# Digital Literacy and Awareness in Australia's New Global Frontier

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# Introduction

'Digital literacy' has been identified as one of the areas in which Australia need to improve if it is to get people to engage online and participate in these benefits. To that end, Australia has announced a *National Digital Economy Strategy* which addresses targeted areas to raise Australian capability to engage online.

With the National Broadband Network (NBN) promising to providing basic access and 'supply-side' infrastructure, Australia now finds itself needing to focus on the demand-side: that is, ensuring that Australians are able to take advantage of the benefits that a fully networked society can provide.

With basic access considerations already addressed, increasing engagement levels will be driven by improving Australians' digital literacy and making them more aware of the benefits available from greater online engagement enabled by ubiquitous, reliable, secure, always-on and very-high bandwidth broadband networks and services.

These benefits include improved accessibility to government services, healthcare, educational content and services, financial services, community integration, employment opportunities, participative democracy (digital citizenship) and freedom of expression.

The NBN will also provide a platform for research and innovation. Australian businesses and other organisations are expected to take advantage of high-speed broadband access provided by the NBN to improve access to global markets and improve international competitiveness. Some businesses are already positioning themselves to take advantage of this infrastructure. However, in order to take advantage of the opportunities, Australian entrepreneurs will need to improve their digital literacy and technology skills and awareness of the potential of the NBN and broadband.

In this context, the policy discussion in Australia is now moving away from broadband access as being the major barrier to people engaging online. Internet-connected computers and other access points will be increasingly available, including wireless access and access from public institutions such as libraries. Increasingly, the reasons why many people are not moving online understood to be:

- Lack awareness of the benefits online access and broadband can provide.
- Lack the basic ICT and Internet skills to get online and find the information and services they need.
- Lack the confidence to engage online safely (including concerns about cybersafety and cybersecurity).

High-level analysis indicates that those who have the most to benefit from services delivered over high-speed broadband are also among Australia's most disadvantaged and are expected to be the most difficult to get online. This includes people who are aged, disabled, low education or incomedisadvantaged. In addition, there are segments of the population that do not fall into these categories and yet have limited take-up due to an unawareness of the extent of benefits available or a fear of online 'dangers'.

## This paper will outline:

- Who is not benefiting from the digital economy, and why.
- How a lack of digital literacy and confidence would restrict access to these benefits for individuals, as well as organisations across government, business and the community.
- Some of the initiatives being undertaken, by government and other sectors, to address these issues.

# **Australian Infrastructure Challenges**

Broadband communications infrastructure development presents serious challenges for Australia because of its extremely low population density – only 22 million people live in a country that is 14 times the size of France.

This situation becomes more extreme when one considers that the majority of Australia's population is clustered around the major capital cities and coastal areas, especially in the east-coast 'belt' stretching from Brisbane to Sydney and in Melbourne and surrounding areas. Close to two-thirds of Australia's population resides in a capital city and 68.7 per cent live in Australia's major cities. In contrast, just 2.3% live in remote or very remote parts of Australia. Australia's well-populated areas receive reasonable levels of private-sector infrastructure investments and broadband service offerings, but the same is not necessarily so outside of these zones.

This leaves around a third of Australians spread across Australia's vast rural, regional and remote areas. In these areas the investment cases are usually much poorer as average costs of infrastructure and service provision rise quickly when measured on a potential customer basis. In many cases there is simply insufficient return on investment to drive private sector investment. Even where some regional areas do have some level of broadband infrastructure present, there is commonly only one service provider.

The situation is more extreme when one considers that, while business cases for many remote and regional areas may indicate a marginally positive return on investment, the industry is highly capital intensive and private sector will tend to be risk-adverse and not make these investments. In a competitive market environment for limited amounts of capital, companies will usually give preference to the higher rates of return available in more densely populated and metropolitan areas. Thus, regional and especially remote areas will usually be at the bottom of a long list of prospective investment opportunities for broadband infrastructure and service providers to consider.

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<sup>&</sup>lt;sup>1</sup> Australian Bureau of Statistics, *Regional Population Growth, Australia*, 2009-10, Cat No. 3218.0, March 2011

# **National Broadband Network**

Australia has taken a decisive approach to ensuring essential broadband infrastructure by committing to provide infrastructure that is initially government-owned as a platform for innovation and competition in services delivery. According to NBN Co's Corporate Plan<sup>2</sup>, the total capital expenditure for the project is estimated to be \$35.9 billion. That makes the NBN the single largest infrastructure investment made by an Australian Government.

