

SUBMISSION No. 75
AUSTRALIAN COUNCIL ON CHILDREN AND THE MEDIA

(Incorporating Young Media Australia)
PO Box 447 GLENELG SA 5045

ABN: 16 005 214 531

YMA Helpline: 1800 700 357 Phone: (08) 8376 2111 Fax: (08) 8376 2122

Web: www.youngmedia.org.au E-mail: info@youngmedia.org.au



SUBMISSION TO

JOINT SELECT COMMITTEE ON CYBER-SAFETY

KIDS AND CYBER-SAFETY

The Australian Council on Children and the Media (ACCM) welcomes the opportunity to comment on the terms of reference for this inquiry as they relate to children.

This submission has been prepared for the Australian Council on Children and the Media by members of its Executive Committee. This Committee includes Prof. Elizabeth Handsley (a specialist in media law as it relates to children), Dr C Glenn Cupit (Senior Lecturer in Human Development at University of SA, Lesley-Anne Ey (doctoral student, research background in cybersafety) and Barbara Biggins CEO

The ACCM would welcome the opportunity to expand on the issues raised, at a later date.

For further information, please contact Barbara Biggins at above address.

1. INTRODUCTION

The ACCM is a not-for-profit national community organisation whose mission is to support families, industry and decision makers in building and maintaining a media environment that fosters the health, safety and wellbeing of Australian children.

Its patrons are Baroness Susan Greenfield and Steve Biddulph.

ACCM has a national Board representing the states and territories of Australia, and a comprehensive membership of organisations and individuals who support its mission. Membership includes ECA (Early Childhood Australia), ACSSO (Australian Council of State Schools Organisations), AHISA (Association of Heads of Independent Schools of Australia), AEU (Australian Education Union), Enough is Enough, Australian Association for Infant Mental Health, Parenting Research Centre, Junior School Heads Association of Australia SAPPA (South Australian Primary Principals Association), Federation of NSW P&C (Parents & Citizens), and the Council of Mothers' Unions in Australia.

ACCM's core activities include the collection and review of research and information about the impact of media on children's development, and advocacy for the needs and interests of children in relation to the media.

The ACCM's core services include the national freecall 24/7 Children and Media Helpline (1800 700 357); the ACCM website www.childrenandmedia.org.au containing media-related information (attracting over 1000 visits per day); the award-winning and popular *Know before you go* child-friendly movie review service (now with more than 540 movie reviews); the development of parent media awareness materials, making submissions and participating in media interviews related to media regulation.

2. THIS SUBMISSION REFLECTS THE FOLLOWING PRINCIPLES

2.1 The International Convention on the Rights of the Child Article 17, viz

“States Parties recognise the important function performed by the mass media and shall ensure that the child has access to information and material from a diversity of national and international sources, especially those aimed at the promotion of his or her social, spiritual and moral well-being and physical and mental health. To this end, States Parties shall:

(a) Encourage the mass media to disseminate information and material of social and cultural benefit to the child and in accordance with the spirit of article 29;

(b) Encourage international co-operation in the production of, exchange and dissemination of such information and material from a diversity of cultural, national and international sources;

(c) Encourage the production and dissemination of children's books;

(d) Encourage the mass media to have particular regard to the linguistic needs of the child who belongs to a minority groups or who is indigenous;

(e) Encourage the development of appropriate guidelines for the protection of the child from information and material injurious to his or her well-being, bearing in mind the provisions of Article 13 and 18.”

2.2 The Code under the Classification (Publications, films and computer games) Act 2005:

“Classification decisions are required to give effect to the following principles which are set out in the Code:

(a) adults should be able to read, hear and see what they want

(b) minors should be protected from material likely to harm or disturb them

(c) everyone should be protected from exposure to unsolicited material that they find offensive, and

(d) the need to take account of community concerns about:

(i) depictions that condone or incite violence, particularly sexual violence, and

(ii) the portrayal of persons in a demeaning manner.”

2.3 The Policy Guidelines on Children's Media of the Australian Council on Children and the Media.

3. IN THE PREPARATION OF THIS SUBMISSION, ACCM HAS

- relied on its experience and active involvement in issues related to healthy and safe use of all media (including pioneering Cybersafety programs for parents in 1998)
- Drawn on its ongoing activity of reviewing the current research literature as it relates to the impact of media on children. .

4. SUMMARY OF ACCM SUBMISSION

At a fundamental level, the ACCM believes that while programs specifically about cybersafety can be useful, the most important objective in relation to children, should be to encourage the use of strategies by parents which develop safe and healthy use of **all screen media** from their children's earliest years.

The ACCM believes that any discussion of cybersafety as it relates to children, needs to be grounded in a context of many years of well developed knowledge and research about child development, and understanding of children's developing abilities to comprehend and to use cybersafety techniques.

In relation to cybersafety issues, the Joint Select Committee is urged to give full consideration to a wide range of harms to children. These extend well beyond those to which much attention is paid viz predators and bullying. The risks from ongoing exposure to unregulated internet marketing directed at the young and to s*xualising and objectifying content, and from playing extremely violent downloaded video games may seem less grave but they are likely to be encountered by many more children. Therefore they are of at least as much concern from a policy point of view.

5. ACCM RESPONSE TO ISSUES RAISED IN THIS INQUIRY

ACCM notes that the initial focus of the inquiry is on the following topics as they relate to children:

- the online environment in which Australian children currently engage, including key physical points of access (schools, libraries, internet cafes, homes, mobiles);
- abuse of children online, particularly cyber-bullying;
- inappropriate social and health behaviours in an online environment (e.g. technology addiction, online promotion of eating disorders, drug usage, underage drinking, gambling and smoking);
- identity theft;
- breaches of privacy;
- Australian and international responses to these cyber-safety threats;

- opportunities for cooperation across Australian stakeholders and with international stakeholders in dealing with these cyber-safety issues;
- ways to support schools reduce the incidence and harmful effects of cyber-bullying; and
- the role of parents, families, carers and the community.

The ACCM's submission has relevance to the last 3 of these dot points, viz opportunities for cooperation across Australian stakeholders, ways to support schools, and the roles of parents, and carers.

