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# Online Network Use in Schools: Social and Educational Opportunities

# Abstract

Most state governments in Australia have banned popular online networking sites from public schools after these sites were accused of supporting a broad host of threats to young people. This paper questions the effectiveness of these bans in light of recent empirical research that highlights the social and educational benefits that can accrue from young people's online network use. In doing so, this paper argues for a more informed policy debate that considers not only the risks involved in using online networks, but also the opportunities online networks afford and the capabilities young people require to use them effectively.

#### Introduction

In recent years, Australian politicians and media commentators have claimed that online networks – email, chat, social network sites, virtual reality environments and communities of interest – have supported a broad host of threats to young people including paedophilia (ABC 2007; Coonan 2007; *Sydney Morning Herald* 23/6/2007), bullying (*Daily Telegraph* 13/11/2007; Moses 2007; Smith 2007), racism (Box 2006; Tinkler & David 2007), and the spread of unwanted pornographic and violent materials (Shanahan & Rowbotham 2007; Horin 2003; Tanner 2006). This paper explores how state governments, with a specific focus on the current situation in the state of Queensland, have opted to deal with the alleged risks posed by these networks through education policies. In addition, it discusses recent research that highlights the way online network use can support social and educational benefits. The paper concludes by considering the appropriateness of current education policies, which are likely to impede some young people's abilities to use online networks effectively.

# What are online networks?

An online network can be defined quite simply as an internet-based environment that requires membership for participation whereby membership facilitates a relationship through which resources (both material and immaterial) can be mobilised. By focusing on the aspect of membership in this definition, rather than on the specific technical features of different online platforms, the aim is to shift the focus away from the technology and instead focus on human-centred concerns. The primary interest of this paper is the reasons why young people choose to join online environments and what social and educational benefits their membership provides.

# Online networks and young people

In Australia, 81% of households with children aged under 15 years have home internet access compared with 57% of households without children under 15 years (Australian Bureau of Statistics (ABS) 2007a). Thus, while the level of home connectivity for young people is high, 19% of Australians aged less than 15 years are without home internet access. Further, 43% of young people in this age group have no broadband access at home (ABS 2007a). Young people from households with a low-income, with single parents and with low levels of formal educational attainment, as well as those

from Australian Aboriginal households, are all worse off in terms of internet access (ABS 2007a; ABS 2007b).

A study of young people aged 8–17 years (n=1003) by the Australian Communications and Media Authority (ACMA 2007) combined a quantitative national survey with qualitative media time-use diaries. The study found that young people spend about one and a quarter hours online each day. For young children aged 8–11 years, the average daily time spent online was just 30 minutes per day, while for teenagers aged 15–17 years this was found to rise to just under two and a half hours. What young people used the internet for in a three-day period, as recorded in their media time-use diaries, varied significantly with age. The key activities carried out by the older group of teenagers (aged 15–17 years) included spending 45 minutes per day on communication activities (such as emailing, messaging or chatting), 25 minutes on homework, 23 minutes playing online games against others, 24 minutes on social networking or usergenerated content sites and 14 minutes viewing audio-visual content. This suggests that this age group use the internet for diverse purposes but that most of their time online is spent using online networks that they have voluntarily joined.

However, internet access statistics are quite limited in what they can tell us about equality of opportunity. Personal mobile media ownership, high-speed access versus dial-up access and family and school time and use constraints, as well as skills, literacies, knowledge and support (what can be collectively called information and communications technology (ICT) capabilities) all impact on young people's ability to use the internet in meaningful ways (Livingstone, Bober & Helsper 2005). Despite this, very few studies have investigated the way internet use relates to and impacts upon young people's broader lives. Instead, many, if not most, of the published studies that have examined young people's online network use (particularly those in the field of youth studies) have been primarily concerned with potential risks.

#### Risks involved with online networks

Chat rooms, instant messaging platforms and social networking sites have all been identified by researchers as online environments where young people can be sexually harassed, groomed by paedophiles, and unwittingly encounter violent or pornographic materials (for example Byron Review 2008; Fleming et al. 2006; Livingstone & Helsper

2007; Livingstone 2008; Muir 2005; Ybarra, Espelage & Mitchell 2007; Ybarra et al. 2007a; Ybarra et al. 2007b).

