# It takes a Community to Bridge a Divide: Working Towards Digital and Social Inclusion with Community Technology Learning Centres

Muir K & Boot R\*

## The Smith Family, Australia

#### **Abstract**

Digital inclusion programs are a proven approach to helping disadvantaged Australians overcome the 'digital divide' and to build social capital. The digital divide is often viewed in terms of physical access to Information and Communications Technology (ICT), but digital inclusion goes beyond access. A person not only needs access, but also must possess the motivation and basic ICT skills in order to fully participate in the economic, social, political and cultural spheres of society.

The Smith Family's initiatives in the area of digital inclusion highlight the value of a lead facilitator to drive a community-centred approach that focuses on networks and partnerships to deliver sustainable social change. Digital inclusion programs are based on a community capacity building approach that provides more meaningful, sustainable and far-reaching outcomes.

This paper provides a case study on The Smith Family's involvement in Microsoft's global Unlimited Potential (UP) program. UP in Australia is working with over 150 community technology learning centres (CTLCs) to connect individuals and communities, and to improve lifelong learning opportunities for disadvantaged people. As lead partner, The Smith Family works with and through partners both in the local community and across the country towards the delivery of integrated local programs. Program activities include community consultations and networking, assets-based reviews, customised non-formal training programs, access to low-cost PCs, train-the-trainer initiatives and other funding and support resources for CTLCs. It is a proactive and preventative approach to overcoming disadvantage by identifying and leveraging existing resources.

#### Section I: Background

The importance of technological literacy became evident in the 1990s when the educational, economic and social benefits of access to and usage of Information and Communication Technologies (ICT) were realised. With this realisation came the understanding that certain groups in society were missing out on developing these literacy skills. The phrase 'digital divide' was coined to describe this problem and governments and non-profits around the world moved to bridge the gap. While 'digital divide' as a term has begun to lose relevance, the advantageous nature of ICT literacy has increased.

In 1999 The Smith Family (TSF) began working to ensure disadvantaged families were ready, willing and able to be digitally engaged by establishing Computer Clubs in two locations. Five years later, TSF became the lead partner in Microsoft Australia's Unlimited Potential (UP) initiative. This paper presents an overview of the first phase of evaluation outcomes from UP's Community Technology Learning Centres (CTLCs).

Access to and meaningful usage of computers and related technology has the potential to bring about educational, economic and social benefits (Chow et al. 2000, Harouna et al. 2001, p. 7, Asgeirsdottir 2002). Yet not all Australians have access or can meaningfully use computers and the internet (Zappala and McLaren 2003, p. 13, International Telecommunication Union 2003). While the term 'digital divide' was coined, and is still popularly used to explain this occurrence, digital inclusion encompasses far more than 'access' to the hardware and software of technology (Ferlander 2003). There is not a simplistic two way spilt between the 'haves' and 'have-nots' as digital inclusion occurs on a number of levels (Cisler in Warschauer).

Of course access remains important, but access is redundant if people lack the skills or the interest to use computers and the Internet. The provision of training, while also essential, does not guarantee that the digitally excluded will be motivated to attend. The Access, Basic Training and Content, or ABCs, of the digital divide have therefore been extended to incorporate the idea that technology is also a means to 'social inclusion'. As the United Kingdom Cabinet office recognised in 2004:

"Digital inclusion is not about computers, the internet or even technology. It is about using technology as a channel to improve skills, to enhance quality of life, to drive education, and to promote economic well-being across all elements of society. Digital inclusion is really about *social* inclusion, and because of this, the potential for technology to radically improve society and the way we live our lives should not be underestimated" (Cabinet Office 2004).

Muir (2004) argued that the ABC acronym should be reassigned to Access, Basic Training and Community Connections. The challenge is to engage those not using technology to be digitally inclusive by recognising the financial, educational and motivational barriers individuals face that prevent them from accessing and fully using technology in order to assist them to overcome these impediments. The new 'C' recognises the importance of motivation as one of the primary barriers and helps to shift the focus away from technology towards people and the community.

## **Barriers to digital inclusion**

While the price of technology has come down considerably over the past decade, financial issues still present barriers for low socio-economic status families when considering purchasing

<sup>&</sup>lt;sup>1</sup> TSF's work in this area has been informed by five separate research reports and two prior program evaluations. The most significant research reports are Zappala 2003 and Muir 2004.

computers and access to the Internet. *Barriers to Participation* revealed that sole parents only spent an average of \$2.90 per week on computers and the Internet, compared to the \$6.70 spent by couples with children (Zappala 2003, p. 34). In 2000 the Australian Bureau of Statistics (ABS) found households on incomes of over \$50,000 were twice as likely to have Internet access than those earning less than \$50,000 (Zappala 2003, p. 67).

Education also remains a barrier for some individuals. A recent study by the National Centre for Social and Economic Modelling (NATSEM 2004, pp. 90, 97) found 70 per cent of Australians with tertiary qualifications used a computer at home and 75 per cent used the Internet, compared to 27 and 32.1 per cent respectively of those who had completed up to Year 10 at school (Lloyd and Bill 2004, pp. 90, 97).

The third barrier, which ties in with education and learning, is motivation. The OECD found the most common barrier to learning is not financial or time limitations, rather it is motivation. Some people fail to understand the benefits of learning (Directorate for Education, Employment, Labour and Social Affairs 2001, p. 18). So even if we remove the other barriers, certain people will still lack the 'drive' to learn to use technology (Selwyn et al. 2003, p. 179).

When we assess who these non-learners predominantly are — the early school leavers, the unskilled workers and the unemployed — we find that they are also the groups least likely to use computers and related technology (OECD 2003, p. 4). Thus the solution to engaging these individuals must go beyond just providing access and training and should include community connections.

#### Overcoming the barriers with CTLCs

CTLCs may provide part of the solution to digital inclusion because they can address all three of the above barriers: they can provide free or cheap access to computers and the Internet; a non-threatening local environment where individuals can go to learn about computers; and a local informal setting that may engage those with low education levels and those previously disinterested in learning about technology (Muir 2004).

These centres have been found to not only engage disengaged learners and change attitudes towards learning, but also connect people and communities. This connectedness is a result of providing a public meeting place where locals can interact and access the Internet to communicate with others outside of their area and become part of 'communities of interest'. Participants of CTLCs have been found to increase their interaction with previous strangers, have a greater awareness of local activities, opportunities and resources available to them, engage in community issues and improve their community identity (for a further discussion of the literature see Muir 2004). While the literature demonstrates that CTLCs can produce positive

social outcomes, just placing a centre in a community does not guarantee success. Positive outcomes are contingent on a number of conditions.