The NBN will provide access to high-speed broadband to 100 per cent of Australian premises. The government's objective is to connect 93 per cent of Australian homes, schools and businesses with fibre to the premises technology providing broadband speeds of up to 100 megabits per second. All remaining premises will be served by a combination of next-generation wireless and satellite technologies providing peak speeds of at least 12 megabits per second.

The productivity gains associated with this investment will mean that economic and social benefits will continue to flow for decades beyond the completion of the project. The NBN will:

- Deliver significant improvements in broadband services for all Australians at affordable prices.
- Support a new wave of digital innovations that will change and improve the way Australians live their lives, receive services and connect with the world.
- Stimulate the economy and help drive Australia's productivity.
- Transform service delivery in key areas such as health, education and energy.
- Connect our big cities, regional centres and rural communities.
- Ensure that every community in regional Australia gets fair and equal access to affordable high-speed broadband.

# Who is not engaged?

Australia is a developed country, but faces challenges in terms of the take-up of Internet services by some groups in society that are less able to take advantage of the opportunities. This includes people who are seniors, disabled, indigenous, on low incomes or living in regional or remote areas.

According to the Australian Bureau of Statistics (ABS) around 12 per cent of Australians have **never** used the Internet and 26 per cent of Australians aged over 15 years did not use the Internet in 2008-09<sup>3</sup>. The figures are higher in remote areas, where 34 per cent of people did not use the Internet in 2008-09. The figures are also higher for retired persons, those on low incomes, indigenous persons and those living in regional areas.

For example, in 2008-09 only 57 per cent of persons aged 65 years and over used the Internet compared with 98 per cent of persons aged 14 to 17 years. Similarly, 34 per cent of persons earning less than \$40,000 pa have never used the Internet, compared with only 11 per cent of persons earning over \$40,000 pa.<sup>4</sup>

<sup>&</sup>lt;sup>2</sup> http://www.nbnco.com.au/wps/wcm/connect/downloads/publication/NBN-Co-Corporate-Plan.pdf

<sup>&</sup>lt;sup>3</sup> Australian Bureau of Statistics (ABS), Household Use of Information Technology 2008-09, Cat. No. 8146.0, Canberra, December 2009

<sup>&</sup>lt;sup>4</sup> ABS 2009-09 ibid.

Similarly, research by the Australian Communications and Media Authority (ACMA) shows that 22 per cent of Australians did not use the Internet on a weekly basis in June 2010, down from 33 per cent in June 2005. This same research also shows that 55 per cent of people aged over 65 years did not use the Internet weekly in June 2010.

On the other hand Australia's youth, like youth in developing countries around the world, have taken to engaging online in a massive way. According to the ABS, during 2008-09 Internet usage from every site increased with age, with children aged 12 to 14 years registering the highest proportion of Internet usage (96%) of any demographic. However, even here we see gaps. For example, Internet usage is lowest for children with unemployed parents (64% for one parent families and 67% for two parent families).

Significant differences in activities are evident across children's age groups and gender as well. For example, a higher proportion of boys (78%, compared to 60% of girls) and younger children (77% for 5 to 8 and 73% for 9 to 11 year olds compared to 59% for 12 to 14 year olds) used the Internet for playing games in 2008-09.<sup>6</sup>

Older children are more likely to use of the Internet for educational activities in 2008-09 (94% for 12 to 14 and 91% for 9 to 11 year olds compared to 64% of 5 to 8 year olds), as are girls in general (87% compared to 82% of boys). Emailing was also more common for girls (43%) compared to boys (29%).

For aged persons another story unfolds, as the proportion of people who have not used the Internet rises to 37 per cent for persons aged 55-64 years, shooting up to 69 per cent for persons aged 65 years and over.<sup>8</sup>

Similarly, people who already live with disadvantage will face barriers to broadband access regardless of where they live. For persons with a disability and requiring assistance with their core activities, only 28 per cent had broadband access in 2006.<sup>9</sup>

The disparity of Internet access between metropolitan and regional/remote areas, and between the disadvantaged and non-disadvantaged, raises equity and access issues and has social inclusion implications. While most Australians are enjoying the benefits of online engagement, certain groups of already disadvantaged Australians are being denied those benefits, either consciously or unconsciously. This leads to a widening of the extent of digital disadvantage in terms of access and social equity.

