

The impact of new technologies on the digital generation: a critical analysis and review of policy making in Australia

Ali Mubarak

There has been a rapid increase in the use of digital technology within Australian households in the past decade. In 1998 only 41 per cent of Australian households had Internet access; in 2006 this figure had increased to 60 per cent (ABS, 2006). A further indicator of the rapid spread of up-to-date technology in Australia is the use of broadband connections. In 2005–06, the number of households with broadband Internet connections almost doubled to 2.3 million, reflecting the enthusiasm with which Australian homes have adopted Internet technology. A significant increase in Internet use among children is also evident. In 2006 nearly 92 per cent of children aged five to 14 years used a computer and 65 per cent used the Internet (ABS, 2006). Internet usage appeared to increase with age, from 37 per cent for 5–8 year olds to 88 per cent for 12–14 year olds. Increasing use of digital technology by young people has become an accepted norm in most Australian households.

Mobile phone technology is another important digital tool and plays a key role in the life of young people in Australia. According to the Australian Telecommunications Association mobile phone subscription was around 19 million at the end of 2006. Due to rapid advancement in broadband and mobile phone technology, the mobile phone industry has been constantly launching new features within mobile phones, tempting young people to buy them. It is now very common to see mobile phones carrying Internet-based technological tools, adding to the capacity for younger Australians to be the primary users of Internet technology.

In a survey completed in 2003, the ‘Kids are calling’ section of the McNair Ingenuity Research Australian Kids Consumer Insights, it was reported that:

one in four children aged from six to 13 now have a mobile phone; more than 90 per cent of children aged from six to nine have used a mobile phone, usually one belonging to their parents; young girls are more likely to use a mobile phone than boys of the same age, and are significantly more likely to have their own mobile phone” (DCITA, 2005: 10)

This type of statistical detail effectively defines the digital generation. Young people born in the period from the early 1990s to 2000, aged somewhere between 7 years and 16 years are the ‘digital generation’ and will be the primary focus of this chapter.

In a 2006 report, the Internet Industry Association predicted that by the year 2010 average Australian household expenditure on digital entertainment products, voice calls and Internet would be \$A300 per month. This report also predicted that broadband would have significantly increased young people’s exposure to digital, home-based entertainment. Without doubt, the lifestyles of young people in Australia have gone through an enormous transformation due to new technologies that were not available to people born 30 years ago. Today Australia’s younger generation is currently enjoying great advantages from increased access to entertainment and high speed communication arising from digital technological tools. However, there is a dark side inherent in the risks that access to this technology creates. Given the state’s long tradition of responsibility for the welfare of children and young people, the Australian Government is responding to the potentially harmful effects that might be experienced from such ready access to digital technological tools.

This chapter critically explores the social and psychological implications of digital technology on the digital generation within Australia. It also provides an overview of current and

future policy directions to protect the interests of young people in Australia.

The social and psychological aspects of digital technological tools in relation to young people

Access to the Internet and mobile phone technologies have had wide social and economic effects on young people (Warden et al, 2004; Childnet International, 2006). While these modern technologies assist young people to be connected with their peer groups quickly and establish strong social support networks, they also pose some serious challenges to young people's security and wellbeing. Child abuse resulting from engagement with the Internet and Internet chat rooms, and the exposure of young people to pornographic and other offensive materials have been widely debated in recent years. Two significant issues stand out in these debates: sexual exploitation of children through the Internet (ECPAT, 2007), and the risk of creating psychological dependence and addiction among young people because the Internet acts as a powerful stimulant that provides instant feedback and excitement (Goldberg, 1996; West, 2001). Schwartz and Southern (2000) also argue that there is a strong possibility of people becoming psychologically addicted to using social interaction facilities on the Internet. In recent research it was found that nearly one third of adolescents appear to be compulsive Internet users (Mubarak, 2005); and psychiatrists Beard and Wolf (2001) suggest that Internet addiction is an impulse-control disorder requiring professional intervention.