The influential studies cited here have been primarily interested in understanding to what degree young people engage in different forms of risk-taking behaviour online (including giving out personal details and talking to "strangers") and with identifying the characteristics of high-level risk-takers. Far less research has attempted to understand the social benefits young people gain from forms of online network use that are classified by researchers as potentially "risky".

Livingstone and Helsper (2007) define risky behaviour as: giving out personal information online, making friends online and going to offline meetings with people met online. Using data from the combined qualitative and quantitative UK Children Go Online<sup>1</sup> study, they found that children's offline social and psychological characteristics influenced their online communication. For example, low life satisfaction was found to increase the likelihood of carrying out all risky activities online. But, at the same time, low life satisfaction also increased the likelihood that young people would seek advice online and would make new friends online. This suggests a doubleedged sword. On the one hand, young people with low levels of life satisfaction may benefit most from the online support and new friendships that online networks can facilitate. But, on the other hand, these young people are also more likely to be engage in behaviour that may involve or lead to risk-taking behaviour when they do get online. The linked experience of online risks and benefits is further highlighted by the findings that the more time young people spent online, the more skills they acquired, the more rewarding their experience was likely to have been and the more risks they were also like to have encountered (Livingstone 2006).

The Byron Review (2008) was an independent study commissioned by the UK Prime Minister, Gordon Brown, to review the risks children face online. Consultant clinical psychologist Tanya Byron found that while there is little doubt that there are new and in some cases increased risks presented to young people by the internet, any

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<sup>&</sup>lt;sup>1</sup> The UK Children Go Online study surveyed young people aged 9–19 years and their parents and carried out focus group discussions and interviews with both parents and young people. See: <a href="http://www.lse.ac.uk/collections/children-go-online">http://www.lse.ac.uk/collections/children-go-online</a>>.

concrete "evidence" of harm resulting from the internet is fairly limited. Byron concluded that the impact of encountering risks is very much context-bound and related to the previous experiences of the child and the context of the interaction rather than the format or type of interaction itself (p.59). Byron's key recommendations made to the UK government for the management of online risks are based around a three-pronged approach designed to: 1) reduce the availability of harmful content, 2) restrict young people's access to this content, and 3) to increase young people's resilience in responding to harmful content. Byron emphasised the need for media literacy training in schools because, "we need to empower people with the skills, knowledge and confidence they need to embrace new technology to make the decisions that will protect themselves" (p.109). Byron recommended that media literacy education be tiered and based on an understanding of children's ongoing social and psychological development and on an understanding that young people will want to use the internet for different things as they change and develop.

The UK government has now accepted the Byron Review in full and has stated that it will act on all of the recommendations made, including introducing changes to the school curriculum and to teacher training that will support online safety and skills (Balls 2008). However, there has been no equivalent to the Byron Review in Australia and no national strategy currently exists to ensure that young people are receiving an appropriate education in how to avoid and deal with internet risks *while* enjoying the benefits also provided.

#### The benefits of online network use

Recent Australian and international research points quite clearly towards the civic (Coleman 2008; Rheingold 2008; Vromen 2007), cultural (Byrne 2008; Ito 2006; Williams 2006), creative and educational (Jenkins 2006; Jenkins 2007; Ondrejka 2008), self-expression and social development (boyd 2007; boyd 2008; Lenhart & Madden 2007; Livingstone 2008) and health opportunities (Beattie et al. 2006; Dutta, Bodie, & Basu 2008; Inspire Foundation 2007) provided by young people's use of online networks.

But while the risks young people encounter online now can be statistically measured through survey-based studies, it is much more difficult to measure online benefits. The main reason for this is that it is complicated, if not impossible, to disentangle internet use

benefits from the many external psychological and social factors that are likely to play a role. Indeed, most of the research studies cited above have been based on anecdotal or non-representative population samples. Within the limited space here, the paper will discuss research findings that provide evidence that online network use can develop social capital and support educational benefits.

# Online networks and social capital

International research has shown that higher levels of social capital are associated with better health, higher educational achievement, better employment outcomes and lower crime rates (Woolcock 2001). Woolcock (2001) has identified three different forms of social capital: 1) bonding social capital, which describes closer, more intensive connections between people in similar situations, such as family members and close friends; 2) bridging social capital, which describes more distant connections, such as those with business associates, acquaintances and friends of friends; and 3) linking social capital, which describes vertical connections with people in dissimilar situations including government agencies and social services.

