



Australian Research Alliance
for Children & Youth

Using Information and Communication Technology in the Workplace

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Australian Research Alliance for Children and Youth
June 2006

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**Funded by the Australian Government
Department of Families, Community
Services and Indigenous Affairs**

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ISBN: 978-1-921352-24-9

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**Australian Research Alliance
for Children & Youth**

ABOUT ARACY

The Australian Research Alliance for Children and Youth (ARACY) was founded by a group of eminent experts and organisations in reaction to increasingly worrying trends in the wellbeing of Australia's young people.

ARACY is a national organisation with members based across Australia.

ARACY asserts that by working together, rather than working in isolation, we are more likely to uncover solutions to the problems affecting children and young people.

ARACY is a broker of collaborations, a disseminator of ideas and an advocate for Australia's future generation.

ARACY has two primary goals:

1. To promote collaborative research and agenda setting for children and young people
2. To promote the application of research to policy and practice for children and young people.

This paper is one of a series commissioned by ARACY to translate knowledge into action. This series of papers aims to convert research findings into practical key messages for people working in policy and service delivery areas.

The ARACY topical papers may also be the focus of workshops or seminars, including electronic mediums.

Developed for the Facilitating Partners of the Australian Government Communities for Children initiative, this paper is now being made available to a wider audience via the ARACY website: www.aracy.org.au

INTRODUCTION

The use of information and communication technologies (ICTs) in the workplace, educational institutions, and the home has grown appreciably in recent years. Modern ICT products are now readily available to most people. They range from Ipods, mobile phones, personal organisers and digital TVs through to satellite communication technology, personal computers and the world wide web.

As information and communication technology has become more sophisticated it has also become more economical and accessible. The specialised skills required to use technology are no longer confined to computing experts. Off-the-shelf products provide non-experts with the opportunity to take advantage of ICTs to create new knowledge and information networks [1]. The way we communicate and seek knowledge has been transformed. People are instantly accessible through common forms of communication such as mobile phones and e-mail. The world wide web enables public access to vast amounts of information and the transfer of knowledge to an extent and a rate previously not envisaged.

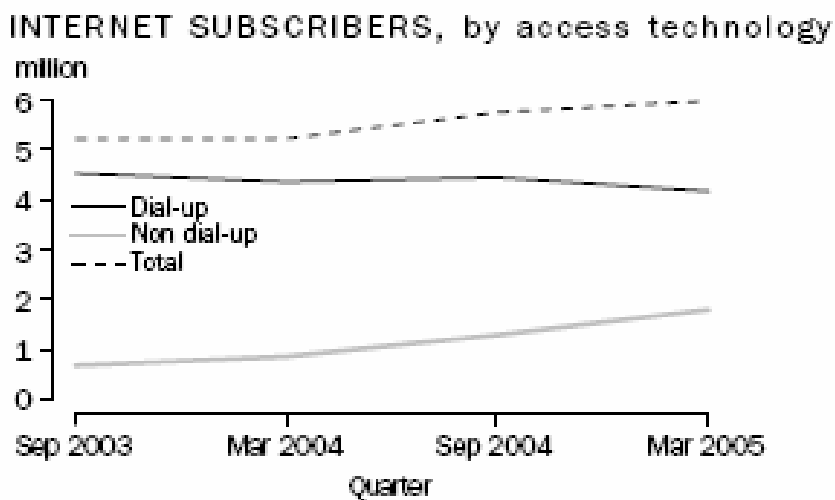
For community service professionals this new technology can facilitate maximum information retrieval and exchange as well as dissemination of information through electronic publishing. It enables individuals to communicate instantly with other people throughout the world from their home or office base [2]. Wireless connection in cafes and other locations has also increased our opportunities to communicate via a laptop.



Profile of Australian ICT use

Australia as a country has relatively high access to internet and associated technology [6]. However, there are gaps between communities and within populations groups in the capacity to access and use ICTs. It is now commonly believed that groups that do not have the opportunity to participate in the services provided by new information and communication technology will be increasingly disadvantaged both socially and economically [3,4]. The term digital divide has been coined to describe the social implications of unequal access to information and communications technologies and to the acquisition of the skills necessary for full inclusion [5].

At the end of March 2005, total Internet subscribers in Australia numbered 5.98 million [6].



Source: ABS (March 2005) Internet Activity Survey, Half Year Ending March 2005

According to Nielsen-netratings there were an estimated 14,189,557 users of the internet in Australia as of January 2006. This represents approximately 68.4% penetration. This makes Australians one of the highest ranking nations as users of the Internet [7].

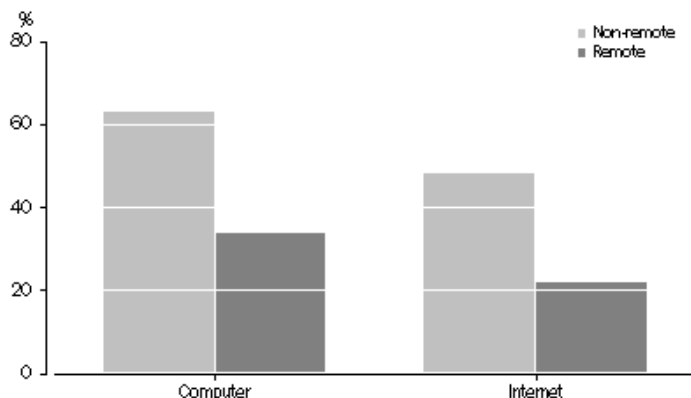


ABS research indicates there are range of variables that influence access and usage of the computers and the internet. Key variables include:

- usage decreases with age
- higher levels of education and schooling promote greater usage
- unemployment increases usage if looking for work
- probability of usage increases with socioeconomic status
- dependents increase likelihood of computer ownership and usage
- state by state differences, for example NSW has the lowest per population usage and ACT the highest
- speaking English increases usage [8]
- remote living decreases the likelihood of computer ownership and usage
- Indigenous populations - have a significantly lower access and usage of computers and the internet than the national population.