The exposure of young people to sexually explicit or offensive materials online arose as a major concern in a recent study in Australia (Mubarack, 2005). The research found that almost half of 12–13 year olds reported accessing websites their parents would prefer them not to see and nearly half of the children reported exposure to inappropriate materials through pop-up windows and spam emails (ABA, 2005b). Flood and Hamilton (2003) also reported that children in Australia experience extensive exposure to pornography, with nearly 73 per cent of

boys and 11 per cent of girls they interviewed reporting that they had watched sexually explicit videos online. Eighty-four per cent of boys and 60 per cent of girls reported that they had been exposed accidentally to sex sites on the Internet. Disturbingly, Mills (1998) observed that young people engaging in sexual activities via the Internet could not isolate their experiences from their real emotional lives; and Katelyn et al (2001) observed that those barred from expressing important sexual needs in their real life relationships were more likely to turn to the Internet to do so. The results of an online survey conducted among adolescent girls by Berson et al (2002) indicated that a significant number of these girls engaged in very risky behaviour when online and continued potentially problematic real life practices as a result of these interactions. Flood and Hamilton (2003) argue that children who are exposed to sexually explicit, violent and nude material are likely to become desensitised to a range of unacceptable behaviours, and it possibly encourages them into sexual abuse and exploitation.

There is also concern that language use within chat rooms is changing, exposing young people to further risk (Merchant's, 2001). Cyberspace is also serving as an alternative venue for forming relationships among adolescents who are alienated from their peers or parents, while more well-adjusted young people are less likely to engage in these interactions (Mitchell et al, 2003). A further finding is a marked decline due to high Internet use in civic engagement (individual and collective forms of action that are designed to identify and address matters of public concern) of young people (Putnam, 2000). Barrakat (2005) bemoans that online activities are eroding citizenship and fragmenting strengths in communities.

Mobile phones provide further challenges posed by the Internet. Due to broadband and 3G technology, access to the Internet via mobile phones has increased. The portability of Internet tools through mobile phones has significantly increased the exposure of children to unwanted materials on the Internet, such as pornography, sexual chat and commercial online chat services.

In particular, the increased use of pre-paid phones has made it difficult to establish the age of mobile phone users. Easy availability of mobile phones at home has significantly increased the access of minors to unwanted materials on the Internet because they can often gain access without the need to enter passwords. Anti-social activities such as race hate messages, materials promoting violence, cults, drugs and eating disorders are easily passed on to a network of young people simultaneously by a click of a button through services such as instant messaging. Bullying has also emerged as a prevalent problem perpetrated through mobile phones.

Increasing debt for young people from big mobile phone bills has emerged as a major economic concern in recent years. For some young people, this results in increased stress due to poor financial management, often leading to excessive paid work that affects concentration at school (Childnet International, 2006). A further danger is that young people carry their private identity information such as name, telephone numbers and digital pictures of self and others on their mobile phone, which can be easily broken into. Complications arising from privacy issues have resulted in law enforcement processes becoming significantly more challenging for policing.

The functionality of mobile phones and other mobile communications devices has increased rapidly in Australia in recent years. These devices now deliver multimedia services, including audio-visual content and Internet services, which were once available only through a fixed environment. The 3G technology in particular has enhanced the capabilities of devices such as mobile phones, personal digital assistants and laptops with wireless connections, to provide advanced services such as: still image capture with mobile phones; video playback; Internet access; portal access to subscriber services; email functionality and; the features of hand held games consoles (DCITA, 2004). It is common in Australia to see service providers publicising the adult-themed services such as sex chat and pornography for

adults, without having capacity to prevent these messages from reaching children.

Since mobile carriers have invested heavily in modern technology such as 3G in recent years, there has been strong competition in the Internet industry to invent innovative content and services. To meet such demands, the mobile carriers have established partnerships with many types of content providers. While the content currently available through mobile phones is deemed suitable to all audiences, some may include sexual content, violence and interactive gambling. These digitally led possibilities pose a serious challenge to policy makers in Australia in regulating the content of mobile phone carriers.