Drawing on research and practitioner, educator and other commentators' experiences, Muir (2004) highlighted six key 'success factors' for CTLCs.<sup>2</sup> The six factors are:

- 1. having partnerships
- 2. being engaged with the community
- 3. providing a positive learning environment
- 4. having well trained, multi-skilled staff & volunteers who are engaged with the community
- 5. providing an appropriate physical location and an internal environment that encourages social interaction
- conducting evaluations.

# Section II: The response — The Smith Family and Microsoft Unlimited Potential

## The Smith Family

The Smith Family is a national, independent, social enterprise that supports disadvantaged children and their families to create a better future through education. Our vision is of "A more caring, cohesive Australian community". Our mission is that "Together with caring Australians, The Smith Family will unlock opportunities for disadvantaged families to participate more fully in society."

The Smith Family works to achieve its mission in two ways: by increasing the participation of those that have been marginalised and the engagement of those individuals and organisations that have capacity to share (time, talent or money). The Smith Family has adopted a preventive approach to addressing disadvantage that is based on education and lifelong learning. The organisation has a particular focus on increasing the reading, technological and financial literacy capacity of children and their families.

#### Microsoft Unlimited Potential

Microsoft *Unlimited Potential* (UP) is a global initiative that aims to help people overcome the 'digital divide' within their communities regardless of their circumstances. Microsoft Australia has committed more than AU\$40 million over five years in software, cash, curriculum and training support to reach disadvantaged Australians.<sup>3</sup> UP is a multi-faceted program including the following components:

- UP Software Donation Program free software for community organisations
- Resources to support Community Technology Learning Centres (CTLCs)

<sup>&</sup>lt;sup>2</sup> For a far more comprehensive list of best practice criteria, see CTCNet's 'Standards of Excellence for Computer Technology Centres', Version 4 Rev. 10/02. This includes three levels – best practices, preferred practices and minimum standards.

<sup>&</sup>lt;sup>3</sup> For further information see <a href="http://www.microsoft.com/australia/up">http://www.microsoft.com/australia/up>

- Microsoft Authorised Refurbisher free software for hardware refurbishing
- Disaster Relief Grants.4

## The partnership

Microsoft Australia began donating software to TSF in 1998. In 1999, the two organisations came together to begin working on bridging the 'digital divide'. Two Computer Clubs were established in suburban Melbourne to teach ICT skills to financially disadvantaged children. In November 2002, the partnership grew to include RMIT University and nine local community organisations. The reach was extended across Victoria and the target groups expanded to include regional citizens of all ages.

In June 2004, the Microsoft Unlimited Potential (UP) program was launched in Australia, with TSF as the lead community partner. At the time of writing this report, the TSF-Microsoft partnership is still growing rapidly and includes 44 community organisations across Australia delivering ICT skills training in 75 TSF-affiliated CTLCs. The target groups now include low socio-economic families, seniors, youth at risk, culturally and linguistically diverse individuals, those with a disability, people living in rural and remote areas, and Indigenous Australians.

UP in Australia is designed and built on the collective experience, skills and networks of Microsoft, TSF, RMIT University<sup>5</sup> and the other UP Foundation Partners — WorkVentures, Inspire Foundation, Australian Seniors Computer Clubs Association (ASCCA) and Yarnteen Aboriginal & Torres Strait Islander Corporation. Across all the Foundation Partners, there are currently more than 150 UP CTLCs located in every Australian state and territory. The overall program aim for the partnership is to improve lifelong learning for disadvantaged people by providing technology-related skills through CTLCs.

#### The UP project

The objective of UP in Australia is to support CTLCs and networks of CTLCs to enhance their impact in the community and their long-term sustainability of operations. UP does this by:

- providing direct resources to support CTLCs such as curriculum for formal and nonformal training programs, funding for elements of CTLC operations, and Microsoft software
- running Train-the-Trainer courses for volunteers and other CTLC staff
- facilitating information sharing forums on topics such as volunteer management, community engagement, and social impact evaluation tools
- facilitating the matching of Microsoft staff volunteers to provide services for local community organisations

<sup>&</sup>lt;sup>4</sup> This aspect is not discussed in this paper.

<sup>&</sup>lt;sup>5</sup> RMIT University is the Academic Partner for Unlimited Potential in Australia.

- assisting CTLCs in community engagement and in attracting disadvantaged individuals
  in the community to attend centres, particularly through the 117 Education Support Workers
  employed by The Smith Family in their flagship Learning for Life program
- **linking other relevant local, state and national initiatives**, such as PC refurbishing through the Microsoft Authorised Refurbisher program, migrant settlement services, and local iterations of Job creation and employment programs
- conducting research and ongoing evaluation of the effectiveness of the UP network and the social impact of UP CTLCs
- consulting and conversing with government and others to champion digital inclusion issues
- responding to the evolving needs of CTLCs as agreed with UP stakeholders.

# **UP training programs**

The funding provided to CTLCs is targeted in key areas and not intended as comprehensive funding for CTLC operations. The funding focuses on volunteer management and is directly linked to the delivery of training programs and outcomes. All of the training offered uses non-formal approaches and is based on the 'Fields of Fascination' concept (described further in a following section) as a means of re-engaging individuals in lifelong learning. There are two types of training programs funded:

- ICT Fundamentals is designed to cater for those people who have no prior meaningful experience with computers. It provides an introduction to computers and aims to equip participants with basic ICT literacy skills such as how to turn a computer on, use a mouse and keyboard, search the Internet, send an e-mail, and fill out an online form. The training is a minimum of five hours and is normally run with five to ten people.
- Computer Clubs/'whereveruni' is designed for those with little or no ICT literacy skills and who can commit to an eight week program. Computer clubs usually run for two hours every week (minimum 16 contact hours per student), with a minimum of five participants. 'Computer Club' is the generic term used within UP. 'whereveruni' is a trademark of RMIT University and is the equivalent of Computer Clubs. The broader RMIT University innovation program also incorporates accredited professional development for volunteer trainers.

