Curricular and extra-curricular opportunities to engage school students in critical literacy in England. In S. McNicol, (Ed.). *Critical Literacy for Information Professionals* (pp. 105-14). London: Facet.
- Judd, T. and Kennedy, G. (2011). Measurement and evidence of computer-based task switching and multitasking by 'Net Generation' students. *Computers & Education*, 56(3), 625-631.
- Littlejohn, A. Beetham, H. and McGill, L. (2012). Learning at the digital frontier: A review of digital literacies in theory and practice. *Journal of Computer Assisted Learning*, 28, 547-56.

Luke, A. and Freebody, P. (1999). Further Notes on the Four Resources Model, *Reading Online*.

Retrieved from

<http://www.readingonline.org/research/lukefreebody.html>

Maddux, C.D., Liu, L. and Johnson, L. (2008). Web 2.0: On the cusp of a revolution in information technology in education? *Computers in the Schools* 25(3-4), 159-162.

Male, T. and Burden, K. (2014). Access denied? Twenty-first-century technology in schools.

Technology, Pedagogy and Education, 23(4), 423-437.

Martin, A. (2008). Digital literacy and the digital society. In C. Lankshear & M. Knobel (Eds.),

Digital Literacies: Concepts, policies and practices (pp. 151-176). New York: Peter

Lang.

May, J. (2014) Is web filtering in the UK excessive? Retrieved from

<http://www.cilip.org.uk/blog/web-filtering-uk-excessive>.

McLaughlin M. and DeVoogd, G. (2004) *Critical Literacy: Enhancing students' comprehension of text*,

New York: Scholastic.

McNicol, S. (2016) "School librarians' intellectual freedom attitudes and practices", *New Library*

World, 117 (5/6), pp. 329 – 342.

McNicol, Sarah (2005): *Censorship practices and access to information: Interviews with school and*

children's librarians, <https://dx.doi.org/10.6084/m9.figshare.1512323.v1>.

Muir, A., Spacey, R., Cooke, L., and Creaser, C. (2016). Regulating internet access in UK public

libraries: legal compliance and ethical dilemmas. *Journal of Information, Communication and Ethics*

in Society, 14(1), 87-104.

National Counter Terrorism Security Office. (2015). *Guidance: Online radicalisation*. Retrieved from <https://www.gov.uk/government/publications/online-radicalisation/online-radicalisation>

O'Donnell, A. (2016). Securitisation, counterterrorism and the silencing of dissent: The educational implications of Prevent. *British Journal of Educational Studies*, 64(1), 53-76.

Pangrazio, L. (2016). Reconceptualising critical digital literacy. *Discourse: Studies in the Cultural Politics of Education*, 37(2), 163-74.

Sharples, M., Graber, R., Harrison, C., and Logan, K. (2009). E-safety and Web 2.0 for children aged 11-16, *Journal of Computer Assisted Learning*, 25, 70-85.

Shor, I. (1999). What is Critical Literacy? In A. Darder, M. Baltodano, & R.D. Torres, R.D. (Eds.) (2003). *The Critical Pedagogy Reader* (pp. 282- 304). London: Routledge Falmer.

Thornburgh, D., and Lin, H. S. (Eds.). (2002). *Youth, pornography, and the Internet*. Washington, DC: National Academies Press.

Willard, N. (2010) Teach them to swim. *Knowledge Quest*, 30(1), 54-61.

Yan, Z. (2009). Differences in high school and college students' basic knowledge and perceived education of Internet safety: Do high school students really benefit from the Children's Internet Protection Act? *Journal of Applied Developmental Psychology*, 30, 209-17.