This represents a substantial and ongoing economic and social loss for Australia. For example, a recent report by Allen Consulting<sup>10</sup> has estimated that households with an Internet connection gain benefits of approximately \$150 per week through time-saving activities such as telecommuting, remote work and study, information resources, online shopping and education.

The same study also demonstrated that if approximately 800,000 more Australian households are connected to the Internet, household consumption gains would increase by \$2.4 billion per year.

<sup>&</sup>lt;sup>5</sup> Australian Communications and Media Authority, *Communications report 2009-10 series, Report 1 – Australia in the digital economy: The shift to the online environment*, Melbourne, 2010

<sup>&</sup>lt;sup>6</sup> ABS 2008-09 *ibid*.

<sup>&</sup>lt;sup>7</sup> ABS 2008-09 *ibid*.

<sup>&</sup>lt;sup>8</sup> ABS 2008-09 ibid.

<sup>&</sup>lt;sup>9</sup> ABS Patterns of Internet access in Australia 2006, Cat. No. 8146.0.55.001, 2007

<sup>&</sup>lt;sup>10</sup> The Allen Consulting Group, *Quantifying the economic gains of getting more Australian households online*, November 2010, pp36-38

The study predicts that these gains would fall across all Australians, but would be skewed towards benefiting those in non-metropolitan areas (regional output gains of 0.53 per cent) more than those in metropolitan areas (0.38 per cent).

# Why are Australians not engaged?

Research from ACMA in 2009<sup>11</sup> indicates that the key reasons why these Australians are not accessing online resources and services are:

- No physical broadband access Limited infrastructure and services, especially in regional areas.
- Affordability especially for people on low incomes or in regional/remote areas, broadband access can represent a large proportion of disposable income (after rent, food, power).
- Awareness While most people are generally aware that the Internet provides benefits,
   ACMA research indicates that non-users are often unaware of the full extent of benefits available from using digital media, which makes them less motivated to learn and engage.<sup>12</sup>
- Confidence Fears and concerns about cyber-safety and cyber-security discourage people from engaging.
- Digital literacy Non-users or infrequent users often do not have a broad vision of how the
  Internet works and do not pick up transferable skills, and therefore find it difficult to engage
  independently. Such skills may include using a search engine, navigating a website,
  purchasing goods or using a camera.

# How to get Australians online

Online awareness, digital literacy and confidence levels all impact on individual perceptions of online safety. These issues can be directly addressed through programs to build fundamental digital literacy skills and demonstrate the benefits from participation, providing people with the awareness, motivation, confidence and capability to engage online safely and securely. Ideally, digital literacy programs need to be complemented with available hardware and broadband access channels, as these skills are best gained, improved and retained through frequent use.

Digital literacy is increasingly essential for accessing online information services (including online government services) and effective participation in economic, social and community life. As environments change over time, users also go through continual learning processes, both formally (e.g. training courses) and informally (self-guided, researched online or with help from friends and family). Frequent and ongoing engagement facilitates and encourages this continual learning process.

ACMA research into personal attitudes of non or limited users towards the use of personal information online suggest that, once issues of access channels and affordability have been addressed, the two key factors motivating people to improve their 'digital media literacy' are their existing competencies with using digital media and their level of motivation to become more digital

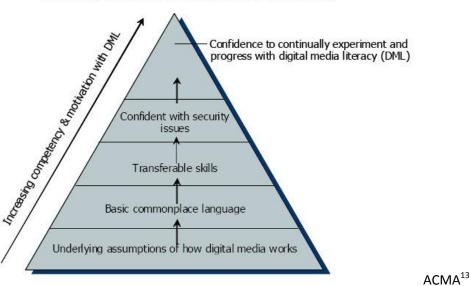
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<sup>11</sup> Australian Communications and Media Authority, Adult Digital Literacy Needs, Qualitative research report, August 2009

<sup>&</sup>lt;sup>12</sup> Australian Communications and Media Authority (2009), *ibid*.

media literate. That is, people become more confident and capable online as they learn more, and have reasons to go online.

This means that cybersafety and security initiatives will likely have little impact on this group's attitude until fundamental digital media competency is achieved. People need to learn about how to be safe and secure online at the same time as they learn other digital literacy skills. As they gain more skills, participate and take advantage of online opportunities, their awareness of the benefits and confidence with security and safety matters improves, as does their motivation to engage. The following diagram illustrates the hierarchy of digital literacy skills and engagement:



Hierarchy of skills, knowledge and understanding

As many initiative options (discussed below) would be best progressed through a cooperative model involving local community and state authorities, it would also be appropriate to consider following a national compact model for engagement with the third sector and other local partners (e.g. local government, community, library and private sector partners).