Thus, it is evident that while digital technology has been a wonderful gift to young Australians, it also poses many serious challenges to the welfare of children and young people who embrace it so willingly. It is crucial to safeguard the digital generation from the harm possible through new communications technology. The following section is an analysis of Australian policy making responses to these issues.

Policy making in the area of digital technology to protect the digital generation in Australia from harm

The Australian Government has shown a keen interest in protecting children and young people from the negative effects of new communications technology. Under Schedule 5 of the *Broadcasting Services Act 1992*, the Australian Government provided opportunities for the Internet industry to work together towards ensuring the safety of young people using digital technologies. This collaborative approach was refined further as the Internet industry transformed and advanced its capacities. During subsequent years, the Australian Government's Department of Communications, Information Technology and the Arts launched enquiries into the content of online bulletin boards. Based on its findings, it prepared a

report on the regulation of online services in 1996. In the same year the Australian Broadcasting Authority (ABA) (now the Australian Communications and Media Authority, (ACMA) since July 2005) launched an inquiry into the content of Internet service providers (ISPs) and released a report titled 'Investigation into the content of online services'. This report proposed that a self-regulatory system be introduced in Australia in which the Internet industry would be guided by its voluntarily developed codes of practice and the ACMA's content rating scheme. Due to rapid developments occurring in the Internet industry, the Australian Government's Senate Select Subcommittee on Information Technologies was formed in 1998 and conducted its own inquiry covering a wide range of issues related to Internet content. This committee launched a self-regulatory mechanism through which the Australian Government and the Internet industry were to work together.

The *Broadcasting Services Amendment (online services) Act* was passed in 1999 and came into effect January 2000. According to this Act, the ABA was required to establish a complaints hotline for the community to notify the government of Internet content that is not suitable for children and younger people (Family and Community Development Committee, 2000). The Act also required the Internet industry to develop its own industry codes of practice and implementation on a voluntary basis. The ABA and Internet industry were also required to launch community education programs and raise awareness about child safety on the Internet.

Classification system of content available on the Internet in Australia

Classifying content available on Internet-based technology tools is a crucial task in protecting the digital generation from exposure to inappropriate material. The AMCA uses a co-regulatory scheme that came into effect in 1999, and sits within the National Classification Board (which was originally established to classify films and videotapes) to classify material

available on the Internet. According to this classification system, material containing detailed instructions about how to conduct criminal acts, violence or drug use, child pornography, bestiality, excessively violent or sexually violent materials, and actual depiction of sexual activity are rated as X or RC, and are totally banned. Material classified as R, which includes excessive violence or sexual violence, implied or simulated activity, and material suitable only for adults, can be viewed only by adults aged 18 years and over. This material is required to be filtered using advanced filtering technology so that only adults have access to it. The AMCA's classification system applies to all material originating from Australia. According to this classification system, the AMCA can direct an ISP or an Internet content host (ICH) to remove prohibited or potentially prohibited content from the Internet. If the AMCA considers that certain content on the Internet poses a threat to any segment of society or is illegal, it will refer the matter to the police.

Material originating from overseas, produced outside the ACMA's jurisdiction, poses a major challenge. Details of prohibited content or content hosted outside Australia are forwarded to the makers or suppliers of the filter products, who are listed in the schedule of the registered code of practice for Internet service providers (ISPs) in Australia. On notification by the ACMA the makers or suppliers of these products are required to agree to make modifications to offensive content. The code also requires Australian ISPs to provide Internet filters to their subscribers that will protect the children and young people from exposure to material that is unsuitable for their age and maturity (ABA, 2005a).