The key reason why online networks can enhance social capital is because the increasing ubiquity of the internet and related ICTs impacts on the way social relationships and social networks are created, mediated and maintained. If a majority of people communicate and connect online, this in turn impacts on the way they accumulate social capital (Notley & Foth 2008). In this way ICTs can and do have an impact on bonding, bridging and linking forms of social capital (Huysman & Wulf 2004).

United States Pew Internet & American Life studies have found that internet use provides Americans with a valuable path to resources including people, services and information, and that those connected to the internet are more likely to seek assistance on health, education, employment and financial issues (Boase et al. 2006). A UK-based representative study by the Oxford Internet Institute (Dutton & Helsper 2007), and a qualitative Canadian study by Wellman and Hampton (2003), indicate that internet use expands users' social networks both online and offline. In these ways, the internet has clearly been shown to develop users' social networks and thus to increase their social capital in significant and measurable ways.

But young people's use of the internet to develop social networks is often considered to be less straightforward because this may involve interactions with strangers. The greatest concern of parents and policymakers in regard to young people's internet use appears to be young people's interactions with strangers (Byron Review 2008).

However, while there is a great deal more to learn about the social capital benefits of young people's internet use in an Australian context, a study by Mission Australia (2007)<sup>2</sup> found that young people aged 11–19 years rated the internet as the fourth most important source of advice and support after friends, parents and relatives/family friends. The internet was ranked before doctors, school counsellors and social workers as a source for advice and support. Further, Ariadne Vromen's (2007) ethnographic-based study found that Australian online networks such as Vibewire (www.vibewire.net) and Reach Out! (www.reachout.com.au) facilitate civic participation, information-sharing and knowledge-building and create support systems for young people in Australia. At the same time, she found that a digital divide among Australian youth continues to inhibit the participation of many on networks like these.

In terms of educational benefits, the value of the internet for instant access to information is readily apparent (ACMA 2007; Byron Review 2008). However, it is also clear that the educational benefits of the internet are not automatic, nor are they guaranteed. Rather, they derive from the ways in which the technology is used (Buckingham 2008). Henry Jenkins's (2007) white paper, *Confronting the challenges of participatory culture: Media education for the 21st century,* aspires to support a discussion about the value of online cultural engagement and the role this should play in re-shaping formal education in the United States. The report draws from and is motivated by 2005 Pew research findings that indicate that "more than one-half of all teens have created media content, and roughly one-third of teens who use the internet have shared content they produced" (Jenkins 2007, p.3). A central aim of the report, Jenkins says, is to "shift the focus of the conversation about the digital divide from questions of technological access to those of opportunities to participate and to develop the cultural competencies and social skills needed for full involvement" both online and

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<sup>&</sup>lt;sup>2</sup> This national telephone survey of 29,000 young people aged 11–24 found that 13.9% of young people aged 11–14, and 22% of 15- to 19-year-olds, turned to the internet for advice and support (Mission Australia 2007).

in society more generally (Jenkins 2007, p.4).

Jenkins (2007) defines a participatory culture as, "a culture with relatively low barriers to artistic expression and civic engagement, strong support for creating and sharing one's creations, and some type of informal mentorship whereby what is known by the most experienced is passed along to novices" (p.3). He argues that there is evidence to show that participatory cultures that have proliferated online and that are now popular among young people provide many of the skills and cultural competencies required for full online and social engagement by supporting "peer-to-peer learning, a changed attitude toward intellectual property, the diversification of cultural expression, the development of skills valued in the modern workplace, and a more empowered conception of citizenship" (Jenkins 2007, p.3). These benefits, Jenkins (2007) says, are hindered by a "participation gap" that is characterised by "unequal access to the opportunities, experiences, skills, and knowledge that will prepare youth for full participation in the world of tomorrow" (p.3).

Other researchers have also emphasized the learning benefits that online network use can provide through the development of skills in peer-to-peer knowledge sharing, collaboration and critical evaluation (Gee 2003; Ito 2006; Organisation for Economic Cooperation and Development (OECD) 2007; Sefton-Green 2005). Case study research has suggested that the flexible, personalised, experiential and informal learning opportunities that online network platforms provide can better suit young people who have struggled with the industrial one-size-fits-all style of teaching that still characterises the mainstream school systems in most developed nations (Green et al. 2007). However, rather than suggesting that online networks offer learning tools that are superior to traditional school-based learning, some researchers argue that online networks can and should be used to support an education system that conforms to the learner, rather than the learner to the system. This is because online networks provide opportunities to diversify and personalize learning and to make it more relevant to young people's interests and everyday lives (Green et al. 2007).