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<sup>&</sup>lt;sup>13</sup> ACMA, Adult digital media literacy need – Qualitative research report, August 2009

# What assistance is provided to help Australians engage?

The ACMA *Audit of Australian digital media literacy programs, July 2009* report notes that that Commonwealth, State and local governments are key players in providing integrated 'digital media literacy' (DML) programs, often in partnership with community organisations. DML Programs are generally aimed to target specific groups which include:

- Students & teachers DML skills, new technologies and infrastructure training
- Rural, remote and regional communities technology centres and basic DML training
- Seniors and disadvantaged persons

   vocational skills and removing barriers to use<sup>14</sup>
- Indigenous communities DML skills training
- Businesses online business presence, engagement and market development
- General Population Access and training through libraries and public learning centres, and some community engagement programs

The report also notes that program focus is tending to move from access issues and basic ICT skills towards increasing participation, incorporating new skills development and emerging technologies.

In the rest of this section I will outline a range of initiatives focused on digital literacy, education using online tools and resources, cybersafety, cybersecurity, awareness raising initiatives and demonstration programs. Most of these initiatives are supported by Australian government agencies or the public library sector.

## National Digital Economy Strategy

The Australian Government launched its *National Digital Economy Strategy* on 31 May 2011. This articulates a vision for the digital future and ways forward for government, industry and the community.

This vision is strongly focused on awareness raising and demonstrating the potential benefits of broadband, and closing gaps between those who benefit from online engagement and those that that don't, particularly between regional/remote and metropolitan areas.

It includes the goals that Australia is counted among the top five OECD countries by 2020 for the percentage of households connected to broadband at home and the portion of businesses and not-for-profit organisations using online opportunities. The goals also include that households and business in regional areas will engage online as much they do in the cities.

These goals are both bold and bullish, but not unreasonable. To put that comment in context, the OECD reports that in 2010 Australia ranked 18th amongst member states for broadband penetration.<sup>15</sup> Also, the number of Australians who have never used the Internet is higher among those living in regional and remote areas.<sup>16</sup> However, with the successful rollout of the NBN, increased participation and use of broadband services, resources and opportunities by Australians in areas like health, education and government services, Australia could achieve these goals.

 $^{15}$  OECD Fixed (wired) broadband subscriptions per 100 inhabitants, by technology, June 2010

<sup>&</sup>lt;sup>14</sup> ACMA Audit of Australian digital media literacy programs, July 2009

<sup>&</sup>lt;sup>16</sup> Australian Bureau of Statistics, *Household Use of Information Technology*, Australia, 2008-09: *Chapter 3: Use of the Internet; Table 1 Persons 15 and over, Use of the Internet by location of access–2008–09*, Cat. No. 8146.0, Canberra 2010 http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/8146.02008-09?OpenDocument

The strategy is linked to and complements Australia's NBN. It outlines a vision in which the digital economy transforms national productivity, global competitiveness and social well-being. The strategy targets eight core areas:

- Participation by Australian Households
- Participation by Australian businesses and not-for-profit organisations
- Smart management of the environment
- Health and aged care services
- Education
- Teleworking
- Government service delivery and online engagement
- Online engagement in regional Australia

Throughout the strategy digital literacy appears as a core element towards enabling improved achievement against all of these goals, and in particular towards enabling online participation and also as an objective of online education.

Australia anticipates substantial benefits from greater online participation. For example, Allen Consulting has estimated that if the number of Australian households connected to the Internet increased by 10 percentage points, this would deliver direct gains of \$2.4 billion per annum through improved benefits in areas such as access to telework, research, health and education services.

However, targeted action will be required in order to minimise digital divides and prevent widening of gaps between the advantaged and disadvantaged, reduce social exclusion and empower individuals and communities.

Digital literacy, awareness of the benefits of engagement, encouraging the creation of locally-relevant content and delivery of innovative and value-adding services via broadband are all essential parts of the strategy to close these gaps between the digital 'haves' and 'have-nots'. According to research by ACMA<sup>17</sup>, more than half of Australians currently without an Internet connection are not planning to get one. The most common reason they provide is that they do not see the relevance to their lifestyle.