Community education on digital media

As per the *above mentioned regulations*, the ACMA and the Internet Industry Association (IIA) are obligated to establish a close rapport with the community and create channels through which community members can provide feedback on the

content available on the Internet. The ACMA has created a community education wing, known as NetAlert (ACMA, 2005), with its own website that provides useful information about the regulation of online content. It creates community awareness about online content that is harmful to the community. This website also has tools to help the community provide feedback to the ACMA about online content. NetAlert has established close links with local city councils, libraries, state and territory education departments and academic institutions to disseminate useful information related to the cyber media, and the ABA's fight against the challenges posed by digital media.

The IIA has also created its own community education program through its website, which provides up-to-date information on Internet filters and other digital technological tools available in the market. It also evaluates their advantages and disadvantages. The updated version of the Internet industry codes of practice contains useful information on legal issues pertaining to online content and the community's role in providing feedback and complaints to the IIA. My search through the Internet revealed the presence of many other Australian-hosted websites that provide information to young people and their parents about safety on the Internet. These include SimGuard, Cybersmart Kids, CyberAngels, Young Media Australia, Parents Guide to the Internet, Netmom, National Centre for Missing and Exploited Children, Safe Teens, Centre for Media Education, Smartparent and Netparents, all helpful in creating awareness about content available on the Internet. The presence of so many information sites also emphasises the level of risk that children and young people face in digital technology environments.

The Internet industry codes of practice

In response to government regulation, the Australian Internet industry has created its own codes of practice. The codes provide guidelines for members of the Australian based Internet Industry Association (IIA) to ensure the protection of children from inappropriate content. In particular, the government

requires ISPs to monitor content available online and the IIA to revise its Internet industry codes of practice annually. The IIA must also provide all necessary information to the community about technological developments occurring and how communities can benefit from them. In a 2005 review, the IIA fully endorsed the need for developing technological solutions for managing children's use of the Internet. This code of practice *encourages* the ISPs or ICHs to use appropriate warnings and/or labelling systems to warn minors that the content is intended for adults only. This includes material that is potentially prohibited. The code of practice also requires the ISPs or ICHs to take necessary steps to make sure that material available on their services is not in contravention of any Australian state, territory or federal law. The IIA also stresses that each ISP or ICH will, upon notification from the ACMA that certain newsgroups are linked with child pornography and paedophile activity, take *reasonable* steps to ensure that its newsgroups' server will not accept feeds from such newsgroups.

The latest industry codes of practice require Internet service providers to take reasonable steps to inform their end users about the methods of supervising and managing children's access to Internet content, and about the availability of one or more IIA family friendly filters and how they can be obtained. They must also provide a list of one or more IIA family friendly filters with links to effect download and instructions for use. These codes of practice insist that content providers ensure that the community is informed about, and assisted in providing feedback to the AMCA about the content hosted within the Internet by the ISPs and ICHs. In order to achieve this objective, the IIA has suggested that content providers create an online Safety Page by providing a direct hyperlink (an online safety button) to the IIA's Safety Page that will help members of the community provide feedback.

Challenges posed by law enforcement in relation to Internet and mobile content in Australia

It is evident from the above discussion that Australia has shown keen interest in protecting children and young people from the potential harm of the Internet. However, there remain serious challenges in enforcing policies due to the fact that the Internet transcends national boundaries and many forces outside Australia contribute to the available content. Keeping this in mind, there has been increased inter-country collaboration in recent years, to attempt to address the challenges at hand. Many industrially advanced countries have started cooperating in matters relating to law enforcement on sex offences pertaining to children. This trend has forced Australia to work closely with law enforcement agencies overseas so the Australian High Tech Crime Centre was created. This body has established ties with 18 international law enforcement agencies, which include Interpol, the Internet Hotline Providers Association (INHOPE) and the Cyber Tip Line.

However, this trend is not common to all countries in the world, creating a major obstacle for law enforcement in Australia. For example, law enforcement on inappropriate Internet content is not uniform in countries such as Russia, India and China. In 2003–04 more than 99 per cent of prohibited Internet content investigated by the ABA was hosted overseas and approximately 65 per cent was sufficiently serious to warrant immediate action. In the same year, the ABA referred more than 700 items of prohibited overseas-hosted content to filter manufacturers listed in the codes of practice so that access to such content would be blocked by users of those filters (ABA, 2005c).