# Young people's online network use in schools

Access to online networks in schools varies across the Australian states. In Queensland, for example, since 2003, all state primary, secondary and special schools have been

required to connect to the internet using *Ednet*, which includes a mandatory state government filtering system (Queensland Government Department of Education, Training and the Arts 2003). Today, *Ednet's* managed internet system (MIS) goes well beyond filtering pornographic materials: it also prevents students from using web-based email, popular social networking sites including *MySpace*, *Bebo*, *Tagged* and *Facebook*, content sharing networking sites like *Flickr* and *YouTube* and popular blogging sites such as *LiveJournal* and *Blogger*. The Queensland Education Department has stated that its rationale for banning the use of popular online networking sites in schools is because it has a "duty of care" to protect students from harm. It believes that popular online networks:

... have a very broad range of content that varies greatly in terms of quality and also appropriateness for school age children. Most of the content on these sites has little educational value ...children, subject to parental/caregiver approval, can still access these sites from home if they wish to develop skills and search for educational material on these types of sites (Queensland Government Department of Education, Training and the Arts 2007).

This statement is embedded in two assumptions. First, the Education Department assumes that students have home internet access; second, it believes the ability to use online networks should be dictated by parental decisions rather than mediated by formal education. This first assumption is clearly problematic given the persistent digital divide in Australia that has been identified earlier in this paper. The second assumption also warrants further debate because it places a burden on parents, many of whom are clearly struggling to keep up with the pace of technological change and with their children's internet use. A recent study by ACMA found that 96% of parents believe that their children benefit from their internet use, but that 44% of the parents of teenagers worry about the safety of their child while online (ACMA 2007). The UK Children Go Online study found that the way parents understood the risks and potentially harmful experiences their children encountered online was a far cry from how children described the situation, while most parents do not feel competent enough to help their children develop online skills (Livingstone 2006; Livingstone, Bober & Helsper 2005).

The UK Byron Review (2008) surmised that one of the greatest issues in dealing with young people and online risks is that a "generational digital divide" exists where parents do not understand the risks involved online and, consequently, this can make them feel

fearful and helpless and unable to manage risks in the same way they do offline. Byron argues that what is required is a "shared culture of responsibility with families, industry, government and others in the public and third sectors all playing their part to reduce the availability of potentially harmful material, restrict access to it by children and to increase children's resilience" (Byron Review 2008, p.2). Her key recommendations to the UK government emphasise that she believes that government should take the lead in ensuring internet safety and learning is sustained over time.

But while the Queensland Government responded to the rise in popularity of particular online networks by banning their use in schools, it is important to note that, in 2006, the Queensland Education Department developed an intranet-based (non-public) network, Learning Place, that supports content uploads, conferencing spaces, blogs, wikis and collaborative project spaces (Queensland Government Department of Education, Training and the Arts 2007, 2008). According to the Education Department, over 100,000 students had registered on the network as of January 2008 (Queensland Government Department of Education, Training and the Arts 2008). Learning Place spaces are managed by teachers or school administrators who decide on access and upload restrictions: students do not have the ability to create their own spaces without teacher permissions. In this way, Learning Place raises important questions about the value (and purpose) of "managed" versus "autonomous" online network spaces for young people (see Coleman 2008). Whether it is possible for young people to learn the ICT capabilities they require to participate on online networks through a limited, restricted and completely adult-managed intranet like Learning Place needs to be assessed through empirical research.

In defence of the Education Department, some online environments are accessible in Queensland state schools. While *EdNet* blocks commercial global networks such as *MySpace* and *YouTube*, it does permit access to some Australian youth-focused online network sites including Vibewire (vibewire.net), Reach Out! (www.reachout.com.au) and Kids Helpline (www.kidshelpline.com.au) (Queensland Government Department of Education, Training and the Arts 2007, 2008). These networks have been found to provide opportunities for young people to access forms of social support and to voice and develop their opinions and creative skills (Beattie et al. 2006; Inspire Foundation 2007; Vromen 2007).