Therefore, the government is committing funding to a number of initiatives designed to demonstrate the potential of high-speed broadband, improve digital skill levels, break-down barriers to participation and improve the accessibility and reach of the NBN. Initiatives include:

The Digital Communities Initiative (\$23.8 million over three years) will help increase the
proportion of Australian households that are online by establishing 'Digital Hubs' in 40
communities in the NBN's early rollout. These hubs will assist locals to improve their digital
literacy skills and better understand the benefits of the NBN.

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<sup>&</sup>lt;sup>17</sup> Australian Communications and Media Authority, *Adult Digital Literacy Needs, Qualitative research report*, August 2009

Focused on regional and remote areas, Digital Communities will serve to demonstrate broadband benefits in areas like health and education. The initiative will deliver education and training targeted to enable participants to perform basic online activities like email, searches, online shopping, government services and social media.

- **Digital Enterprises** Initiative (\$12.4 million over three years) will assist small-to-medium enterprises and not-for-profit organisations (including local cultural organisations) in 40 NBN early rollout communities to help them fully utilise the broadband network. This awareness-raising program will help the region to recognise the benefits of the NBN and take advantage of them to improve the effectiveness and reach of their operations.
- Continuing the Broadband for Seniors Program (extra \$10.4m over four years) Broadband for Seniors involves 2,000 Internet kiosks providing free Internet access and training to senior citizens who have no PC or Internet access available to them. The kiosks are hosted in public places such as council offices, community centres and aged care villages. The initiative supports seniors to gain confidence to use new technology by providing free online training and individual and workshop training. This program provides valuable skills for taking advantage of online opportunities and builds community participation and social inclusion.

## Other initiatives delivered by the Australian Government

• The **Indigenous Communications Program** (ICP, \$30m over 4 years, from July 2009-2013) improves communications access for Australians living in remote Indigenous communities, so that they are able to take full advantage of the economic, education, social and cultural opportunities offered by the digital economy.

The Internet and Training element (\$6.9m) of the ICP provides funding to improve access in up to 120 remote Indigenous communities to basic public Internet facilities and computer training, in partnership with the State and Northern Territory Governments. A National Partnership Agreement has been established that allows participating States and the Northern Territory to build on existing infrastructure and develop tailored solutions that meet the needs of their remote Indigenous communities, many of which will receive Internet access for the first time.

Delivery of public Internet access and training services to remote Indigenous communities through the ICP began in early 2010, giving indigenous people living in remote parts of Australia the opportunity to access this increasingly important tool for communication, education and economic opportunity and to join the rest of Australia in developing its Digital Economy.

• The **Digital Regions** Initiative (\$60 million over four years) co-funds innovative digital enablement projects with state, territory and local governments through a National Partnership Agreement to delivery better education, health and emergency services in regional, rural and remote Australian communities.

For example, under the Digital Regions Initiative, \$5.5 million has been recently committed to the **Telehealth Trials** demonstration initiative in Queensland to help people in regional areas access quality healthcare through telehealth and health outreach services. The initiative will establish a range of telehealth services for patients living in regional Queensland, including a trial of in-home telehealth services for Australians with diabetes living in Townsville. The trial will involve in-home monitoring, teleconsultations, support and provision of health updates and alerts to health professionals. These trials will help identify the impact and benefits of in-home telehealth.<sup>18</sup>

EduONE, another project funded under the Digital Regions Initiative, will use high-speed broadband to deliver virtual classrooms and innovative educational resources. EduONE is a joint project between the University of New England and the Community Technology Centres to develop a portal (eduone.edu.au) to provide open education resources and enhanced educational services at 30 centres in rural and remote locations in New South Wales. Based in an early roll-out area for the NBN, EduONE will utilise the high-speed network to provide virtual training rooms and laboratories and improve learning outcomes.

- The NBN Enabled Education and Skills Services Program (\$27.2 million over four years), also recently announced, will support development of online and interactive education and training projects. This program will demonstrate the potential and benefits of broadband for educational services delivery and target regional communities benefiting from the NBN's early rollout. It will support innovative education and training projects with potential to deliver high quality, accessible and sustainable online tools to Australian schools, technical and further education colleges, universities, workplaces and homes. It will leverage the NBN to support education, training and skills development using online learning services delivery via high-quality video and web-conferencing platforms. 19
- Livewire is a free and safe online peer support program connecting socially isolated young
  Australians affected by a serious illness, chronic condition or disability. It is an innovative
  application of broadband technology providing an online community that participants can
  access for advice and social support from peers.