The Australian High Tech Crime Centre has also been playing a pivotal role in coordinating joint law enforcement operations involving all states and federal law enforcement authorities within Australia. In 2001, the Australian Cyber Crime Act was amended to add a new section (3LA) to the Crimes Act 1914 (Commonwealth), which means law enforcement officers now

have the power to compel a person to reveal their private encryption keys, and personal identification numbers or passwords, thus enabling the officers, for the purpose of investigation, to access information held on a computer.

In 2004, the Australian National Ethical Offenders Register was launched by the Australian Government. This requires all state and territory governments to notify the public of personal details, addresses and travel plans of people convicted of some serious offences involving children. In the same year, the government also enacted the *Crimes Legislation Amendment (Telecommunications Offences and other measures) Act (No 2) 2004* which came into effect in March 2005. This amendment to the Act was made to protect children from sexual exploitation. The Act declares that it is a criminal offence under Commonwealth law to use the Internet or any telecommunications service or device to access, possess, send, cause to be sent, make available, publish or distribute child pornography materials or child abuse material. This law in particular has increased the responsibilities of ISPs and ICHs for the protection of children and young people.

In order to enforce the law effectively to protect the interests of children, the government has created the Australian Federal Police Online Child Sex Exploitation Team (OCSET). This team performs an investigative and coordination role within Australia for multi-jurisdictional and international online child sex exploitation matters. This crime investigation wing has been given the important responsibility of investigating matters related to online child exploitation, including pornography, abuse, grooming and procurement of children. These matters include those referred from Australian state and territory police, government and non-government organisations (including ISPs and ICHs), the Australian High Tech Crime Centre, international law enforcement agencies, Interpol and members of the public. The Australian Federal Police can investigate Internet sites carrying offensive material that are operated from an ISP within Australia. Any sites not within Australia are

referred to overseas law enforcement agencies. The Australian Federal Police reports that OCSET has been functioning effectively, as evidenced by a number of arrests. During 2005–06, 21,781 child pornography images and 416 movies were located on the Internet, resulting in the investigation of the persons and organisations responsible (AFP, 2006).

The Australian Government continues to show its ongoing interest and leadership qualities in trying to improve the digital generation's safety online. In June 2006, the Department of Communications, Information Technology and the Arts announced the government's intention to create a National Filter Scheme to provide every Australian family with a free Internet filter as part of a \$116.6 million comprehensive package of measures to crack down on Internet pornography. This scheme also aimed to provide libraries with free filters so that computers in libraries across Australia would also become child-friendly. As part of this scheme, NetAlert, launched a comprehensive national community education campaign to ensure that all Australian parents were aware of the benefits of regulating their children's Internet experience by using a safe and effective computer filter. However, although filtering technology has proved very useful in protecting children against prohibited Internet content, Australian families do not seem to be installing Internet filters in their home computers. The ABA (2005b) survey revealed that a proper filter was installed in only 35 per cent of Australian households. This survey seems to reflect parents' 'trust' that their children will self-censor, rather than taking the firm step of installing filters. This trend clearly indicates that Australian households are yet to understand the importance of installing Internet filters on their home computers. To overcome this situation, the Australian Government is exploring the possibility of introducing online content filters at the ISP end. Recently, the ACMA launched a series of trials of ISP-based filtering. However, NetAlert reports that filtering online content at the ISP level leads to a significant reduction in the speed and efficiency of ISP computer networks

and that ISPs will be confronted with serious technical challenges if ISP-level filtering is introduced. It further argues that the existing co-regulatory scheme, with its strong focus on using community education to encourage Australian families to install Internet filters at home will be of greater benefit than introducing filtering at the ISP level (NetAlert, 2006).