#### **Evidence-based**

The methodology used to develop the project is based upon evidence-based principles and action research, as reflected in this paper. For example, the six success factors for CTLCs

<sup>&</sup>lt;sup>6</sup> 'whereveruni' original name and concept created by Jim Downing and expanded by the RMIT Learning Network team. 'whereveruni' is targeted at adults who are marginalised from learning and social participation and aims to excite these people to realise the possibilities that lay within them through an educational experience that is facilitated by technology.

<sup>&</sup>lt;sup>7</sup> RMIT University's involvement is funded by the Victorian Department of Education OTTE Innovation Program.

outlined by Muir (2004) are utilised firstly as part of the selection criteria for new UP CTLC partners, and secondly, to help inform the type of support provided.

The challenge is to develop a workable and sustainable model to address a complex problem that has no simple solution. The model has evolved over time and will continue to evolve as we work towards having a greater impact.

The UP program is an example of working 'with and through' others to leverage off existing resources and capacity. It focuses on working at a community level 'with' communities, rather than 'for' or 'to' them. We also document and learn from our experiences. The following section discusses some of TSF and RMIT University's key learnings from conceptualising and actualising digital inclusion programs.

## Section III: Five key learnings

# 1. Individuals can re-engage in lifelong learning through their 'Fields of Fascination'

As noted above, the OECD found the most common barrier to learning is motivation and understanding the benefits of learning. A key feature of UP in Australia is a focus on non-formal learning as a means to re-engaging disadvantaged Australians in lifelong learning. Many participants in UP have had negative experiences in formal education and do not see themselves as learners.

Through the approach developed in partnership with RMIT University, participants are encouraged to re-engage in lifelong learning by focussing on topics of interest, or their fields of fascination'. These can cover any area, from gardening to cooking to V8 supercars. Participants learn ICT literacy skills as they explore their interests. These skills are largely incidental to the overriding aim of helping people believe they can learn (again) and see themselves as learners.

# Case study: 'Fields of Fascination'

Not long ago a young woman — we'll call her Wendy — brought her children into one of our UP centres. She was a single mum, probably in her early thirties who had very little interest in, or perceived need for, computers and the internet and wasted no time indicating this to the trainer. Sensing a challenge, the volunteer trainer — Ross — decided to take a different tact. "What is the best thing that could happen to you?" he asked her. "Win lotto" was her reply. "What would you do with the money?" "I would take my children to Disney Land and buy a new car." Wendy said. "Well, let's imagine you have won lotto. Who would you tell?" Ross said. "I'd tell my friend Jen." "Then let's write a letter to Jen," Ross continued enthusiastically.

It just so happens that part of Wendy's reluctance to use a computer was her embarrassment over her poor spelling and so she was delighted when the little red squiggly lines appeared under her misspelt words guiding her to type them correctly.

At the same time a man came into the centre. He didn't think that learning to use a computer could be fun until Ross showed him how to surf the web and found a page on the Internet that compared the fuel consumption of Holden and Ford V8s. The man was enthralled and couldn't believe the internet could be used to source such information.

A third and older woman in the UP centre, was very interested in 'Blue stone' buildings and castles. Again, Ross was able to help her use the internet to find a wealth of information on blue stone castles in the UK.

But here comes the most important part of this story. It wasn't long before the man started talking to the young single mum about which car she should buy for her kids and the older lady convinced the single mum to visit a castle or two on her way to Disney Land.

This is the real strength of the UP initiative. The ability to use technology as a way of connecting people to create a strengthened sense of neighbourhood and in turn build stronger, more connected communities.

#### 2. Partnerships and community engagement are vital for CTLC sustainability

A key to sustainability is through developing meaningful partnerships. Community organisations, businesses and individuals possess numerous skills, resources and networks, which can be drawn upon to assist CTLCs to achieve their desired educational and social outcomes (CTCNet 2002, Russell 1999, pp. 28-31). Organisations working in isolation are unlikely to be sustainable and/or successful.

The sustainability of a centre is highly dependant upon funding it can attract or revenue it can raise. After many years some centres and learning networks have ceased operating or are currently vulnerable to closure partly because of a dependence on a single source of centralised funding, usually from government (Crow 2003, p. 30). Since 1997 the federal government has injected large amounts of funding into CTLCs under the Networking the Nation initiative. The 2003–2004 budget, for example, included \$27.9 million. Yet from 1 July 2004 funding stopped. Thus the issue of sustainability is now paramount in the mind of those who have survived, especially because most centres have remained reliant on government funding (DCITA 2003, p. 2).

Despite funding cuts, a significant number of CTLCs continue to operate, many of which are connected to networks. The stronger CTLCs often have links to entrepreneurial leadership or leadership that is well integrated into their community. The remaining centres and networks are survivors; they have their own aspirations and plans for program development. UP recognises the importance of complementing these aspirations and utilising their existing management and volunteer structures.

"Taree Community College has valued the opportunity to be involved with the Microsoft Unlimited Potential program in partnership with The Smith Family. The community as a whole has benefited from the sharing of skills and knowledge, especially through the digital storytelling computer club. In this forum, indigenous youth are working with mentors from the community to record traditional stories using modern technology. What a wonderful way to help build greater understanding and tolerance in our community" (Debra Nicholson, Manager, Taree Community College).

The UP program is also actively working to assist CTLCs to attract appropriate individuals in the community to attend centres. One strategy uses TSF's 117 Education Support Workers from its flagship Learning for Life program.

## 3. Local success revolves around 'local champions'

As part of managing and coordinating the growth of UP in Australia, TSF identifies communities across Australia are likely to benefit most from digital inclusion programs. This depends in part on community needs, but also on the communities' capacity to use and build on the resources provided by UP. Sufficient infrastructure must be in place for UP to be effective in a community. The required level of physical infrastructure is relatively simple to define and procure. However, the required level of social infrastructure is more nebulous.

When recruiting CTLC partners for UP, the single most important factor TSF considers is the strength, capacity and quantity of 'local champions' or proactive leaders who are well connected and engaged in the community. Such 'champions' come from various backgrounds and cannot be easily defined, except perhaps for displaying a proven track record for making a difference in the community through worthwhile initiatives.

#### 4. Training programs must be flexible to meet local needs

UP in Australia is a national program delivered locally by selected community partners who are already actively engaged in their communities. The community partners are empowered with the flexibility to deliver the program depending on their local conditions. UP recognises that local community organisations are best placed to assess local needs and demands.