Livewire includes inspirational and entertaining content, interactive educational games and a full suite of blogs, chat rooms and community tools to improve the young people's emotional and social wellbeing. Livewire offers a solution for these young people, siblings, parents and carers by facilitating connection, interaction and support between people who are experiencing similar situations.

<sup>&</sup>lt;sup>18</sup> http://www.minister.dbcde.gov.au/media/media\_releases/2011/195

<sup>&</sup>lt;sup>19</sup> http://www.minister.dbcde.gov.au/media/media releases/2011/194

The **Livewire** project was established with assistance from the Australian Government, which provided \$7.2 million to its initial establishment. Livewire is co-funded, managed and implemented by a subsidiary of the Starlight Children's Foundation.<sup>20</sup>

- **Digital Education Revolution** (DER) The Australian Government committed \$2.4billion over 2007 2013 to the DER, which aims to contribute sustainable and meaningful change to teaching and learning in Australian schools that will prepare students for further education, training and to live and work in a digital world. Initiatives include:
  - The National Secondary School Computer Fund<sup>21</sup> is the major funding element of the DER. The Fund is helping schools to provide new computers and other ICT equipment for students in Years 9 to 12, as well as providing the necessary infrastructure to support the installation and maintenance of additional ICT. The primary aim is to achieve a computer to student ratio of 1:1 for students in Years 9 to 12 by the end of 2011.
  - Providing around \$100 million towards broadband connections for schools.
  - Providing \$36 million towards development of online curriculum pilot projects, including online curriculum tools and resources that support the national curriculum and specialist subjects such as languages.
  - Providing \$16 million to the ICT Innovation Fund<sup>22</sup> to fund four projects that will help teachers and school leaders to better use ICT in the classroom.
  - Collaborating with states and territories and Deans of Education to ensure new and continuing teachers have access to training in the use of ICT.
  - Enabling parents to participate in their child's education through online learning and access.
  - Support mechanisms to provide vital assistance for schools in the deployment of ICT.
- Framework for Open Learning (FOLP) FOLP is a small grants program which supports
  national cross-sectoral projects and activities that enhance learning outcomes, encourage
  learning throughout life and provide educational benefits for the effective and efficient use
  of ICT across Australian education and training sectors. It fosters collaboration and
  innovation in the educational use of ICT, and promotes national and international
  engagement in such innovation.
- Golden Gurus provides mature age Australians (aged 50 years and over) with a range of
  opportunities to support community organisations and small businesses by sharing their
  skills and experience. Some projects conducted under Golden Gurus support digital literacy
  objectives, such as helping to provide basic computer training for disadvantaged people e.g.
  with disabilities, aged or isolated.

http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/ComputerFund/Pages/NationalSecondarySchoolComputerFundOverview\_aspx

<sup>20</sup> https://www.livewire.org.au

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http://www.deewr.gov.au/Schooling/DigitalEducationRevolution/DigitalStrategyforTeachers/Pages/ICTInnovationFund.aspx

#### **Public Libraries**

**Public libraries** play an important role in providing access and digital media training to the digitally disadvantaged, as they are capable of overcoming barriers such as having no Internet available at work or home due to affordability or other issues. Public libraries also provide safe 'spaces' where people can do things like engage online socially, research homework projects or engage with online government services and support groups.

Public Libraries are of key importance for providing access to information resources and online services for the 'digitally disadvantaged'. Librarians are becoming 'life coaches for the digital age', as the sector attempts to fulfil the important digital roles of providing Internet access, building capabilities (training) in basic to advanced digital media literacy skills, and providing government and health information in plain language. However, many public library sector representatives report that local libraries face difficulties in resourcing the surge in public demand for online access and support, especially in terms of ICT hardware costs, broadband access, Internet education programs and skills availability.

According to the Australian Library and Information Association (ALIA) *Internet Access in Public Libraries Survey 2008*<sup>23</sup>, which polled 200 public libraries serving a total of 6,920,476 registered users, or approximately 70% of registered libraries nationwide:

- These library services provided 5144 public access Internet terminals, an increase of 41% compared to 2005 (3646 terminals).
- An estimated 147,474 users access the Internet each week using these library services an increase of 91% compared to 2005 (77,168 users).
- Of the responding libraries, 99% indicated that they provided at least one form of user education and support for their Internet services training or support, a significant increase from 85% in the 2005 survey.
- Overall, 80% of the responding library services provided Internet education programs, an increase from 74% in 2005.
- Formal Internet training was offered by 58% of libraries and 10% of libraries use external providers for formal training.
- 70% of libraries offered more than one form of assistance (e.g. email, basic computing, Internet and specialised training like online databases, writing, genealogy, wireless Internet).
- 20% of libraries offered a full range of assistance to their Internet users, including formal training, subject and search guides, and informal assistance.