5.1 The importance of starting early with strategies for healthy use of all screen media.

There is a growing body of research which provides evidence that early screen experiences can have significant impacts on the developing child. (ARACY 2010, Royal Melbourne Children's Hospital 2009)

It is therefore important that parents are aware of potential hazards, and are encouraged to start early in managing the time children spend with screens (TV, DVDs, computer games, internet, mobile phones) and the content to which children are exposed in the early years.

The development and use of parental media management techniques in those years, can prevent children's overdependence on screens as a source of entertainment, assist in the avoidance of harmful content and make it easier, as children encounter more hazardous content, for parents to provide acceptable guidance in such situations.

The ACCM has many years of experience in the development of strategies for healthy use of all screen media, especially directed at parents of children in the early years. The ACCM is the only organisation in Australia actively supporting such an approach, but has received no financial or government support to ensure that this is accepted and promoted as a significant program for parents of young children.

The ACCM's programs could be more effectively utilised by many in the community, if significant funding were directed to this area.

5.2 The importance of a child development framework for cybersafety programs:

Children are using modern electronic communication media at an increasingly younger age, yet most existing internet safety resources are appropriate for older children and their parents.

Few resources support parents of 4-8 year olds, and fewer provide effective age-appropriate strategies. For instance, internet use is significant between 5-8 years (20+% at 5, 52% at 8, 10% using daily; 60% 2-6 days weekly. Nearly 50% of use by 6-10s is not monitored regularly. (Ey 2010)

Developmental immaturity, trustfulness, and lack of specific education, make under sixes particularly vulnerable to misdirection (to inappropriate sites), exploitation and predation. Five to eight year olds can recognise appropriate strategies, but may not recognise all potential dangers. 27% of parents do not employ protective strategies in potentially dangerous situations; with only 7% then providing safety education. (Ey 2010)

5.2.1 The importance of providing age-appropriate cybersafety programs for young children is explored in an article by Ey and Cupit, soon to be published in the *Journal of Early Childhood Research*. The abstract of this article says :

Children are able to recognise some of the potential dangers the Internet presents but only able to spontaneously recall a minority. Many young children have encountered inappropriate material on the Internet or have been exposed to bad experiences. Even though children were able to recognise potentially dangerous situations, there were clear indications that children place themselves at risk. Children's responses demonstrate naivety and trust which is likely to place them in jeopardy if they are not educated to recognise the risk.

A minority of parents are providing guidance for children about Internet dangers. However few teachers are. This leaves many young children vulnerable. To leave even a small percentage of children susceptible to Internet dangers is not socially responsible. Although protecting children whilst at school is important, education about Internet protective behaviours is necessary to protect them elsewhere. It is essential that educational institutions take the responsibility to teach children protective strategies they can use wherever they access the Internet.

The full text of the article can be found in Appendix 1 to this submission.

5.2.2 The ACCM has a fully developed research project designed to determine the optimal ways to encourage parents of young children to use age-appropriate strategies for safe

internet use, but has been unable to obtain funding for it .from a range of government and non-government agencies. The research rationale and project outline reads:

This unique project will provide and evaluate resources for parents based on a child development framework for understanding children's comprehension of cyber-content and safety, and effective methods to both protect children and build their own cyber-safety awareness. It has the potential to reduce exposure of very young children to exploitative communications and depictions, including sexual exploitation and cyber-bullying, which can all undermine children's well-being.

It will:

Establish a reliable relevant information base. A literature review and preliminary research to identify, more precisely, the risks the internet holds for young children's safety and well-being; young children's understanding of the risks; and the problems these risks present for parents/carers of those young children. This will provide extensive information about current knowledge and findings, help determine gaps in knowledge, and the need for further research. (2 months)

Determine community perceptions and needs. Based on these findings, and ongoing input from the early childhood community, the project will identify needs, and propose potential interventions and motivators for parents and carers to be involved in cyber safety. (2 months)

Develop and trial relevant programs and resources. The concepts that young children can understand in relation to internet hazards will be identified. Potential interventions will be tested and refined and resources and programs developed. The resources will be directed to allow parents to become judicious users and proficient managers of the cyber-environment and to progressively develop these skills in their children. (8 months)

Publish, promote and provide resources and programs where parents of young children are. The resources will be distributed where parents and carers of young children already go. Selected early childhood centres will distribute and use the resource in South Australia, and their staff will promote and encourage the program. This will alert parents/carers to cyber safety information and be easily accessible to them (4 months)

Evaluate: The take-up of the materials in centres will be assessed and parents given the opportunity to provide feedback on the effectiveness of the processes for themselves and their children. (2 months) .

5.2.3 Children welcome greater involvement by parents

The Norton Online Family report 2010 which surveyed 7000 adults across 14 countries including Australia found that parents lack awareness about the extent of their children's

negative experiences online and that children would welcome more parental involvement in their online lives.

5.3 Attention to a broad range of common hazards is needed

ACCM urges the Committee to recommend that much more attention needs to be paid to the more common hazards encountered by children on the Internet. These are all areas where parents need information and strategies for the avoidance of harm.

These include:

- Internet advertising and marketing to children; ACCM draws the Committee's attention to recent research funded by SA Health and conducted by a research team at Flinders University. This team has focused on marketing of foods to children via non-broadcast media. The results of this research have not yet been made public, but the Committee could contact a lead researcher Ms Kaye Mehta at Flinders University, School of Health Sciences.
- Exposure to s*xualised marketing and music videos, which present children in in age-inappropriate ways, and encourage children to associate the trappings of adult s*xuality with social success. (Australian Council on Children and the Media 2008)
- Downloading very violent games. There is well established research now linking children's playing of violent games with increased aggression, lack of empathy, and decreased prosocial attitudes. (Anderson C et al 2010, Bartlett 2009, Bushman and Huesmann 2006, Gentile 2008, Warburton 2010) .

5.4 Opportunities for cooperation

The ACCM is a membership based national organization which already involves a broad range of other child focused organizations in its policies and programs. It is well placed, If funded to do so, or in cooperation with other stakeholders, to utilise its grass roots networks across Australia to promote the need for, and use of programs and strategies for safe use of media.