Yet another policy direction currently under consideration by the Australian Government is the possibility of introducing restrictions on online content hosted by overseas ISPs that is classified 'R' (adults only). It has been argued that a high proportion of adults would opt out of a filtering system that blocks R rated content from overseas sites because this content includes a wide range of material that, though it may be harmful to children, does not harm adults. Such a policy decision would be a major step toward protecting the children and young people from the harmful effects of digital media. However, this policy involves wider issues such as which themes are harmful to children, who will decide which content is harmful, and who will enforce prohibition on content originating from overseas.

Outcomes of law enforcement in Australia for protecting the digital generation from harm

A six-month report published in 2005 on the online content co-regulatory scheme showed that the ACMA's Internet Complaints Hotline received 451 complaints, including 46 invalid complaints (ACMA, 2005b). Of these, 82 investigations were terminated due to the ACMA being unable to locate the Internet content referred to by the complainant. The ACMA completed 318 investigations, 222 (70 per cent) of which resulted in the location of prohibited Internet content. The report also indicates that the ACMA investigated 398 prohibited items of Internet content and found that 323 items (80 per cent) were 'Refused Classification' (RC). Of these, 272 (84 per cent) contained exploitative/offensive depictions of children or were otherwise related to paedophilia. The report found that a majority of prohibited items of Internet content were hosted

overseas. More than half the content was hosted from the United States. Europe accounted for 23 per cent, with a significant proportion coming from Russia and China. South Korea and Hong Kong accounted for approximately 13 per cent. This report clearly indicates the enormity of the situation in protecting children living in the digital era.

In a recent study on the experiences of young people interacting through the Internet, based on focus group discussions among 114 high school students in the 13–17 years age group, it was found that young people spent nearly 13 hours per week accessing the Internet and approximately one third of them were likely to have a psychological addiction to its use (Mubarak, 2005). Only 18 per cent of young people reported parental support and guidance for Internet use. This research also suggested a gender-biased parental attention to the use of Internet in that 39 per cent of the parents of female respondents had shown concern or objections to chat room use, but only seven per cent of the parents of male respondents had shown concern or objections to their chat room use.

Such research indicates that messages about protecting the digital generation have not reached Australian communities. While the digital generation is busy enjoying the benefits of digital tools, simultaneously they are at risk of being seriously affected by these tools' negative effects. This situation poses a serious question about the effectiveness of the current self-regulatory scheme for filtering Internet content and of the Australian Government's initiative to promote community awareness about the safety of children online.

A reason for the weakness of 'voluntary' self-regulation by the Internet industry could be the conflict between ISP business interests and their moral responsibility toward the welfare of the community. The conflict of interest within the IIA is evident from its recently launched Responsible Business Program. One can see many phrases such as 'take reasonable steps', 'provide reasonable assistance', 'ensure the best possible', being used in

the guidelines for the ISPs and ICHs. Obviously these phrases leave to the individual service provider the final decision as to the extent to which it will take responsibility.

While the Australian Government's initiative to introduce compulsory filters at ISP level is a healthy move, it is also necessary for the Internet industry to take more responsibility in reducing potential harm for children and young people online. This may require the introduction of certain specific guidelines by the government, which must be followed strictly by the Internet industry. In other words, I am suggesting that the existing regime of self-regulation needs to be replaced with a government-regulated or quasi-regulated system. While the government's recent proposal to introduce compulsory filters at ISP level is promising, it has many technical hurdles to overcome. It is important that the Internet industry share the costs involved in promoting the safety of the digital generation. Similarly, the level of success achieved by the government's community education program needs to be evaluated critically. Based on the observations reported by the Australian Government (ABA, 2005b) and my own research, it is evident that the community has not been educated sufficiently to make all reasonable efforts to protect the children and young people from the possibly negative effects of available digital technology.