In 2002, 56% of Indigenous people aged-15-years or over used a computer and 41% used the Internet in the previous 12 months. Indigenous people in non-remote areas (63%) were almost twice as likely to have used a computer than those in remote areas (34%). Similarly non-remote Internet use (48%) is just over twice remote Internet use (22%) for the same period.

Use of computers or the internet by indigenous persons, by remoteness – 2003



**Source: ABS (2004) Australian Online
How Australians are Using Computers
an the internet**



The Importance and Impact of Information and Communication Technology in the Work Place

Access to the Internet and other ICTs has the potential to deliver economic, educational and social benefits to individuals, organisations and communities. The proliferation of ICTs has led to what is referred to as the 'knowledge society'. ICTs have made it possible to have fast access to, and distribution of, information. They allow new ways of doing work in real time more efficiently and effectively.

For community organisations, ICTs are seen as a means to contribute to organisational efficiency and effectiveness, in addition to contributing to social capital and community building. Modern community organisations are characterised by virtual relationships and distributed professional communities.

While the focus of this paper is on the role of ICTs within the internal work place, it is also important to note that there is a growing analysis of the use and role of ICTs in community development work (external work). This relatively new field is called Community Informatics and stems from the premise that - as access to technology increases the focus needs to shift to find out how ICTs are used in the community, and consideration should be given to the effective use of ICTs in this context [10]. Otis & Johanson (2004) paper on this subject provides excellent background reading.

Concerns have been raised about internet relationships being less authentic and meaningful than face-to-face relationships. Early evidence is pointing to the opposite. Cyber relationships continue in physical space, form new communities and are characterised by a mixture of online and off-line interactions. Internet users tend to spend more time in face to face connections than do non users [10].

There are significant advantages for community organisations to adapt their business and culture to embrace the benefits of ICTs. It has the potential to enhance both their internal and external business.



More than Just Access to Technology

Access to the technology in Australia is relatively high and rapidly increasing [6,7,8]. There is now some suggestion that the focus needs to shift towards 'soft technology'. This refers to user focused technology including: consultation, training, mutual support, and network building [10].

Importantly for community organisations, access to technology and becoming computer literate does not imply information literacy. The creation of information and use of electronic information services increases the need for information skills training. Information literacy gives individuals the capability to recognise a need for information and access, evaluate and use that information efficiently and effectively [11].

Using ICTs to Communicate and Share Knowledge with CfC Sites

ARACY has relied heavily on the introduction of modern ICTs to provide timely and affordable support to assist capacity building and evidence base programming for the 45 CfC sites. A range of ICT strategies have been used. In addition, more standard ICTs such as emails, telephones and teleconferences. ARACY has also introduced access grid meetings, Webinars and Internet discussion forums.

ARACY recognises ICT's are not a substitute for face-to-face communications and continues to maintain communication and knowledge exchange between the less frequent (and often more costly) face-to-face Regional Workshops and the National Conference.

Webinars: ARACY has used Webinars to link the 45 CfC sites throughout Australia. Web conferencing technology can be accessed visually from a personal computer while dialogue can be heard via the telephone. Like teleconferencing, Webinars enable CfC staff to attend a conference from their desk. The advantage of the Webinar is the ability to share presentations, documents and other material on the users PC screen during the meeting without the need for special software. ARACY



has demonstrated a technology with immeasurable value for use in other contexts and some CFC Facilitating partners are already applying this to other aspects of their work.

Discussion Forums: ARACY offers a closed discussion forum to the CfC community. The discussion forum is used to share information, network and build communities for people who wish to discuss a wide range of topics. The discussion forum users can communicate simultaneously by posting their stories and ideas on the forum and holding question and answer sessions online.

Access Grid Workshops: Access Grids are a broader ARACY initiative available to CfC staff and ARACY members. These live presentations are the ultimate in video conferencing. Hosted at Access Grid nodes (sites) throughout Australia, the presenters and audience can view each other by joining the Access Grid. Their image is projected onto a large multi-media screen. Although workers usually have to leave their office to attend they can link up with an Access Grids in their local area, saving valuable resources and time spent travelling. In the future, investment in Access Grid technology for the office will be available. ARACY uses Access Grids for large scale meetings, collaborative sessions, seminars and training.

ARACY has also placed significant focus on the provision of training and support to access these new technologies. The introductory Webinar associated with this paper was a practically based session providing training on how to use the technology. Training on how to log on and use the discussion forum has also been provided through a Webinar and instructions are also provided for both the Webinar and the discussion forum on ARACY's website. With staff turn over at some sites ARACY recognises the need for CfC sites to have access to ongoing training. The ARACY Webmaster provides ongoing support on an individual basis in addition to the web based instructions.

ARACY will continue to use and develop ICT initiatives in the support and interactions with the CfC personnel. The aim is to make the process of information sharing simple, beneficial and cost effective.



KEY POINTS FOR PRACTICE

The access to and capacity to use information and communication technology has become important for individuals, organisations and communities in Australia and world wide.

Research now indicates that people and organisations with limited access to the newer technologies such as the world wide web are at risk both socially and economically.

For community service organisations and professionals ICTs potentially provide access to knowledge and communication. The modern organisation is characterised by asynchronic and virtual relationships.

The capacity to benefit from this new technology not only involves having access to the technology but also having the skills and capacity to effectively use the technology. Training and support is an important aspect when investing in modern IC



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