The provision of access to these networks within Queensland schools could be argued to broaden the limited opportunities provided by *Learning Place* by allowing students to use still limited but potentially safer, non-commercially motivated online networks. The need and justification for this restricted access and the question of whether students are aware of the limited options they do have should form part of an important public discussion about the current forms of internet censorship in schools. Of key importance to this discussion will be an assessment of how current forms of content censorship in schools may be impacting on the digital inclusion opportunities of different young people, particularly those without home internet access. We know very little about how young people develop their internet skills. It is important that we investigate whether young people without home internet access or those from particular socioeconomic or ethnic backgrounds are at a disadvantage because popular uses of the internet are banned in schools. This is a plausible scenario because exploiting the benefits of online networks requires particular capabilities (access, skills, literacies and support), as does avoiding the risks.

# New media literacy education policy?

At the November 2007 Australian federal government election, the Australian Labor Party (ALP) defeated the Coalition government, which had spent the previous 11 years in office. During their 2007 election campaign, the ALP announced a "cybersafety policy" (ALP 2007). The policy document stated that, "Labor considers that, just as we teach Australian children about the risks of drink driving, we must also teach them how to be responsible cyber-citizens and about the importance of cyber-safety" (ALP 2007, n.p.). This analogy speaks volumes about the government's starting point in addressing online safety. It infers that the Labor Party believes that going online is a risky activity and that it is government's responsibility to teach young people about these risks. This contrasts significantly with the analogy used in the Byron report. Tanya Byron (Byron Review 2008) suggests that we should understand young people's internet use in a way similar to how we understand their need to learn to swim. In this analogy, the starting point infers that the internet is positive, fun and important for life. Learning how to use it will take time and will involve learning a number of skills while support systems will always be required for young people and adults alike (just as lifesavers and warning signs are required at the beach even for competent swimmers).

Despite this, Labor's cyber-safety policy document did extend the past government's notion of online risk, which had been articulated through their pre-election NetAlert internet safety policy initiative (Coonan 2007).3 The notion of risk was extended by the Labor Party away from an exclusive focus on bullying, pornography, paedophilia and meeting strangers to include other issues such as computer use addiction, identity theft, and dealing with unwanted spam, advertising and viruses. The cyber-safety policy document set out a number of ways Labor would change and extend the NetAlert initiative if elected. For example, the policy proposal promised to undertake further research into cyber-safety issues in Australia and to establish a Youth Advisory Group (YAG) to advise government, as well as a permanent joint parliamentary standing committee to investigate and report on cyber-safety issues. The proposal also promised that a Labor government would establish a dedicated cyber-safety website for young people that would provide "age-appropriate information" as well as reporting processes that were considered superior to those currently in place on the NetAlert website. Finally, the document stated that a Rudd Labor government would work with the states and territories to ensure all existing teachers progressively upgrade or develop their ICT competence, which should include an understanding of cyber-safety. The document proposed that from 2009, new education students would be required to have "appropriate skills in ICT before they are able to graduate" (ALP 2007, n.p.).

This brief policy proposal from the Labor government has great merits and potential and many of the actions it proposed have more recently been mirrored by the more comprehensive recommendations made in the UK Byron Review (2008). Unlike the Byron Review, this policy proposal did not address the need to invest resources into understanding and supporting the social and educational benefits young people can gain from their online network use.<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> Among other things, this initiative provided additional funding for paedophile detection, and introduced a major media internet safety awareness campaign and free PC-level filtering software for every Australian household. The current Australian Government is championing ISP-level filtering.

<sup>&</sup>lt;sup>4</sup> In the 2008–2009 federal Budget, the Australian Government committed funding of \$125.8 million over four years to its cyber-safety plan. This plan should be considered against whole-of-government initiatives in digital education revolution, the digital economy and the Prime Minister's evidence-based policy platform. While the benefits of internet use are not explicitly mentioned in the plan itself, the whole-of-government framework clearly encapsulates benefits on investment in this area. For example, the government's \$4.7b broadband push is premised on the economic, social and cultural benefits of online engagement for Australians, including young people.

In this way, this policy proposal is restricted and warrants further research and discussion to ensure that policies support young people to develop the capabilities they require to participate online in ways that are meaningful to them.