CONCLUSION

ACCM hopes to have drawn the Committee's attention to some significant issues that have to date gained little traction in public debate about children's online experiences. There is a need

to place cyber-safety in the broader context of screen experiences generally and less grave but more widespread risks to children from the online environment. In addition we hope that the Committee will address the needs of younger children and their parents.

Much more needs to be, and can be done to encourage and assist the parents of young children, to manage and monitor all screen media experiences with their children from an early age. The outcome will be healthier use of all media accompanied by healthier and happier children.

References

Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B.J., Sakamoto, A., Rothstein, H.R., & Saleem, M. (March 2010). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries. *Psychological Bulletin*,

Australian Council on Children and the Media (2008) *Submission to the Senate Committee on Environment, Communications and the Arts Inquiry into the impact of sexualised media on children*.

Australian Research Alliance on Children and Youth (2010) *Young Children and media : a discussion paper*. Perth, ARACY

Barlett, C. P., Anderson, C. A., & Swing, E. L. (2009). Video game effects confirmed, suspected and speculative: A review of the evidence. *Simulation & Gaming*, 40, 377-403.

Bushman, B. J., & Huesmann, L. R. (2006). Short-term and long-term effects of violent media on aggression in children and adults. *Archives of Pediatrics and Adolescent Medicine*, 160, 348-352.

Gentile, D. A., & Gentile, J. R. (2008). Violent video games as exemplary teachers: A conceptual analysis. *Journal of Youth and Adolescence*, 9, 127-141.

Norton Online Family report 2010

http://www.symantec.com/content/en/us/home_homeoffice/media/pdf/nofr/Norton_Family-Report-UK_June9.pdf

Royal Melbourne Children's Hospital (2009) *Television and early childhood development: Policy brief 16*. http://www.rch.org.au/emplibrary/ccch/PB_16_template_final_web.pdf

Warburton, W. A. (2010). *Psychology, the media and children's well-being*. Paper presented at the Harvard-Australia Symposium on Media Use and Children's Well-being, Adelaide, Australia.

APPENDIX 1.

JOURNAL OF EARLY CHILDHOOD RESEARCH (IN PUBLICATION 2010)

YOUNG CHILDREN'S UNDERSTANDING OF RISKS ASSOCIATED WITH INTERNET USAGE AND THEIR CONCEPTS OF MANAGEMENT STRATEGIES

Lesley-Anne Willoughby (BECE honours)

C. Glenn Cupit (PhD)

University of South Australia

SUMMARY

The Internet provides remarkable opportunities for children's learning and development. Nevertheless, it is unregulated and hard to control, which potentially places children at risk of exploitation. This study examined 5-8 year old children's understanding of dangers associated with the Internet, management strategies and sources of their understanding. Children in small groups answered questions relating to what they consider dangerous interactions or materials connected with the Internet, management strategies they would employ if confronted with these, and who taught them what they knew. Many children reported prior negative experiences on the Internet. Although, they identified several risk categories, when presented with potentially dangerous Internet interactions almost half were not able to identify the associated risks. Most children identified appropriate management strategies; however it was evident that children could not safely employ these because they were unable to recognise potential dangers. Just under half of the children indicated they had not been taught Internet safety. Internet risks for children can be reduced through education in their recognition of potential dangers, recall and management strategies, indicating a need for schools to incorporate Internet safety into curricula.

RESUME

L'Internet offre des opportunités exceptionnelles pour l'apprentissage et le développement des enfants. Toutefois, n'étant pas réglementé et étant difficile à contrôler, l'Internet risque d'exposer les enfants aux dangers de l'exploitation. Cette étude consiste en un examen de la

compréhension, par des enfants âgés de 5 à 8 ans, des éventuels dangers posés par l'Internet, des stratégies de gestion et de la façon dont les enfants ont acquis cette compréhension. En petits groupes, les enfants ont répondu à des questions (avec et sans suggestions de réponses) portant sur ce qu'ils considèrent comme étant des interactions ou des documents dangereux sur Internet, sur les stratégies de gestion qu'ils emploieraient s'ils étaient confrontés à de tels dangers, et sur qui leur a appris ce qu'ils savaient. De nombreux enfants avaient déjà fait des expériences négatives sur l'Internet. Bien qu'ils aient identifié plusieurs catégories de risques, lorsqu'ils étaient confrontés à des interactions potentiellement dangereuses sur l'Internet sous forme de scénario près de la moitié d'entre eux n'a pas été en mesure d'identifier les risques connexes. La plupart des enfants étaient en mesure d'identifier des stratégies de gestion appropriées ; il était toutefois évident que les enfants ne pouvaient pas employer ces stratégies en toute sécurité parce qu'ils ne pouvaient pas reconnaître les dangers potentiels. Un peu moins de la moitié des réponses des enfants a révélé qu'ils n'avaient pas appris à utiliser l'Internet en toute sécurité. Il est possible de réduire les risques posés par l'Internet en éduquant les enfants en matière de reconnaissance des dangers potentiels et en matière de stratégies de rappels et de gestion des dangers ; il est donc important que les écoles incluent l'utilisation en toute sécurité de l'Internet dans leurs programmes scolaires.

RESUMEN

Internet ofrece extraordinarias oportunidades para la educación y el desarrollo de los niños. No obstante, no está regulada y es difícil de controlar, lo cual puede acarrear que los niños corran el riesgo de ser explotados. Este estudio evaluó en niños de entre 5 y 8 años su conocimiento de los peligros potenciales de Internet, sus estrategias de manejo y cómo adquirieron dicho conocimiento. Repartidos en pequeños grupos, los niños respondieron a preguntas (unas con pistas y otras sin ellas) sobre lo que ellos consideraban interacciones o materiales peligrosos en Internet, las estrategias de manejo que emplearían si se enfrentasen a éstos, y quién les enseñó

lo que saben. Muchos niños ya habían tenido experiencias negativas en Internet. Aunque identificaron varias categorías de riesgo, cuando se les expuso una situación con interacciones potencialmente peligrosas en Internet casi la mitad de ellos no pudo identificar los riesgos asociados. La mayor parte de los niños pudo identificar estrategias de manejo adecuadas. Sin embargo, era evidente que no podrían emplearlas puesto que eran incapaces de reconocer los peligros potenciales. Casi la mitad de las respuestas de los niños indicó que no se les había enseñado seguridad en Internet. Los riesgos que Internet presenta para los niños se pueden reducir educándolos para que reconozcan los peligros potenciales y mediante estrategias recordatorias y de manejo, y por lo tanto es importante que los colegios incorporen la seguridad en Internet en sus planes de estudios

KEYWORDS: young children, Internet, risks, education, child protection

INTRODUCTION

While the Internet provides remarkable opportunities for children's development and learning, allowing them access to new sources of knowledge and broadened experiences, it also leaves them vulnerable to exploitation (Freeh, 2000; Nir-Gal & Nur, 2003).