The differing types of CTLCs delivering UP in Australia include community centres, libraries, community colleges, primary and high schools, learning centres, and youth centres. Many of these centres are used to a top-down approach where they are instructed as to what courses will be offered, the manner in which they will be delivered and what outcomes should be attained. While UP has a formal curriculum, which is utilised as an effective resource, it is very flexible in its approach. Although a few centres found this flexibility challenging initially, it is now overwhelmingly perceived as a major asset of the UP model.

"I have learnt so much in such a short time, and I am learning at my own pace, which is much easier" (Elsie, on her way to Certificate II in Information Technology through whereveruni).

#### 5. Volunteers are invaluable but not 'free'

Volunteers are a valuable resource and have been heavily utilised by CTLCs in Australia and around the world. In 2001 alone, over 1000 volunteers spent more than 80,000 hours assisting CTLCs (Norris 2002, pp. 364-80). While much has been written about the advantages of using volunteers,<sup>8</sup> there are also challenges and our experience to date confirms much of the wider literature.

Although an invaluable resource volunteers require time consuming management, ongoing support, training, precise information, clearly defined policies and their skills and interests need to be matched to available roles. Managing volunteers is not the same as managing staff, but volunteer management still consumes significant resources (Tacticos 2004).

The UP funding provided to CTLC partners to deliver Computer Clubs is intended to help cover the costs of volunteer recruitment and management. However, we must recognise that not all centres can realistically attract and retain good volunteers and occasionally paid resources are necessary.

The TSF affiliated UP centres are not required to provide certified/qualified trainers. The level of ICT knowledge required is relatively low. As many of the participants experience learning difficulties and/or have had negative experiences with formal learning, the important characteristic for trainers is that they can empathise with the participants and engage them.

# Section IV: The evaluation (Phase I)

The data used for this first phase of evaluation is from eleven of the more established CTLCs. Successive program evaluations will also include data from CTLCs that joined UP more recently. The evaluation captured data on 98 adults participating in regular computer classes (these adults were split across thirteen groups) and 145 school students participating in youth specific computer clubs. While the training and student outcomes are detailed briefly in Parts A and B, this paper primarily focuses on adults who attended UP CTLCs regularly over approximately a three-month period.

## Part A: Evaluation of adults regularly attending CTLCs

The evaluation used surveys, which explored the demographic details of attendees, their previous computer experience, the types of computer use, and the affect UP centres had on the attendee's lives and that of their communities.

The pre-program evaluation of the regular adult attendees, which aimed to establish baseline data, was completed by 128 adults (71 filled out the forms online and 57 completed them in hard copy). Ninety-eight individuals completed the post-program surveys at the end of their course. While the same centres distributed both surveys, not all of the individuals who submitted a post-program survey had completed a registration one. Thus the baseline data and the post-program data cannot be directly correlated. While this is unfortunate, the pre and post program surveys can be used independently to reveal who attended the centres and to demonstrate the influence these centres have had on some people's lives.

# **Demographics**

Many of those who attended the centres were older female pensioners from couple families, with a significant proportion from culturally and linguistically diverse backgrounds. Almost two-thirds of those who completed the pre- and post-program surveys were female. 63.4 per cent of those who disclosed their age were over 55 years and over one-quarter of participants were aged between 65-74 years.

The centres were successful at attracting individuals from culturally and linguistically diverse (CALD) backgrounds. As Table 1 illustrates, just over half of the attendees were born in Australia and over 40 per cent of attendees spoke a language other than English at home. These figures are high when compared to the Australian population (ABS 2001).

Table 1. Birthplace and language spoken at home

	UP Adults (%)	All Australians
		(%) (ABS 2001)
Born in Australia	53.9	73.6
Language other than English	40.6	20.0
spoken at Home		

While CALD individuals were well represented at the centres, only 1.6 per cent of the participants identified as Indigenous Australians.<sup>10</sup> Thus this group were underrepresented when compared to the population (in the last census 2.2 per cent were Indigenous Australians

\_

See, for example the Volunteering Australia website <a href="http://www.volunteeringaustralia.org">http://www.volunteeringaustralia.org</a>.
 The participants were not given unique identifiers because centres did not want participants' survey results to be identifiable to the training staff and it was these staff members who.

because of resource constraints, facilitated the survey completion. Since the first phase of the evaluation, the surveys have been amended to include the participant's date of birth. This, coupled with centre location and gender should provide an adequate identifier to correlate preand post-program surveys in future evaluations.

<sup>&</sup>lt;sup>10</sup> We expect that the percentage of Indigenous students will be much higher in subsequent program evaluations. A number of CTLC partners who have recently joined UP focus particularly on Indigenous Australians.

ABS 2001). Those with a disability were also slightly underrepresented. While 20 per cent of Australians have a disability, only 15.9 per cent of attendees identified similarly (ABS 2003)<sup>11</sup>.

Given the age bracket of participants, it is not surprising that only 22.9 per cent of attendees were in families with dependent children. However, what was unexpected was the small number of sole parents. While there were twenty parents with dependant children from couple families attending, only two were headed by sole parents (therefore comprising less than 10 per cent of these families). As one parent families make up 15.5 per cent of all Australian families (ABS 2001), the centres are not attracting a representative proportion of younger sole parents. This may be attributed to the time demands on sole parents, but centres should look at barriers, such as childcare, this group may be facing which prevents them from taking up opportunities like computer training.

The demographic details of the attendees reveal that the UP centres were successful at attracting the disadvantaged. Not only were the majority of participants financially disadvantaged — 80.2 per cent held a pension, health or concession card, compared to only 33 per cent of the Australian population many were also predominantly excluded from other mainstream areas of participation.

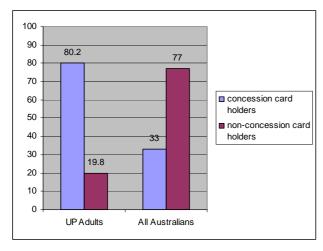


Figure 1. Concession card holders (percentage)

Of those who completed the registration survey (n=128), more than one in ten (11.7 per cent) were unemployed and not seeking work. Over sixty per cent of those engaged in the labour force, were unemployed and looking for work (compared to 5.3 per cent of the population in

<sup>11</sup> Similarly to the Indigenous percentage, we expect that the percentage of participants with a disability to be significantly higher in subsequent program evaluations.

12

<sup>&</sup>lt;sup>12</sup> More than half of the respondents were in couple family situations and the majority of these families had non-dependent children. In the latest census 47.0 per cent of all families were couple families with children (ABS 2001).