#### **Conclusions**

While governments can provide parents with a PC filtering system, encourage them to block uses of online networks and ensure that all public schools do the same, this is likely to be denying some young people crucial opportunities to learn to use online networks in safe, meaningful and effective ways. It is important that Australian policymakers consider the social and educational benefits of, first, allowing young people to use different online networks in schools, and, second, discussing the use of online networks in the curriculum to ensure that both the benefits and risks of online networks are understood by young people from different ethnic, socioeconomic and geographic contexts. This is particularly important in light of recent and emerging research that indicates the many and varied benefits online network use can support.

Rather than investigating different experiences of online network participation, policymakers in Australia have been preoccupied with the potential dangers of interactions through popular online networking sites such as *MySpace* and *YouTube*. To move beyond a discussion that only examines the risks involved in using such networks, we need to start by asking which networks different young people inhabit, how they make use of these networks and then consider how this use interacts with and impacts upon their lives. To achieve this, a government commitment to funding empirical research relating to the benefits of young people's internet use is required. This will support the development of an evidence base that can then form the basis of more informed policy.

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### References

- ABC. 2007. MySpace deletes 29,000 sex offender profiles. *ABC News Online*, 25th July 2007. Australian Broadcasting Corporation. http://www.abc.net.au/news/stories/2007/07/25/1987535.htm (Accessed: 30th December 2007)
- ABS. 2007a. Household Use of Information Technology, Australia, 2006-07. Canberra: Australian Bureau of Statistics.
- ABS. 2007b. Patterns of internet access in Australia, 2006: 8146.0.55.001 Canberra: Australian Bureau of Statistics.
- ACMA. 2007. Media and Communications in Australian Families 2007: Report of the Media and Society Research Project. Melbourne: Australian Communications and Media Authority: Commonwealth of Australia
- ALP. 2007. Labor's Plan for Cyber-safety. Australian Labor Party. November 2007. Pp http://alp.org.au/download/now/labors\_plan\_for\_cyber\_safety.pdf (Accessed: 14th December 2007)
- Balls, Ed. 2008. Written Ministerial Statements. Thursday 27 March 2008. Children, Schools and Families "Safer Children in a Digital World" (Byron Review). Pp http://www.parliament.the-stationery-office.co.uk/pa/cm200708/cmhansrd/cm080327/wmstext/80327m0001.htm (Accessed: 2th June 2008)
- Beattie, Debra, Stuart D. Cunningham, Richard G. Jones, & Oksana Zelenko. 2006. "I use online so the counsellors can't hear me crying": Creating design solutions for online counselling. *Media International Australia Incorporating Culture and Policy* 118:43-52.
- Boase, Jeffery, John B. Horrigan, Barry Wellman, & Lee Rainie. 2006. The Strength of Internet Ties. Washington, D.C: Pew Internet & American Life Project.
- Box, Dan. 2007. Racist site warnings ignored. *The Australian*, March 13th 2006. Pp http://www.australianit.news.com.au/story/0,24897,18442097-15306,00.html (Accessed: August 21st 2007)
- boyd, danah. 2007. Friends, Friendsters, and Top 8: Writing Community into being on social networking sites. *First Monday* 12 (11).
- boyd, danah. 2008. Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life. Pp119-142. In *MacArthur Foundation Series on Digital Learning Youth, Identity, and Digital Media Volume*, edited by D. Buckingham. Cambridge, MA: MIT Press.