Many countries are educating children about how to use the Internet; however the degree to which they are being taught the risks the Internet holds is unclear. The widely expressed concern about those risks by parents, child protection advocates and the academic community necessitates an exploration of children's knowledge of, and education about, Internet dangers, particularly while younger and more susceptible.

This paper reports a study which examined children's understanding of Internet dangers, their management, and prevention strategies for these and explored sources of their knowledge. A

brief overview of research into young children's Internet usage and its dangers follows using Australia as an exemplar of international trends.

Over the past 7 years there has been a steady increase in children using Internet technologies at earlier ages, and a decrease in the age of first access (Aisbett, 2001; Australian Bureau of Statistics, 2003, 2005-2006; DeBell, 2005; NetAlert, 2005, 2007a).

Internet accessibility is a major influence on these trends. NetAlert (2005) indicates that children access the Internet across a wide range of venues and mobile Internet-enabled technologies, but most commonly in their own homes and at school. In a study conducted on behalf of The Australian Bureau of Statistics, Trewin found that 76.7% of children aged 5-8 years access the Internet at home and 49.3% at school, and that just over 20% of Australian children aged 5 years are accessing the Internet (Australian Bureau of Statistics, 2003). This increases steadily with age (see Table 1).

TABLE 1.

Percentage of children accessing the Internet by age (5-8 years)

Age	Access %
5 Years	20.6
6 Years	33.4
7 Years	42.2
8 Years	52.6

Of children aged 5-8 years, 4.3% accessed the Internet daily in 2003 (Australian Bureau of Statistics, 2003) escalating to 10% in 2006 (Australian Bureau of Statistics, 2006), 57.3% accessed the Internet up to 6 days a week, and only 37.8% less than one day a week. Although adults are encouraged to supervise children's Internet usage, children are monitored less as they become more confident in using the Internet (Trewin, 2003). Fifty-two percent of families

are involved regularly with 6-10 year olds' Internet access, 31% are involved sometimes and 17% have no involvement (Aisbett, 2000).

Because the Internet can enhance children's developmental and learning opportunities (Nir-Gal & Nur, 2003; Siraj-Blactchford & Siraj-Blactchford, 2001), "we have witnessed the introduction of the Internet into the education system, including kindergartens" as an international trend (DeBell & Chapman, 2006, p. 173). Briggs and McVeity (2000) claim that most Australian schools have Internet access, consistent with Cai, Gantz, Schwartz and Wang's (2003) findings that 99% of US public schools have such access. As Internet use in educational settings increase, so do anxieties over inappropriate materials. The Internet presents particular problems for children and persons responsible for children, as it has proven to be very difficult to control (Lawson & Comber, 2000). Most schools endeavour to protect children in their care. However, there are no provisions for teaching safe Internet behaviours to protect children outside school. For instance, no area in the South Australian Curriculum, Standards and Accountability Framework focuses on Internet safety.

Schools are relatively safe areas for children to use technologies, as they are likely to have filtering and/or monitoring software, an acceptable-use policy that teachers, children and parents sign up to, classroom supervision, a firewall and perhaps a 'walled garden' of websites for children. Access to the Internet at home, however, may not be mediated by such safety mechanisms. There is no fail-safe technological solution that will protect children from all the risks they may encounter online. Children therefore need to be taught safe and discriminating behaviours that they can adopt whenever and wherever they are using the Internet.

(Qualifications & Curriculum Authority & Skills, 2003, p. 10)

International curriculums explored for comparison, emphasise inclusion of Internet safety principles in their syllabus but direct teaching of Internet safe behaviours is similarly lacking.

In the United Kingdom ‘The Internet Proficiency Scheme’, helps students learn how to use the Internet safely and responsibly. However, it is not implemented until children are aged 9-12 years, discounting the protection of younger children (Qualifications and Curriculum Authority & Department for Education and Skills, 2003). Similarly, in their Communication and Information Technology syllabi for children aged 5-12 years, Alberta (Canada) aims to educate children in “demonstrating a moral and ethical approach to the use of technology, becoming discerning consumers of mass media and electronic information and practicing concepts of ergonomics and safety when using technology” (Alberta Education Curriculum Strands Branch, 1998, p. 5). However, there is no direct instruction on Internet safety.

Although on-line computer exploration opens a world of possibilities to expand children’s horizons, it can expose children to risk (DeBell, 2005). NetAlert (2005) identifies the following potential Internet dangers: child exploitation, exposure to inappropriate material, communications (email, chat rooms), commercialism (advertising, marketing towards children), requests for personal information, and unreliable information.

Marketers target children through the Internet because it is part of modern culture, kids are often alone online, the Internet is unregulated and sophisticated technologies make it easy to collect personal information from children (Media Awareness Network, 2007).

Concerns such as exposure to pornography, inappropriate, morbid or violent content, obscene language and communicating online with strangers are widely documented (Aisbett, 2001; NetRatings Australia, 2005).

A frequent concern relates to pædophilia. “Advances in technology have been embraced by sex offenders who have proven to be exceptionally skilled at utilising new modes of

communication to exploit or harm children” (Queensland Police Force, 2005). Pædophilia is underpinned by anonymity (Forde & Patterson, 1998; NetAlert, 2007b). The Internet allows concealment of identity and affords access to children (Flint, 2000; NetAlert, 2007b).