<sup>&</sup>lt;sup>13</sup> Only 53.5 per cent of pension, health care and concession card holders were retired.

<sup>&</sup>lt;sup>14</sup> Based on ABS 2002 data and it includes Pensioner Concession Card, Health Care Card and Commonwealth Seniors' Health Card holders (ABS 2002).

September 2004; ABS 2005b), 23.1 per cent were employed on a part-time or casual basis and only 6 per cent were working full-time.<sup>15</sup>

Fifty-one per cent of those who completed the post-program survey (n=98) were not employed and only 56 per cent of this group were looking for work. Of the 30.6 per cent who were employed, the majority (60 per cent of this group) were employed casually and a further 23.3 per cent were working part-time.

The labour force status of the adults attending the centres could not always be accounted for by other traditional forms of participation — caring, volunteering or study. Even after excluding those with a disability who were not seeking work and the retired, one in five of the first group and one in four of the second, were not acting in any of these roles.<sup>16</sup>

Therefore not only were many of the UP Centres' attendees financially disadvantaged, there were also a significant proportion who were disconnected from the potential opportunities and social networks that work, study, caring or volunteering can offer. The fact that these individuals attended a CTLC is testament to the important role community centres can play in actively reengaging individuals in society.

#### Attracting individuals to UP

People became aware of the UP centres from three main sources — advertisements, agencies (such as Centrelink, TSF and other non-government organisations) and friends or relatives. While most of the group were fairly mobile (58.6 per cent came in a car), 21 people (16.4 per cent) demonstrated a strong commitment by travelling for 45 minutes or more to attend. Reasons for attendance varied, but access to computers (83.6 per cent), learning to use computers (78.9 per cent), finding information (75.8 per cent) and access to the internet (71.9 per cent) were deemed most important. Over two-thirds (67.2 per cent) also reported coming to the centre to increase their self-confidence. Surprisingly, despite the large proportion of pension card holders, the cheap/free nature of the course was only considered an important motivational factor by 57.8 per cent. Finding information about study/job options were also seen to be of lesser importance (42.2 per cent felt this was one reason why they attended). This is a telling finding because it shows the appropriateness of the centres' 'fields of fascination' approach. Individuals learn ICT skills through their areas of interest, rather than being involved in very structured computer training or directed to certain sites.

\_

<sup>&</sup>lt;sup>15</sup> Half of the participants were retired. Over one in four respondents (28 per cent) had only reached Year 9 or less. A further 10.3 per cent had completed Year 10. A quarter has completed further education — either an apprenticeship, traineeship, university degree or TAFE course. The remainder reached Year 11 or Year 12. While 43 per cent had completed a community education course in the past, over half of this group were retired.

<sup>&</sup>lt;sup>16</sup> In the post-program survey 21.4 per cent of all post-program participants were caring in a full-time or part-time capacity, 18.4 per cent were volunteering and 14.3 per cent were studying.

#### Computer and Internet use

Computer and internet usage was explored in the evaluation. Three out of four participants had used a computer in the past year. Just over half (55 per cent) had a computer at home. <sup>17</sup> The second most common place individuals accessed computers was at a community centre (38.3 per cent) and the library (17.3 per cent). A small number had used computers at work, a friend or relative's home, or at a school or education facility.

While three-quarters of individuals had used computers in the past year, an individual's access to a computer is not indicative of how meaningful the computer usage actually is. Neither the capacity of the computers nor the software being used was explored in this evaluation. What it did reveal, however, was that less than half of the participants could find information on the internet or send and receive emails (46.1 and 46.9 per cent respectively). Participants' presence at the centre and their reasons for attending (given above) also indicate that the level of ICT literacy was not high among the group.

#### **Outcomes**

The post-program data revealed some remarkable outcomes for some individuals and overall the evaluation reinforced the wider literature. Centres provided a place where people could not only learn ICT skills, but also a place where lifelong learning could be facilitated and community connections fostered.

# ICT skills and lifelong learning

For many individuals participation at the centre helped to increase their ICT skills. People were learning because at the end of the course 99 per cent stated they continued to come to the centre to learn to use computers, 90.8 per cent agreed they could use the internet to find information and 89.8 per cent could send and receive emails.

Confidence levels were also high. Over three-quarters (76.5 per cent) of respondents felt confident or very confident using computers and related technology at the end of the program. The 14.3 per cent who were undecided about their confidence levels and 9.2 per cent who did not feel confident may have felt overwhelmed by the increase in knowledge about how to use a computer and various software programs. Despite this lack of confidence or indecision, these centres were conducive to learning for most individuals. The majority (89.8 per cent) wanted to continue learning more about computers and related technology.

The centres may have not only influenced individuals' desire to learn more about computers, but also reengaged some people in education or encouraged them to participate in broader learning. Learning about information of interest played an important role in motivating the

14

<sup>&</sup>lt;sup>17</sup> 64.3 per cent of these individuals used it two or more times a week.

<sup>&</sup>lt;sup>18</sup> This has been added to more recent surveys.

majority of people to attend the centre — 94.9 per cent of people came to the centre to find information. Not only did 96.9 per cent of individuals 'enjoy learning' at the centre they attended, 85.7 per cent agreed that the centre had made them 'more interested in learning other things in future' and 83.7 per cent indicated that they were interested in participating in other community education courses.

A number of participants felt that the centres were of great benefit to the community because they provided a friendly, fun and affordable learning environment. Over three-quarters of participants attended the centres 'because it is fun' and many commented on the positive learning environment. One woman stated, "If there were more centres like this, there would be more people willing to learn."

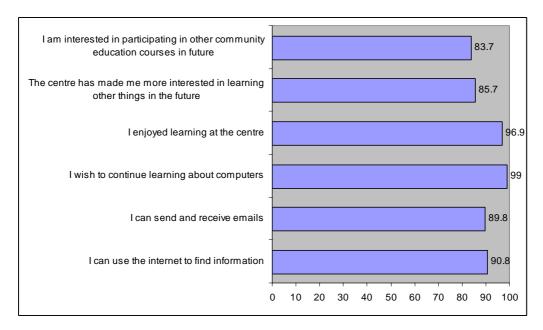


Figure 2. Learning outcomes (percentage)

#### Personal growth/satisfaction

A number of individuals also continued to attend the centres because they felt they could personally benefit from the experience. Some saw it as an opportunity to seek work and improve employability skills. Over half, 56.1 per cent were at the centre to explore future study or job options and others used the centre to prepare a resume (21.4 per cent), add skills to their existing resume (37.8 per cent) and type and print letters (80.6 per cent).