- Buckingham, D. 2008. The Impact of the Media on Children and Young People with a particular focus on the internet and video games. Prepared for the Byron Review on Children and New Technology. With contributions from Dr Natasha Whiteman, Dr Rebekah Willett and Dr Andrew Burn. Pp http://www.dfes.gov.uk/byronreview/pdfs/Buckingham%20Impact%20of%20Media%20 Literature%20Review%20for%20the%20Byron%20Review.pdf (Accessed: 26th June 2008)
- Byrne, Dara N. 2008. The Future of (the) 'Race': Identity, Discourse, and the Rise of Computer-mediated Public Spheres. Learning Race and Ethnicity: Youth and Digital Media. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning:15-38.
- Byron Review. 2008. Safer Children in a Digital World. The Report of the Byron Review: Department for Children, Schools and Families, and the Department for Culture, Media and Sport.
- Coleman, Stephen. 2008. Doing IT for Themselves: Management versus Autonomy in Youth E-Citizenship. Pp189-206. In *Civic Life Online: Learning How Digital Media Can Engage Youth. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning*, edited by W. L. Bennett. Cambridge, MA: The MIT Press.
- Coonan, Senator Helen. 2007. NetAlert Protecting Australian Families Online. Adelaide
  Launch. Senator the Hon Helen Coonan. Minister for Communications, Information
  Technology and the Arts. Tuesday 4 September 2007. Pp
  http://www.minister.dcita.gov.au/coonan/media/speeches/netalert\_\_protecting\_australian
  \_families\_online\_adelaide\_launch (Accessed: 2nd January 2008)
- Daily Telegraph. 2007. Schoolgirl brawl caught on video. November 13th 2007. Pp http://www.news.com.au/heraldsun/story/0,21985,22751898-662,00.html (Accessed: December 20th 2007)
- DETA. 2003. What is the MIS?, no date. Pp http://education.qld.gov.au/schools/mis/ (Accessed: 1st September 2006)
- Dutta, Mohan J., Graham D. Bodie, & Ambar Basu. 2008. Health Disparity and the Racial Divide among the Nation's Youth: Internet as a Site for Change. Pp175-198. In *Learning Race and Ethnicity: Youth and Digital Media. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning*, edited by A. Everett. Cambridge, MA: The MIT Press.
- Dutton, William, & Ellen Helsper. 2007. The Internet in Britian 2007. Oxford: Oxford Internet Institute.
- Fleming, M.J, S Greentree, D Cocotti-Muller, K.A Elias, & S Morrison. 2006. Safety in cyberspace: dolescents' safety and exposure online. *Youth & Society* 38 (135-54).

- Gee, James. 2003. What Video Games Have to Teach us About Litercay and Learning. New York: Palgrave Macmillan.
- Green, Hannah, Keri Facer, Tim Rudd, Patrick Dillon, & Peter Humphreys. 2007. Personalisation and Digital Technologies. Bristol: Futurelab.
- Huysman, Marleen, & Volker Wulf, eds. 2004. *Social Capital and Information Technology*. Cambridge: MIT Press, Massachusetts Institute of Technology.
- Inspire Foundation. 2007. Bridging the Digital Divide: Creating opportunities for marginalised young people to get connected. Number 1 December 2007. Sydney.
- Ito, Mizuko. 2006. Japanese Media Mixes and Amateur Cultural Exchange. Pp49-65. In *Digital Generations: Children, Young People, and New Media*, edited by D. Buckingham & R. Willet. New Jersey: Lawrence Erlbaum Associates.
- Jenkins, Henry. 2006. *Convergence Culture: Where Old and New Media Collide*. New York: New York University Press.
- Jenkins, Henry. 2007. Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. Chicago: MacArther Foundation.
- Lenhart, Amanda, & Mary Madden. 2007. Social Networking Websites and Teens: An Overview. 1st June 2007. Pp
  http://www.pewinternet.org/pdfs/PIP\_SNS\_Data\_Memo\_Jan\_2007.pdf (Accessed: 20th May 2007)
- Livingstone, S. 2006. Drawing Conclusions from New Media Research: Reflections and Puzzles Regarding Children's Experience of the Internet. *The Information Society* 22 (4):219-230.
- Livingstone, S, M Bober, & E Helsper. 2005. Inequalities and the Digital Divide in Children and Young People's Internet Use. London: London School of Economics.
- Livingstone, S, & Magdalena Bober. 2005. Uk Children Go Online: Surveying the experience of young people and their parents. London: Ofcom & London School of Economics.
- Livingstone, S, & E Helsper. 2007. Taking Risks when communicating on the internet. *Information, Communication & Society* 10 (5):619-644.
- Livingstone, Sonia. 2008. Taking risky opportunities in youthful content creation: teenagers' use of social networking sites for intimacy, privacy and self-expression. *New Media & Society* 10 (3):459-477.
- Mission Australia. 2007. National Survey of Young Australians 2007. Melbourne: Mission Australia.