Pædophiles use a variety of devious strategies to target and lure children into unsafe situations such as: monitoring chat rooms to familiarise themselves with children’s interests; posing as a child; grooming (seducing children by feigned attention, affection, kindness and empathy); creating numerous key words and misspelling of children’s web sites to trap children into entering pædophile sites or prevent them from exiting (Arnaldo, 1999; Arnold, 2000; Briggs & McVeity, 2000; Flint, 2000; Forde & Patterson, 1998; Freeh, 2000; Griffiths, 2000; Hay, 2004; Joint, 2003). It is important that children learn preventative strategies against these.

NetAlert Ltd (2005; 2007a; 2007b), Arnold (2000), and Briggs and McVeity (2000), amongst others, campaign for education in Internet safety for children. There is a large quantity of relevant information available internationally for children through Internet sites, service providers, and safety organisations. For instance, in Australia, Police Stations provide Internet safety information. Much of this information addresses potential dangers, strategies to reduce these and Internet safety contacts. However these materials need to be sought out.

Children are frequently placing themselves at risk on the Internet. NetRatings Australia (2005) state that 71% of children aged 8-9 allege that they had experienced exposure to inappropriate content, communicated or met with strangers, or had given out personal information on the Internet. This finding demands that we ask at what age should children be educated to protect themselves from potential Internet dangers. Lawson and Comber (2000) suggest that there is a moral dilemma about how and when to introduce children to the potential dangers of the Internet. Many writers suggest that it is the parent’s responsibility to teach their children Internet safety (Flint, 2000; Freeh, 2000; Joint, 2003; National Center for Missing and

Exploited Children, 1994). However, Briggs and Hawkins (1997) claim that many parents do not teach their children how to stay safe and argue that schools should also accept responsibility for children's safety education.

Society demands individuals be computer literate and schools are encouraged to develop children's computer and technological skills (Briggs & McVeity, 2000). Internationally, information and technology education is significant in school curricula. For example, the South Australian Curriculum, Standards and Accountability Framework encourage computer and Internet use across all learning areas in the (R-10) curriculum, first introducing it in the Early Years Band (under 5) (Department of Education Training and Employment, 2001). Considering the degree of implementation of these technologies in this curriculum, it is unjustifiable that Internet Safety education is absent. Cai et al. (2003) argue that while schools continue to integrate computers into curricular activities, there is both an increasing need and opportunity for teachers to help children become 'wise' users of technology. Briggs and McVeity (2000) suggest that schools are in the best position to teach children Internet safety and provide information for parents on how to protect children who use the Internet. The best way to teach children to protect themselves is to educate them how to identify potentially dangerous situations and manage them effectively (Aisbett, 2001; Briggs & McVeity, 2000; Freeh, 2000; NetAlert, 2005, 2007a; Zheng, 2006).

NetRatings Australia (2005) state that, when children experienced a negative incident on the Internet, 25% did nothing, 31% informed an adult, 7% told a friend, 26% didn't communicate or use the site again, and 1% told the online perpetrator to leave them alone. Not knowing how or to whom to report, no children reported negative incidents to a regulatory authority. Only 7% of parents have the knowledge of how to report to statutory bodies. Although a reasonable

number of children used appropriate management strategies, at least 25% left themselves vulnerable.

In response to such negative incidents, 27% of parents did nothing, 26% changed or installed protective software, 13% changed supervision or rules of Internet use but only 9% educated their children on how to use the Internet safely. The same research reveals that, whilst 60% of children say they have encountered negative experiences on the Internet, only 28% of parents said their children had, which suggests many parents are unaware of their children's online experiences (NetRatings Australia, 2005).

Although there is some research addressing older children, there is currently a dearth of information on younger children's awareness of Internet dangers and their strategies to manage and prevent them. There is no research identifying whether such children are being educated in Internet protective behaviours. Consequently, this study explores what children aged 5-8 say in small group interviews about the potential dangers of the Internet and safety strategies to manage these dangers; and aims to identify whether they are being educated about Internet safety. The following questions directed the research:

Do young children recognise the potential dangers of the Internet?

What reasons do these children offer as to why they identify these as unsafe?

Can the children identify appropriate strategies to manage or prevent potential dangers of the Internet?

Are children being educated about Internet dangers in the early years of school and, if so, by whom?

METHODOLOGY

SAMPLE

A convenience sample of 57 children aged 5-8 years (7 Receptions, 20 Year 1s and 29 Year 2s), self selected by willingness to participate, from a Government junior primary school which has a particular focus on safety education and is situated in a multicultural, middle socio-economic region within a metropolitan area of an Australian state capital. All children interacted with the Internet at school and at home and had functional conversational English.

MEASURES

A 'potential dangers chart' identified eight activities that were considered potentially dangerous (provision of personal information, inappropriate material and communications, inaccurate information and general safety) and one neutral activity. Space was provided for children to record their responses by placing red or green adhesive spots to represent alternative answers. An interview proforma of fifteen questions was designed, of which nine questions related to the chart (see Table 3).

PROCEDURE

Children were interviewed in eleven groups of 4-7 within their year levels. To maximise responses, each group was invited to a quiet, familiar room away from peers or distractions and positioned informally with the researcher. Children were introduced to the research assistant and were familiarised with the taping procedure by recording and listening to their voices on the tape. Using the interview proforma the children were asked questions as a group, and their individual responses were recorded electronically and by the research assistant.

The first interview question ('Is it safe to go on the Internet by yourself?') was 'closed' to introduce children to the interview process. It was followed by two 'open' questions to elicit deeper thinking (Irwin & Johnson, 2005) and obtain children's unprompted (recall) knowledge. These related to who should be with them when accessing the Internet and what they thought should not be accessible. The potential dangers chart was then introduced to provide children with prompts and the questions related to it were asked. Children were encouraged to elaborate on their chart responses with prompting questions like "Why do you think...". The two questions remaining after the chart focused on children's strategies to manage potential dangers and who taught them what they knew. Throughout, the researcher created follow-up questions, also recorded by the research assistant, to expand thinking and further explanation of children's answers.