# **Cybersafety**

# Cyber-Safety Plan

Initial funding was allocated to the Australian Government's **Cybersafety Plan** (\$125.8 million over four years from 2008-09), which provides a set of measures to address the range of issues and challenges faced by families when they are online. The Cybersafety Plan encompasses cybersafety

http://www.alia.org.au/advocacy/Internet.access/Internet.access.survey.2008.pdf

education, international co-operation, research, law enforcement and filtering measures. These measures include the following:

- **Cybersafety Help Button** provides Internet users, particularly children and young people, with easy online access to cybersafety information and assistance; including links to the safety pages of participating social networking and online game sites, and to the Australian Government's Cybersmart<sup>24</sup> and Stay Smart Online<sup>25</sup> websites<sup>26</sup>
- **Education programs** targeting children, parents and teachers, including the Australian Communications and Media Authority's (ACMA) **Cybersafety Outreach** programs
- Funding for the Cybersmart website and a kids online counselling service
- Establishing the **Government's Youth Advisory Group** (YAG) of 500 children aged 8 17, and the **Consultative Working Group** comprising industry, government officials and child protection groups
- Budd:e A program designed to raise the e-security awareness of Australian primary and secondary school students and help them stay smart. It was recently updated to include more comprehensive resources for teachers and extra modules for students
- **Research** ongoing research into the changing digital environment to identify issues and target future policy and funding
- Funding of \$49 million for 91 additional Australian Federal Police officers in the Child Protection Operations Team

## Cybersafety Outreach

ACMA's **Cybersafety Outreach** programs provide free presentations and workshops to improve cybersafety professional development in both metropolitan and regional areas. These provide information about the risks for children and offer appropriate cybersafety tools and strategies. The programs offered are:

- The Professional Development for Educators Program provides full-day accredited workshops and resources to teachers to help deliver cybersafety programs in schools. Topics covered include how children use technology, digital literacy, cyberbullying, identity protection and the legal responsibility of schools to minimise risk.
- Internet safety awareness presentations are provided for teachers, parents and students.
   Recognising the key role for teachers, parents and carers in the online safety of children, the outreach program includes general cybersafety awareness presentations to teachers, parents and students which highlight the key issues and strategies to minimise potential online risks.
- Connect.ed is a self-paced online cybersafety course aimed at providing primary and secondary school teachers with knowledge, confidence and resources to help them keep students safe online. Learning activities provided include issues-based simulations; experiences on social networking sites; video interviews with experts, surveys and interactive case studies.

<sup>&</sup>lt;sup>24</sup> http://www.cybersmart.gov.au/

http://www.staysmartonline.gov.au

<sup>&</sup>lt;sup>26</sup> www.dbcde.gov.au/helpbutton.

The Pre-Service Teacher Program for education students promotes the importance of
cybersafety in schools. Resources include a 50 minute resource lecture and a 90 minute
tutorial, which are provided free to all universities in Australia. The program aims to equip
pre-service teachers with the skills and knowledge to educate their future students about
cybersafety issues such as cyberbullying, sexting, safe social networking, cyber security and
identity protection

Over 242,000 teachers, students, parents and stakeholders have attended presentations or workshops through ACMA's Cybersafety Outreach Programs. In 2009, 68,305 students, parents and teachers attended a presentation. In 2010 this figure increased to 166,362.

Since 2009, the ACMA has run 309 Cybersafety Professional Development workshops with over 7,100 teachers completing this program. 91 per cent of attendees have rated the Professional Development workshop as either excellent or very good.

## **Cybersmart**

**Cybersmart** is a website that provides cybersafety information for parents and information and activities specifically designed for children. Cybersmart links to dedicated resources for teachers, enabling them to confidently instruct Australian children on all aspects of cybersafety.<sup>27</sup> The website also contains a link to an online helpline, allowing young people to chat online with a trained adult about issues they have experienced online. In addition to providing resources for kids, teens and parents, Cybersmart also provides cybersafety resources specifically tailored for use in schools and libraries.

A few examples of the resources are:

- **Cybersmart Detectives**, the interactive online safety game that teaches children how to keep safe online
- **Hector's World**, a new, multi-media resource for use by young children, now available on the Cybersmart website
- The **Let's Fight it Together** set of materials about cyberbullying.