Conclusion

Without any doubt the rapid expansion of the digital technological world has the potential to empower the digital generation. It is important that we acknowledge the enormous benefits that digital technology has brought to young people who have been left behind for many decades. In particular, children from poor families, young people with disabilities and children from remote areas of Australia such as Aboriginal communities have benefited a lot by being brought into the mainstream with new technologies. Today, it is very common to see such groups in the Australian community actively chatting with the world community, overcoming the barriers that they

had for many generations, thanks to the simplicity and cost effectiveness of new technological tools such as the Internet and mobile phones.

However, with the advantages of digital technology come many challenges such as those that have been discussed in this chapter. It is obvious from recent research that it has taken more than a decade for Australia and, to some extent, the whole world to understand the enormity of challenges the digital technological tools have brought with them. Without doubt these challenges will increase with the rapidity with which the digital world is expanding. Australian policy-makers have made it clear in their statements that law enforcement to protect children and young people online will not be successful without the active participation of Australian families and communities. The challenge in the future lies in the extent to which more coordinated strategies involving all segments of Australian communities are developed to protect current and future digital generations from risk of harm in what is an increasingly integral part of their daily existence.

References

ABA – *see* Australian Broadcasting Authority

ABS – *see* Australian Bureau of Statistics

AFP – *see* Australian Federal Police

ACMA – *see* Australian Communications and Media Authority

Australian Broadcasting Authority, 2005a. Five years on: Internet content regulation in review, *ABA Update* (138).

Australian Broadcasting Authority, 2005b. Kidsonline @ home - Internet use in Australian homes, Australian Broadcasting Authority and netAlert Limited, Commonwealth of Australia, Sydney, Australia.

Australian Broadcasting Authority, 2005c. Six month report on the online content co-regulatory scheme – Reporting period from 10 July to December 2004, Australian Broadcasting Authority, Commonwealth, Canberra, Australia.

Australian Broadcasting Authority, 2006. Six month report on the online content co-regulatory scheme, Reporting period 12 July to December 2005, Commonwealth, Canberra, Australia.

Australian Communications and Media Authority (ACMA), 2005. Internet Safety Needs Highlighted as Cyber Survey Reveals Kids Are online Younger and Longer. Press Release, Australian Communications and Media Authority website, Canberra, Australian Government. http://www.acma.gov.au/WEB/STANDARD//pc=PC_91688.

Australian Bureau of Statistics, 2006. Internet activity, Australia, Report No. 8153.0, Australian Bureau of Statistics, Canberra.

Australian Federal Police, 2006. Australian Federal Police Annual Report 2005 -06, Commonwealth of Australia, Canberra, Australia.

Barrakat J, 2005. Online opportunities for civic engagement? An examination of Australian third sector organisations on the Internet. *Australian Journal of Emerging Technologies and Society*, 3 (1), pp 18–30.

Beard K & Wolf E, 2001. Modification in the proposed diagnostic criteria for Internet addiction. *CyberPsychology and Behavior*, 4, pp 377–383.

Berson R I, Berson M J and Ferron J M, 2002. Emerging risks of violence in the digital age: Lessons for educators from an online study of adolescent girls in the United States. *Meridian: A middle school computer technologies journal* [online], 5 (2). Available from: <http://www.ncsu.edu/meridian/sum2002/cyberviolence/8.html> [accessed 03 April 2004].

Childnet International, 2006. www.childnet-int.org [accessed on 26 March 2007].

DCITA – see Department of Communications, Information Technology and the Arts.

Department of Communications, Information Technology and the Arts, 2004. *Review of the operation of schedule 5 to the Broadcasting Services Act 1992*. Canberra: Commonwealth of Australia.

Department of Communications, Information Technology and the Arts, 2005. The social impact of mobile phone use in Australia: a review of data sources. Communications Research Uni, Canberra, Australian Government.

http://www.dcita.gov.au/communications_and_technology/publications_and_reports/2005/april/the_social_impact_of_mobile_phone_use_in_australia_a_review_of_data_sources.