ANALYSIS OF DATA

Interviews were transcribed and the children's responses categorised and tabulated. If a response was given by less than three children (<5%), it was classified 'idiosyncratic'. For some questions children gave multiple responses creating higher number of responses than of children. *Post hoc* categories were derived from open questions (see Table 2). Responses from the 'potential dangers chart' were categorised *pre hoc*, as to whether they represented a dangerous or non-dangerous result (see Table 3). Responses to managing potential Internet dangers and sources of learning about the Internet were categorised *post hoc*.

RESULTS

This paper reports results for questions related to matters where children's risk was most evident.

RECALL OF INAPPROPRIATE MATERIAL

Of the 106 responses identifying inappropriate material, 91 could be easily categorised, leaving only ten idiosyncratic responses and five not directly related to the question (see Table 2).

TABLE 2.

Children's post-hoc responses to; "What is on the Internet that you think shouldn't be on the Internet?"

	Total
Frequent categories	
Sexually Explicit or provocative Images	33
Violence – violent actions, cruelty, killing, weapons	16
Inappropriate language - swearing, rude words	12
Irresponsible people or behaviours – drunk, silly, or strange people – illegal or dangerous behaviours – games or messages that teach bad things or behaviours	11
Occasional categories	
Frightening things	3
Personal information - Information that identifies or provides contact details	3
Viruses	5
Thieves – stealing materials or data	4
Kidnappers – stealing children or their families	4
Uncategorised	
Responses unrelated to the question	5
Other – idiosyncratic responses	10
Total	109

RECOGNITION OF DANGERS

Children answered each question related to the ‘Potential Dangers Chart’ only once showing a high level of recognition of potential dangers. Most children identified it as dangerous to place personal information on the Internet or speak to people over the Internet unsupervised. Many recognised that not everything on the Internet is true; that writing a word in the search box will not take you to what you are looking for straight away; and consider that they should not join clubs, enter competitions or do surveys on the Internet. More than half the children recognised it as dangerous to meet people they only know from the Internet. However, this left a substantial number of children who considered it to be ok, or were unsure. A considerable number of children had already been exposed to inappropriate material. Less than half the children identified dangers associated with writing a word in the search box (see Table 3).

TABLE 3.

Children’s perception of what is dangerous and not dangerous from the ‘Potential Dangers Chart’.

Focus Question	Dangerous	Not Dangerous	Unsure
Is it safe to put your name, address or photo of yourself on the Internet?	54	3	
Have you seen stuff on the Internet that you think you shouldn’t see? Bullying, fighting, rude things	24	33	
Is it OK to speak with people on the Internet that want to talk to you alone – without an adult?	7	47	3
Is it OK to go to children’s sites, e.g. Wiggles, ABC, Neopets?	53	1	
Is it OK to meet up with people that you <u>ONLY</u> know from the Internet?	7	47	3
Is it OK to click on pop-ups that ask you to join clubs, do surveys or enter competitions?	30	24	
Is everything on the Internet true?	17	40	
When looking for something on the Internet, is it safe to write a word in the search box?	35	22	

Will writing a word in the search box, take you to what you are looking for straight away?	20	37
--	----	----

MEETING PEOPLE

Of the sixty-nine responses relating to meeting people whom you only know from the Internet, forty-two identified reasons why it was not safe and twenty-seven identified reasons why they considered it 'Ok'. The former referred to the other person as an adult, whilst the latter indicated that the other person was a child (see Table 4).

TABLE 4.

Junior primary children's responses to 'Is it ok to meet up with people you only know from the Internet?'

Categories	Total
NO	42
Bad people, includes thieves, kidnappers, murders	12
Strangers, people child doesn't know, hasn't seen	6
Trickery – pretending to be someone else, false information, tricks	5
Idiosyncratic responses	19
YES	27
Person might be nice, pleasant to you	4
You know them, children believe they know them	4
Invitations attractive, invites to birthday parties, outings	9
Idiosyncratic responses	5
Total responses	69

POP-UPS

Of the 68 responses relating to clicking on pop-ups that ask you to join clubs, do surveys or enter competitions, 54 identified reasons why it is dangerous; most identified exploitation

through exposure and commercialism with only three responses identifying the danger of placing personal information on the Internet. Of the 14 responses that considered it to be ‘Ok’, eight focused on the possibility of winning (see Table 5).

TABLE 5.

Junior primary children’s responses to ‘Is it ok to click on pop-ups that ask you to join clubs, do surveys or enter competitions?’

Categories	Total
NO	54
Adult content – inappropriate content inc – rudeness, nudity, swear words, danger	9
Trickery – tricks, false info	13
Exploitation through selling	9
Information that identifies or provides contact details	3
Idiosyncratic responses	20
YES	14
Winning	8
Idiosyncratic responses	6

MANAGING DANGERS

Most responses about managing dangers reflected appropriate strategies including; informing adults, closing the website or computer and avoiding re-entry. A small number of responses suggested acting inappropriately or following prompts. Only a few responses considered prevention strategies such as asking permission, contacting website owners and transferred stranger danger knowledge (see Table 6).

TABLE 6.

Junior primary children's responses to managing potential Internet dangers.

Categories	Total
Appropriate management, stopping interaction or removing themselves	61
In-appropriate management , exposure to continued risks	11
Prevention Strategies, precautionary behaviour	18
Total	90

SOURCES OF EDUCATION

Just over half the children who responded had received some education about potential dangers of the Internet (see Table 7). Some failed to answer individually, merely concurring with others in the group, creating lower numbers of responses than children.

TABLE 7.

Junior primary children's view of who has taught them what they know.

Taught by	Total
Parents	13
Teacher	3
Siblings - under 18	5
Relatives – cousins, uncle, grandparents	4
Other Adults – adults not related to children	1
Self Taught	21
Total	46

DISCUSSION

While many children demonstrated proficiency in recognising some of the potential dangers of the Internet, they did not spontaneously recall them nor always respond in ways that would maintain their safety. This contradicts suggestions by organisations and researchers that children do not know these. Risk categories that were identified by children paralleled those reported by NetAlert (2005).