- Moses, Asher. 2007. Online bullying a growing part of US teen Internet life. *The Age*, Pp http://www.theage.com.au/news/Technology/Online-bullying-a-growing-part-of-US-teen-Internet-life/2007/12/02/1196530477410.html (Accessed: 28th December 2007)
- Muir, D. 2005. Violence against Children in Cyberspace: A Contribution to the United Nations Study on Violence against Children. Bangkok: ECPAT International.
- Notley, T, & Marcus Foth. 2008. Extending Australia's Digital Divide Policy: An Examination of the Value of Social Inclusion and Social Capital Policy Frameworks. *Australian Social Policy* (7).
- OECD. 2007. Participative Web: User-Created Content. April 2007. Pp http://www.oecd.org/dataoecd/57/14/38393115.pdf (Accessed: June 5th 2007)
- Ondrejka, Cory. 2008. Education Unleashed: Participatory Culture, Education, and Innovation in Second Life. Pp229-252. In *The Ecology of Games: Connecting Youth, Games, and Learning. The John D. and Catherine T. MacArthur Foundation Series on Digital Media and Learning*, edited by K. Salen. Cambridge, MA: The MIT Press
- Queensland Department of Education. 2007. Responses to questions relating to EdNet Managed Internet Service. Email correspondence. Received by: T. Notley. Sent by: Queensland Department of Education. (30th May 2007)
- Queensland Department of Education. 2008. *Response to T. Notley's email enquiries dated 24 January regarding research application 550/27/565*. Email correspondence. Received by: T. Notley. Sent by: (30th May 2007)
- Rheingold, Howard. 2008. Using Participatory Media and Public Voice to Encourage Civic Engagement. Pp97-118. In *Civic Life Online: Learning How Digital Media Can Engage Youth. The John D. and Catherine T. MacArthur Foundation Series on Digital Media*, edited by W. L. Bennett. Cambridge, MA: The MIT Press.
- Sefton-Green, J. 2005. Report 7. Literature review in Informal Learning with Technology Outside School, edited by K. Facer. Bristol: Futurelab.
- Shanahan, Dennis, & Jill Rowbotham. 2007. Howard on internet porn crusade. *The Australian*, 10th August 2007. Pp http://www.australianit.news.com.au/story/0,24897,22218715-15306,00.html (Accessed: 31st December 2007)
- SMH. 2003. Kids drawn into vile web porn as '60s generation sits on its hands. *Sydney Morning Herald*, Pp http://www.smh.com.au/articles/2003/03/02/1046540073744.html (Accessed: 4th August 2007)
- SMH. 2007. How I trapped paedophiles. Sydney Morning Herald, 23rd June 2007.

- Smith, Bridie. 2007. Schools ban YouTube sites in cyber-bully fight. *The Age*, March 2nd 2007. Pp http://www.theage.com.au/news/national/schools-ban-youtube-sites-in-cyberbully-fight/2007/03/01/1172338796092.html (Accessed: 19th June 2008)
- Tanner, Lindsay. 2006. Government Not Serious On Internet Porn. 20th June 2006. Pp http://www.alp.org.au/media/0606/msfin210.php (Accessed: 26th June 2008)
- Tinkler, Chris, & Hastie David. 2007. Racists' web of hate. *Herald Sun*, February 18th 2007. Pp http://www.news.com.au/heraldsun/story/0,21985,21243032-662,00.html (Accessed: October 21st 2007)
- Vromen, Ariadne. 2007. Australian young people's participatory practices and internet use. *Information, Communication & Society* 10 (1):48-68.
- Wellman, B, & Keith Hampton. 2003. Neighboring in Netville: How the Internet Supports Community and Social Capital in a Wired Suburb. *City & Community* 2 (4):277-311.
- Williams, Patrick J. 2006. Authentic Identities Straightedge Subculture, Music, and the Internet. *Journal of Contemporary Ethnography* 35 (2):173-200.
- Woolcock, M. 2001. The place of social capital in Understanding Social and Economic Outcomes. . SUMA Canadian Journal of Policy Research 2 (10):11-17.
- Ybarra, ML, D Espelage, & K Mitchell. 2007. The Co-occurrence of Internet Harassment and Unwanted Sexual Solicitation Victimization and Perpetration: Associations with Psychosocial Indicators. *Journal of Adolescent Health* 41 (6).
- Ybarra, ML, KJ Mitchell, D Finkelhor, & J Wolak. 2007a. Internet prevention messages: Are we targeting the right online behaviors. *Archives of Pediatrics & Adolescent Medicine* 161 (2):138-145.
- Ybarra, ML, KJ Mitchell, D Finkelhor, & J Wolak. 2007b. Online Victimization of Youth: Five Years Later. *Journal of Adolescent Health* 40:116-126.

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