Employability was only one aspect of personal gain. The centres also played an important part in improving self-confidence (86.6 per cent came to the centre for this reason). And in responding to a question that asked how their lives had changed as a result of coming to the centre eleven participants wrote that they felt 'more confident' in themselves.

## Connecting people

While computers are sometimes stigmatised as socially isolating, these centres served an important community purpose — they connected people, both electronically and physically. Many participants noted that their attendance was influenced by a social purpose. Over 80 per cent of people came to the centre to email and chat over the internet (83.7 per cent) and because they liked the other people who attended (81.4 per cent).

# Electronically connecting people

While the type of internet usage was not explored in great detail, individuals were asked if they accessed a number of sites relating to certain areas of life that could connect them socially, politically and locally:

- 55 per cent used the internet to keep in touch with relatives and friends
- 64 per cent were connected locally by logging onto the internet to find local information and events
- 49 per cent of participants used the internet to access government information and services.
   The access to government services is notable because such contact increases these individuals' linking capital.

# Connecting people in the community

For many individuals, attendance at the centres went beyond simply learning about and getting access to computers and related technology. The sense of place was clearly important to the participants. The centres provided a public space where individuals could come and meet other locals and interact with people they may not normally associate with. Over 90 per cent of participants in the post-program evaluation reported talking to other people using the centre; 69.4 per cent talked to other people using the centre on most occasions; and 83.7 per cent of the group admitted that some of the people they communicated with at the centre were different from them in age, background, ideas and/or religion.

Contact went beyond communication because once at the centre most people were not only talking, but assisting each other. Over three-quarters of participants (77.6 per cent) reported that they had been helped by someone in the class for computer problems and 61.2 per cent stated that they had helped others in the class with computer related problems. Perhaps more striking, however, was the broader assistance given. People within the group clearly formed trusting relationships with others because almost half reported helping other people in the class with non-computer related problems and half stated they had received help for other problems. Having an increased network to draw upon for assistance is known to be beneficial and for one in ten participants this may be especially so because they reported getting help for problems unrelated to computers most of the time they attended the centre. These centres are places that facilitate building social capital for some individuals.

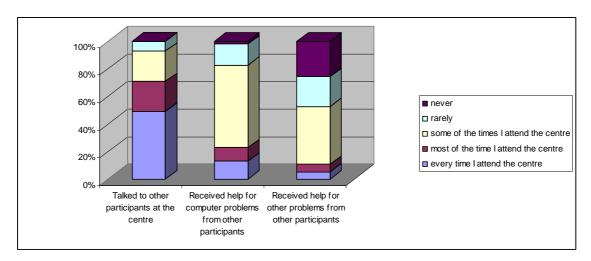


Figure 3. Connecting people

Testament to computer technology learning centres going beyond places where individuals learn ICT skills, are the 75.5 per cent of individuals who noted that attending the centre has made a 'difference' to their lives and the 46.4 per cent who felt that the centre has made a real difference to their community. This was further reinforced by participants' unsolicited comments. Three individuals noted the benefit of being able to communicate via email with friends and family, and thirteen spoke of gaining friends, having a "great social outlet" and increasing "contact with many more people". One respondent wrote that he/she was now "more confident in my ability to deal with other people" and another felt it has "helped me communicate with people". Three participants echoed the sentiment of one individual: "Socially, it has enabled me to communicate better with family and friends as they all knew about computers. Now I know what they are talking about". Others noted that it has made them "more independent" and "more employable". For some it had filled a gap in their lives: "my daily activities are interesting as I am now able to use computers"; "I now have something to look forward to each week".

One seventy-two year old man had great insight into the benefit the centres provided for the community by connecting people. As he aptly said, "from contact with other people I am more aware of what is going on in the community [and] problems I can assist with".<sup>20</sup>

# Part B: Evaluation of youth regularly attending CTLCs

Youth who participated in UP centres attended in an ongoing manner, like their adult counterparts. These youth were predominantly students and thus were more likely to be exposed to ICT than adults because of the prevalence of technology within schools and other

<sup>&</sup>lt;sup>19</sup> While the latter figure was lower than expected, the preliminary findings from surveys received for the second phase of the evaluation indicate that this will be significantly higher. <sup>20</sup> While not mentioned in the text, satisfaction with the course, centres and staff members was high among the participants – over 90 per cent reported satisfaction with the hardware and software, staff and volunteers, classes and training, social atmosphere, cost, opening hours and accessibility.

education facilities. This, coupled with some slight differences in the evaluation survey, is why adults and youth are dealt with separately in this report. Of the youth who attended the centres, 210 completed the pre-program survey, and 145 also filled out the post-program evaluation.

#### **Demographics**

Youth attending the centre were almost split 50:50 male and female (54 per cent male, 46 per cent female). The mean age was 12.3. The greatest proportion of youth were between 11 and 15 years of age (51.9 per cent), followed by 23 per cent who were under 10 years of age. Almost 15 per cent were 18 years old and the remaining 10 per cent did not disclose their age.

The centres attracted a significant proportion of disadvantaged youth. Forty per cent of the young people were from single parent families (far outweighing the 15.5 per cent of youth living in these families throughout Australia). A total of 7.6 per cent identified as Indigenous Australians. While the majority of youth were born in Australia (83.8 per cent), more than one in five (21.1 per cent) spoke a language other than English at home.

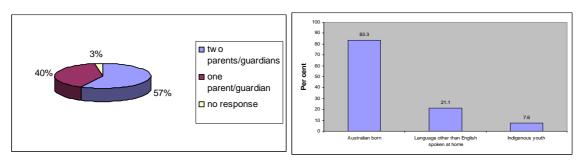


Figure 4a and 4b. Youth demographics

Almost all the youth attending the centres (96.2 per cent) were still at school. While 54 per cent were old enough to have a job — only 14.8 per cent of this group had casual or part-time work; 31.5 per cent did not want a job and 53.7 per cent wanted a job.<sup>21</sup> The students attending the centre may not be the children at risk of disengaging from education at a young age because only 4.8 per cent reported a dislike for learning new things at school. Less than ten per cent of the students did not like learning out of school and only 1 per cent did not like learning new things related to computers.