There was a clear difference between children's recollection and recognition of dangers.

Children identified exploitation and exposure to inappropriate materials without prompts, but it was of concern that they failed to identify communication, commercialism, unreliable information and revealing personal information as Internet risks. However, that these were later recognised when responding to the 'potential dangers chart' demonstrates a need for curricula to move beyond prompted recognition of dangers to active recall in practice.

These results are also consistent with previous research (Aisbett, 2001; NetRatings, 2005), in reflecting children's susceptibility to Internet dangers. Almost half of the children reported prior negative experiences with the Internet.

A considerable number of children did not consider it dangerous to meet with people they only know from the Internet and a few children were unsure, supporting claims that children are unable to recognise such dangers. Presentation in text and in speech of the question that yielded these results emphasised the word 'only'. However, children's responses to examples such as invitations to birthday parties or the park for a game indicate how easy it is for predators to lure children into unsafe situations as they coincide with the appealing enticements offered by paedophiles (Forde & Patterson, 1998). Children's vulnerability to individuals wishing to do them harm is evidenced by almost half of the children reporting they would place themselves at risk.

No previous research specifies whether children consider meeting with people on the Internet as safe or dangerous. The naivety of children's thinking is reflected within this study through many responses but is most apparent in the following: the belief that they 'knew' the person because they were interacting with them; the assumption that they were interacting with other children; response to the attractiveness of invitations; and, for a few, willingness to take a risk on the assumption that the person might be trustworthy. Children's natural disposition to trust and the ease with which their focus can be diverted from safety to fun are characteristics paedophiles prey on. Over a third of children's reasons indicate they would be at risk of exploitation. Nevertheless, some children are capable of appreciating the danger of harm from ill intentioned adults.

In this context, children's responses were more focussed on inappropriate materials or commercialism than personal information. They were able to recognise some risks associated

with placing personal information on the Internet when asked specifically. However, that many children were not able to associate joining clubs, doing surveys and entering competitions with entering personal information reinforces concerns about marketers targeting children and collecting personal information (Media Awareness Network, 2007).

Children's responses may have been influenced by their being captivated by 'clicking on pop-ups', rather than the second part of the question 'that ask you to join clubs, do surveys, or enter competitions'. A variation of wording would allow this to be tested. Although there were only a minority of responses indicating that it is safe to enter into such activities, reasons given by children included the prospect of winning, which once more demonstrates the ease of diverting children's attention from safety to attractive features.

Children's management strategies were ambiguous. When asked directly what they would do in the case of a specific danger, children's responses reflected a high number of appropriate management strategies, contradicting previous findings that children do not know how to deal with situations effectively (NetRatings, 2005). However, if children do not spontaneously recognise all potential dangers on the Internet, they cannot marshal appropriate strategies to manage them. That children are easily distracted from safety by attractive invitations and the appeal of winning draws attention to the need to educate children about alluring strategies used by those encouraging children to take risks.

Just over half the children who answered the question about education had received some instruction. Only a quarter of responses signified that children's parents taught them Internet safety to some degree. This supports Briggs and Hawkins (1997) claim that many parents do not teach their children how to keep safe and questions the argument that Internet safety education is a parental responsibility rather than a public concern. All children who participated in this study interacted with the Internet at school through curriculum studies but

only three children indicated that a teacher provided some education on Internet danger. This suggests that teachers also see it as the parent's responsibility (Flint, 2000; Freeh, 2000; Joint, 2003; National Center for Missing and Exploited Children, 1994).

The internet is continually developing new possibilities. Children within this study did not specifically mention interacting through chat rooms, which according to Joint (2003), and Forde and Patterson (1998) present the most opportunities for pædophilic targeting and grooming. It remains unknown whether young children use chat rooms. Nevertheless, it is feasible to assume that in the future children will be interacting through such communication systems at an earlier age (Aisbett, 2001; Australian Bureau of Statistics, 2003, 2005-2006; DeBell, 2005; NetAlert, 2005) increasing children's vulnerability to pædophiles.

Although this research was conducted using a convenience sample from a single school, the general thrust of the results was consistent with prior findings that young children are already being exposed to potential dangers, and they are not fully aware of many of the risks the Internet encompasses. The multicultural composition of the school provides valuable results from a diverse range of children. Given the school's emphasis on safety education, the high degree of vulnerability that still exists suggests that the situation in schools with a lesser focus on safety would be of greater concern. Nevertheless, to obtain a more comprehensive understanding for this age group requires replication within different settings and international comparisons.

While using group discussions improves responsiveness, it limits individual responses as it is difficult to record when children are concurring with one another, particularly if non-verbal. Consequently, children's level of understanding of Internet safety and vulnerability to risk was underestimated in these results. Research using individual interviews would offer an alternative worth pursuing.

These findings suggest that more needs to be done to educate young children to protect themselves from Internet dangers. The Internet has become ubiquitous in society and education and child safety being a public concern and responsibility necessitates an immediate integration of more effective Internet safety education into school curricula to support children in recognition, understanding and management of Internet dangers.

CONCLUSION

Children are able to recognise some of the potential dangers the Internet presents but only able to spontaneously recall a minority. Many young children have encountered inappropriate material on the Internet or have been exposed to bad experiences. Even though children were able to recognise potentially dangerous situations, there were clear indications that children place themselves at risk. Children's responses demonstrate naivety and trust which is likely to place them in jeopardy if they are not educated to recognise the risk. A minority of parents are providing guidance for children about Internet dangers. However few teachers are. This leaves many young children vulnerable. To leave even a small percentage of children susceptible to Internet dangers is not socially responsible. Although protecting children whilst at school is important, education about Internet protective behaviours is necessary to protect them elsewhere. It is essential that educational institutions take the responsibility to teach children protective strategies they can use wherever they access the Internet.