The number of visitors to the ACMA Cybersmart website continues to grow, with over half a million visits and 5,000,000 page views since its launch in 2009. Almost two-thirds of all teachers have accessed one or more key cyber safety information sources, including the Cybersmart website.<sup>28</sup>

# Stay Smart Online

**Stay Smart Online**<sup>29</sup> is the Australian Government's cyber security website designed to help Australians understand cyber security risks and educate home and small business users on the simple steps they can take to protect their personal and financial information online.

Stay Smart Online promotes simple things that people can do to stay safe online, and provides information and solutions for the latest computer network threats and vulnerabilities. The website serves as a platform for distributing resources such as the Budd: e-security education package, the

<sup>&</sup>lt;sup>27</sup> http://www.cybersmart.gov.au/

<sup>&</sup>lt;sup>28</sup> Teacher Survey conducted in 2010. This involved over 2000 teachers in government and non-government schools in all states and territories, and at both primary and secondary school level.

<sup>&</sup>lt;sup>29</sup> http://www.staysmartonline.gov.au/

publication *Protecting Yourself Online – What Everyone Needs to Know,* factsheets, quizzes and self-assessment tools.

## National Cyber Security Awareness Week and Cybersafety Summit

**National Cyber Security Awareness Week**, which was held from 30 May to 3 June in 2011, is an Australian Government initiative held annually in partnership between all levels of government, industry, consumer and community organisations to raise awareness about cyber security and the simple steps people can take to protect themselves online.

More than 500 organisations participated to promote cyber security and cyber safety messages so that Australians are able to confidently take full advantage of the benefits offered by the Internet.

Over 45 events were held across Australia. These included:

- Release of new research by ACMA on international approaches to cyber-safety education.
- Interactive shared-learning through a *Cybersmart Hero* event and nine *Cybersmart Detective* events across Australia.
- Launching NetBasics, a new cyber security education resource for secondary school students.
- A roundtable discussion with the Australian Communications Consumer Action Network on smartphone safety.

The **Cybersafety Summit** officially opened National Cybersecurity Awareness Week and provided the government with an opportunity to consult with young people, parents and teachers on how to keep young Australians safe online. There were approximately 150 participants, including over 60 members of the Youth Advisory Group (YAG) and their parents and teachers.

More information on 2011 National Cyber Security Awareness Week events and activities are available from the Stay Smart Online website at <a href="https://www.staysmartonline.gov.au">www.staysmartonline.gov.au</a>.

## Consultative Working Group on Cybersafety (CWG)

The Australian Government's **Consultative Working Group on Cybersafety** (CWG) is an initiative of the Government's Cybersafety Plan. The CWG is comprised of representatives from industry, community organisations and Australian Government agencies.

The CWG's role is to consider all aspects of cybersafety faced by Australian children and advise the Government on measures required to operate and maintain world's best practice safeguards for Australian children online and on priorities for action by government and industry.

# Youth Advisory Group (YAG)

The YAG provides formal advice to Government on cybersafety issues including cyberbullying, mobile phone safety, privacy, socialising online, scams and fraud, and online computer games. Some 500 primary and secondary school students from 30 schools nationally have participated in YAG and been a part of providing advice to government.

Cybersafety resources have been developed and adapted in response to YAG advice, such as the Cybersafety Help Button<sup>30</sup> which was launched in December 2010. YAG advice highlighted the need

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<sup>&</sup>lt;sup>30</sup> www.dbcd<u>e.gov.au/helpbutton</u>.

for a 'one-stop-shop' for cybersafety advice and assistance. The Help Button provides Internet users, particularly children and young people, easy online access to counselling, reporting and information resources to assist in dealing with cybersafety issues. The design and functionality of the Help Button was shaped by the YAG, parents and teachers, and the Australian Government's Consultative Working Group on Cybersafety comprising of industry, non-government and government organisations.

# Alannah and Madeline Foundation National Cybersafety Pilot

In 2009-10 the Alannah and Madeline Foundation conducted a national pilot for Cybersafety in 159 Australian schools.

The Government also provided funding of \$3 million to the Alannah and Madeline Foundation for a national pilot of its **e-Smart cybersafety** initiative which, among other things, addresses cyberbullying in schools.

The pilot focussed on educating school communities about the smart and safe use of modern technologies.

The Victorian Government has announced funding of \$10.6 million for the e-Smart program to be rolled out in Victorian schools.