# **Computer and Internet use**

Given the focus on technology within schools, it was unsurprising to find 76.2 per cent of the youth had a computer at home. None of the surveys, however, established how old these computers were, the software installed, whether they had internet access or a printer. Those who had computers at home used them two or more times a week. Over half (57.6 per cent) of

18

<sup>&</sup>lt;sup>21</sup> Those who were employed worked an average of 6.4 hours a week.

the students used computers at a friend or relative's house. Eighty per cent had used one at a community centre and 39 per cent at the library. Almost all youth (96.7 per cent) had used a computer at school. Thus the students were somewhat frequent computer uses and were active in exploiting resources to get access to computers and the internet. This was further evidenced by the 81.3 per cent who felt very or slightly confident about using a computer.

# Reason for attending the centre

Although many youth had used computers previously and were confident in using them, the reasons they attended the centres revealed that these youth were not necessarily accessing computers with up-to-date hardware and software and/or were failing to meaningfully use computers and related technology. Most students reported learning to use computers (88.6 per cent), using the Internet (85.7 per cent) and finding information (80.5 per cent) as important or very important reasons for their participation at the centre. Using the computers for homework was also popular (76.2 per cent), indicating that the computers students had access to outside of the centre may have been insufficient for homework tasks. Playing computer games (71.4 per cent), chatting over the internet, emailing (52.4 per cent), finding out about future study/job options (42.9 per cent) and the free/low-cost nature of the centres (66.7 per cent) were also important reasons students attended the centres.

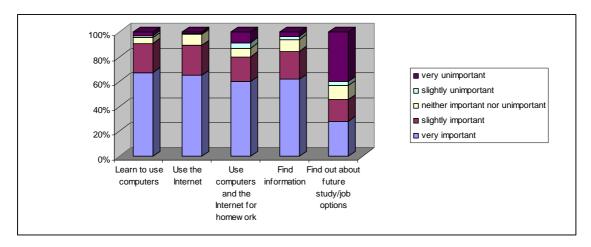


Figure 5. Reasons for attendance

# Post-program outcomes

At the time of the post-program survey, 95.2 per cent felt confident about using computers and related technology (compared to 81.3 per cent at the beginning of the program). Almost all youth (95.9 per cent) agreed that they could use the internet to find information and 81.4 per cent could send and receive emails. All youth wanted to continue to use computers and the internet.

#### Reasons for attendance

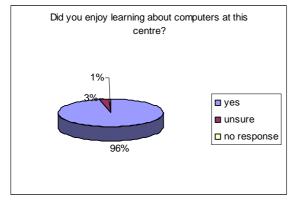
Over time, young people's reasons for attending the centres slightly changed. At the end of the program an increased number of students attended to:

- learn to use computers (92.4 per cent)
- use the internet (94.5 per cent)
- find information (86.9 per cent)
- chat over the internet or email (64.8 per cent).

Thus a larger proportion of youth may have understood the knowledge and benefits that can be reaped from computers and related technology. The importance of using the computers for homework use decreased slightly (73.1 per cent), along with finding out about future study/job options (32.4 per cent). More students attended because it was free/cheap (82.8 per cent). Centres also became a social hub for some students — 83.4 per cent reported attending because "I like the people" and 94.5 per cent attended because "it is fun". 22

#### Learning

As mentioned above, the youth attending were generally interested in learning and the centres helped foster their interest. By the end of the program, 96.6 per cent enjoyed learning about computers at the centres, 95.9 per cent wanted to learn more about computers and 92.5 per cent felt that the centre made them more interested in learning other things in future.



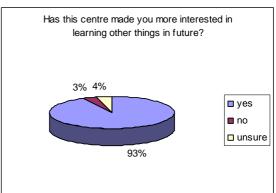


Figure 6a and 6b. Learning outcomes

# Connecting with others

Like their adult counterparts, centres helped youth connect with family, friends and their community. Over half of the youth (56.6 per cent) used the internet at the centres to keep in touch with relatives and friends and almost one third of youth (30.3 per cent) used the internet to find out about events in their local area.

<sup>&</sup>lt;sup>22</sup> Satisfaction was also high among youth attending the centres. The percentage of satisfied youth follows — satisfied with the centres' computer programs — 95.2 per cent; help from staff and volunteers — 98.6 per cent; classes/training — 97.9 per cent; centre's location — 88.3 per cent; centre's cost — 92.4 per cent; opening hours — 89.7 per cent.

Most notable, however, were the connections youth made with each other within the centres. Not only did 91 per cent of the youth talk to other students at the centre and 72.4 per cent talk frequently, but 89 per cent reported that some of those they spoke to were different from them in age, background, ideas and/or religion. Youth also commonly assisted each other while at the centres. Fifty-one per cent reported frequently helping others with computers and the internet and 79.3 per cent had helped others at some stage.

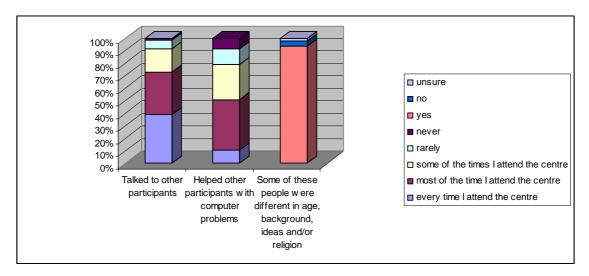


Figure 7. Connecting kids

### Employability

Three students, or 2.1 per cent, had begun working in a part-time or casual job since attending the centre. One of these students had used the centre to look for work, to prepare a resumé and to type and print a letter. Thus there may be a correlation between her attendance and gaining work. This prevalence may increase because among the youth attending 12.4 per cent used the internet to look for work, one in five used the computers to prepare a resume and 46.2 per cent to type and print a letter.

#### Conclusion

The literature portrays digital inclusion programs as a proven approach to helping disadvantaged individuals become more digitally engaged. Based on this evidence, over the past twelve months The Smith Family has worked with Microsoft Australia and other partners to deliver the Unlimited Potential program throughout the nation. As lead partners, The Smith Family has closely followed best practice criteria for CTLCs and used a community capacity building approach that has provided meaningful, sustainable and far-reaching outcomes, as the first evaluation demonstrates.

The evaluation of UP has revealed that TSF's UP centres may go some way to increasing digital and social inclusion. The centres provided free access to computers and the Internet in a non-threatening environment and they attracted a number of disadvantaged participants, many

of whom were otherwise excluded from mainstream activities like work or study. From the self-reporting of participants, attending the centres helped to increase ICT skills, foster positive attitudes towards learning, contribute to personal growth and increase social connectivity — electronically connecting people to relatives and friends and physically networking people with other locals. While further more detailed research on UP centres should be conducted, this evaluation has reaffirmed that given the right conditions and model, CTLCs have the potential to increase digital and social inclusion.