REFERENCES

- Aisbett, K. (2001). The internet at home - A report on internet use in the home [Electronic Version], 1-85. Retrieved February 19, 2007 from <http://www.aba.gov.au/newspubs/documents/InternetStHome.pdf>.
- Alberta Education Curriculum Strands Branch. (1998). *Information and communication technology - Grade 1 to grade 6*. Retrieved July 23, 2007 from http://www.education.alberta.ca/media/453110/pofsie1_2.pdf.
- Arnaldo, C. (1999). Protecting children online [Electronic Version]. *Innocence in danger conference*. Retrieved March 23, 2007, from http://www.unesco.org/webworld/highlights/innocence_010799.html
- Arnold, C. A. (2000). The naked, hairy caveman: Child abuse on the internet. In C. Von Feilitzen & U. Carlsson (Eds.), *Children in the new media landscape - Games, pornography, perceptions*. (pp. 233-246). Goteborg: UNESCO International Clearinghouse on Children and Violence on the Screen.
- Australian Bureau of Statistics. (2003). *Children's participation in cultural and leisure activities, Australia* (Report No. 4901.0). Canberra: Australian Bureau of Statistics. Document Number)
- Australian Bureau of Statistics. (2005-2006). *Household use of information technology* (Report No. 8146.0). Canberra. Document Number)
- Australian Bureau of Statistics. (2006). *Children's participation in cultural and leisure activities, Australia* (Report No. 4901.0). Canberra: Australian Bureau of Statistics. Document Number)
- Briggs, F., & Hawkins, R. (1997). *Child protection: A guide for teachers and child care professionals*. Crows Nest, NSW: Allen & Unwin.
- Briggs, F., & McVeity, M. (2000). *Teaching children to protect themselves*. Crows Nest, NSW: Allen and Unwin.
- Cai, X., Gantz, W., Schwartz, N., & Wang, X. (2003). Children's website adherence to the ftc's online privacy protection rule. *Journal of Applied Communication Research*, 31(4), 346-362.
- DeBell, M. (2005). *Rates of computer and internet use by children in nursery school and students in kindergarten through twelfth grade*. Retrieved February 25, 2007. from http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/00000000b/80/30/bc/bf.pdf.
- DeBell, M., & Chapman, C. (2006). *Computer and internet use by students in 2003* (Report). Washington: U.S. Department of Education - National Center for Education Statistics - Institute of Educational Sciences. Document Number)
- Department of Education Training and Employment. (2001). *South Australian curriculum, standards and accountability framework*. Retrieved March 3, 2007. from http://www.sacsa.sa.edu.au/index_fsrc.asp?t=Home.
- Flint, D. (2000). The internet and children's rights - Suffer the little children. *Computer Law and Security Report*, 16(2), 88-94.

- Forde, P., & Patterson, A. (1998). Paedophile internet activity [Electronic Version]. *Australian institute of criminology - Trends and issues in crime and criminal justice*, 1-6. Retrieved February 2, 2007, from <http://www.aic.gov.au/publication/tandi/ti97.pdf>
- Freeh, L. J. (2000). A parents guide to internet safety [Electronic Version]. *U.S. Department of Justice Federal Bureau of Investigation*, 1-22. Retrieved March 14, 2007, from http://www.eric.ed.gov/ERICDocs2/content_storgae_01/0000000b/80/26/59/ec.pdf
- Griffiths, M. (2000). *Sex on the internet: Issues, concerns and implications* Goteborg: The UNESCO International Clearinghouse on Children and Violence on the Screen.
- Hay, M. D. (2004). Commercial sexual exploitation of children and youth. *British Columbia Medical Journal*, 46(3), 119-122.
- Irwin, L. G., & Johnson, J. (2005). Interviewing young children: Explicating our practices and dilemmas. *Qualitative Health Research*, 15(6), 821-831.
- Joint, A. (2003). Protecting children from paedophiles on the internet. *Computer Law and Security Report*, 19(1), 44-48.
- Lawson, T., & Comber, C. (2000). Censorship, the internet and schools: A new moral panic? *The Curriculum Journal*, 11(2), 273-285.
- Media Awareness Network. (2007). How marketers target kids [Electronic Version]. Retrieved January 30, 2007, from http://www.media-awareness.ca/english/parents/marketing/marketers_target_kids.cfm?Ren.
- National Center for Missing and Exploited Children. (1994). Child safety on the information highway [Electronic Version]. *Electronic frontier foundation*. Retrieved January 24, 2007, from http://www.eff.org/Censorship/?f=child_safety_online.booklet.
- NetAlert. (2005). A parent's guide to internet safety. In NetAlert (Ed.), *Education, software, supervision, empowerment: Just some of the ways you can keep them safe on the internet*. Hobart: NetAlert Limited.
- NetAlert. (2007a). Click into safety online: A parents guide to driving safely on the superhighway, *NetAlert - growing Australia online*. Adelaide: South Australian Police.
- NetAlert. (2007b). Education, software, supervision, empowerment; Just some of the ways you can keep them safe on the internet (pp. 1-6). Hobart: NetAlert Limited.
- NetRatings Australia. (2005). *Kidsonline@home - Internet use in Australian homes* (Report). Sydney: The Australian Broadcasting Authority and NetAlert Limitedo. Document Number)
- Nir-Gal, O., & Nur, T. (2003). Learning in an internet environment during early childhood. *Contemporary Issues in Early Childhood*, 4(2), 172-186.
- Qualifications & Curriculum Authority, & Skills, D. f. E. (2003). *Information and communication technology (ICT) teachers guide*. Retrieved April 16, 2007. from http://www.standards.dfes.gov.uk/schemes3/documents/ICT_Teachersguideupdate.pdf.
- Qualifications and Curriculum Authority, & Department for Education and Skills. (2003). *Information and Communication Technology (ICT) Teacher's guide*. Retrieved. from http://www.standards.dfes.gov.uk/schemes3/documents/ICT_Teachersguideupdate.pdf.
- Queensland Police Force. (2005). Who's chatting to your kids? A must read for parents with internet access (pp. 1-11). Queensland: Queensland State Government.
- Siraj-Blactchford, J., & Siraj-Blactchford, I. (2001). *Kidsmart: The phase 1 UK evaluation 2000-2001 final project report* (Final Project Report No. 4). London: International Business Machines (IBM)o. Document Number)
- Zheng, Y. (2006). What influences children and adolescents' understanding of the complexity of the internet? *Development Psychology*, 42(3), 418-428.