ECPAT (End Child Prostitution and Trafficking), 2007. Available from: <http://www.ecpat.net> [accessed 26 March 2007].

Family and Community Development Committee, 2000. Inequality into the effects of television and multimedia on

children and families in Victoria, Family and Community Development Committee, Melbourne, Victoria.

Flood and Hamilton C, 2003. Regulating youth access to pornography, Discussion Paper No. 53, The Australian Institute, Manuka ACT, Australia.

Goldberg I, 1996. Internet addiction disorder, Quoted by Warden N L, Phillips G & Ogloff RP, Internet addiction, Psychiatry, Psychology and Law, Volume 11 (2): 280 – 295, 2004.

Internet Industry Association, 2006. Year 2010 National broadband targets – maintaining Australia’s competitiveness, Internet Industry Association, Manuka ACT, Australia.

Katelyn Y A, Green A S and Smith P K, 2001. Demarginalizing the Sexual Self. *The Journal of Sex Research*, 38 (4), pp 302–312.

Merchant G, 2001. Teenagers in cyberspace: an investigation of language use and language change in Internet chat rooms. *Journal of Research in Reading*, 24 (3), pp 293–254.

Mills R, 1998. Cyber: sexual chat on the Internet, *Journal of Popular Culture*, 32 (3), pp 31–47.

Mitchell K J, Finkelhor D and Wolak J, 2003. The exposure of young to unwanted sexual materials on the Internet: A national survey of risk, impact and prevention. *Young and Society*, 34 (3), pp 330–358.

Mubarak A R, 2005. A study of the friendship and social interaction facilities available on the Internet and their impact on adolescents. *Report submitted to the Faculty of Social Sciences, Flinders University, Adelaide*, Australia.

Net Alert (2006) Education the best filter for young Australians on the Internet, Media release available at: <http://www.netalert.net.au/03004-Education-the-best-Filter-for-young-Australians-on-the-Internet.asp> [accessed 26 March 2007].

Putnam R, 2000. *Bowling alone: The collapse and revival of American community*. New York: Simon and Schuster.

Schwartz M F and Southern S, 2000. Compulsive cybersex: The new tea room. In Cooper A, ed *Cybersex: The dark side of the force*, A special issue of the Journal of sexual addiction & compulsivity, Philadelphia. Brunner Routledge, 2000, pp 127 – 144.

Warden N L, Phillips, J G and Ogloff R P, 2004. Internet addiction. *Psychiatry, Psychology and Law*, 11 (2), pp 280–295.

West R, 2001. Theories of Addiction. *Addiction*, 96, pp 3–13.

5

Participation, young people and the Internet: digital natives in Korea

Heejin Lee, Gil-Soo Han, Sangjo Oh

Introduction

The significance of Information and Communication Technology (ICT) has become critical in every facet of contemporary life and work. The coming of the Internet was no longer than two decades ago, but it has become a vital technology for all generations. Similar to the current trend towards ‘the visual extravaganza’ by newspaper and television (Barnhurst, 1998: 202), the Internet offers and utilises visual effects in an interactive and dynamic fashion. Moreover, individual users of the Internet are greatly empowered by the opportunity to participate interactively in public debate by airing their views online. Such an opportunity has brought about new avenues for citizens to participate in civic activities and influence political affairs and parties. Undoubtedly, the ways people use the Internet vary depending on their socioeconomic status and the generation to which they belong. Furthermore, the increasing penetration of the Internet opens up new avenues for political parties to attract public attention, especially when young people are increasingly losing interest in most news and information media, whilst gaining significant interest in the Internet (Barnhurst, 1998: 204).

In this chapter we examine how the Internet has affected the public and political participation of young people. We present two case studies where groups of secondary school students from South Korea have appealed to their basic human rights in order to influence policy decisions that had the potential to reduce their quality of life at school. The cases are indicative of the kind of opportunities available to develop innovative ways of participating in the political process. It is a common assumption