#### References

Australian Bureau of Statistics (ABS) 2002a, 'Basic Community Profile and Snapshot', *Census of Population and Housing 2001*, viewed 27 March 2005,

<a href="http://www.abs.gov.au/ausstats/abs@census.nsf/Census\_BCP\_ASGC\_ViewTemplate?ReadForm&Expand=1">http://www.abs.gov.au/ausstats/abs@census.nsf/Census\_BCP\_ASGC\_ViewTemplate?ReadForm&Expand=1>.</a>

ABS 2002b, *Population by Age and Sex, Australian States and Territories*, Cat. No. 3201.0, ABS, Canberra, June 2002.

ABS 2003, Disability Australia, Cat. No. 4446.0, ABS, Canberra.

ABS 2005a, 'Communications and information technology, Use of information technology', *Year Book Australia*, Cat. No. 1301.0, ABS, Canberra.

ABS 2005b, Labour Force Australia, Cat. No. 6202.0, ABS, Canberra, February 2005.

Asgeirsdottir B 2001, 'Seizing the Benefits of New Technologies in a Changing Economy' and Thomas Anderson, 'Knowledge without borders', *OECD Observer*, viewed 16 February 2004, <a href="http://www.oecdobserver.org/news/fullstory.php/aid/619/Knowledge\_without\_borders.html">http://www.oecdobserver.org/news/fullstory.php/aid/619/Knowledge\_without\_borders.html</a>.

Academy for Educational Development 2003, *Country Reports: Research on Non-Profit Public Access Technology Centers*, Report for Microsoft Corporation, Academy for Educational Development, Washington, USA.

Brazelton J & Gorry A 2003, 'Creating a knowledge-sharing community: If you build it will they come?', Association for Computing Machinery, vol. 46, no. 2, February 2003, pp. 23-25.

Cabinet Office, United Kingdom 2004, *Enabling a digitally United Kingdom: A framework for action*, <a href="http://www.cabinetoffice.gov.uk/publications/reports/digital/digitalframe.pdf">http://www.cabinetoffice.gov.uk/publications/reports/digitalframe.pdf</a>>.

Chow C, Ellis J, Walker J & Wise B 2000, *Who Goes There? Longitudinal Case Studies of Twelve Users of Community Technology Centres*, CTCNet Research and Evaluation Team and National Science Foundation, USA.

Cisler S, Breeden L, Guilfoy V, Roberts M & Stone A 1999, 'Computer and Communications Use in Low-Income Communities', *Telecentre Evaluation: A Global Perspective*, Quebec Canada: A report for the Annie E. Casey Foundation presented at an international meeting on telecentre evaluation, 28-30 September 1999.

Cook D, Diaz S, Juliana M & Kratcoski A 2002, *Distance Learning Research Grants: Report of findings*, submitted to The Ohio Learning Network, Research Centre for Educational Technology, Kent State University, Kent.

Crowe D, 'Funds for IT programs dry up', The Australian Financial Review, 13 May 2003.

CTCNet, Standards of Excellence for Computer Technology Centres, version 4, revision 10/02, viewed 9 March 2004,

<a href="http://www.npower.org/nationalservices/sbcexcelerator/ctc+standards+evaluation+form\_blank.">http://www.npower.org/nationalservices/sbcexcelerator/ctc+standards+evaluation+form\_blank.</a> pdf>.

Davies S, Wiley-Schwartz A, Pinkett R & Servon L 2003, *Community Technology Centres as Catalysts for Community Change*, A Report to the Ford Foundation, Project for Public Spaces, BCT Partners and New School University, January 2003.

Department of Communications, Information Technology and the Arts (DCITA) 2003, Maintaining the Viability of Online Access Centres in Regional, Rural and Remote Australia, Discussion Paper, DCITA, Canberra.

Devins D, Darlow A & Smith V 2002, 'Lifelong learning and digital exclusion: lessons from the evaluation of an ICT learning centre and an emerging research agenda', *Regional Studies*, vol. 36, no. 8, November 2002.

Directorate for Education, Employment, Labour and Social Affairs, OECD 2001, *Thematic Review on Adult Learning: Highlights, Emerging Issues and Lessons to Date'*, OECD, Paris.

Ferlander S 2003, *The Internet, Social Capital and Local Community*, PhD thesis, Department of Psychology, University of Stirling.

Harouna B, McMillan-Culp K, Green L, Henriquez A & Honey M 2001, *Effective Technology Use in Low-Income Communities: Research Review for the America Connects Consortium*, Centre for Children & Technology.

Hopkins L & Thomas J, e-social capital: Building community through electronic networks, Institute for Social Research, Swinburne University, viewed 5 March 2004, <a href="http://www.sisr.net/wiredhighrise/papers/buildcommunity.pdf">http://www.sisr.net/wiredhighrise/papers/buildcommunity.pdf</a>.

International Telecommunication Union 2003, 'ITU Digital Access Index: World's First Global ICT Ranking', Press Release, 19 November 2003, viewed 23 February 2004, <a href="http://www.itu.int/newsarchive/press\_releases/2003/30.html">http://www.itu.int/newsarchive/press\_releases/2003/30.html</a>.

Lloyd R & Bill A 2004, *Australia Online: How Australians are Using Computers and the Internet 2001*, National Centre for Social and Economic Modelling and Australian Bureau of Statistics, Canberra.

Muir K 2004, Connecting Communities with CTLCs: from the digital divide to social inclusion, The Smith Family, Sydney.

Norris A 2002, 'Online access centres and partnerships for building community capacity', *Australian Journal of Adult Learning*, vol. 42, no. 3, November 2002, pp. 364-80.

OECD 2001, The New Economy Beyond the Hype: The OECD Growth Project, OECD, Paris.

OECD 2003, Beyond Rhetoric: Adult Learning Policies and Practices — Highlights, OECD, Paris.

Oliver R 2001, 'Seeking best practice in online learning: flexible learning toolboxes in the Australian VET sector', *Australian Journal of Educational Technology*, vol. 17, no. 2, pp. 204-22.

Russell M 1999, 'Online learning communities: implications for adult learning', *Adult Learning*, vol. 10, no. 4, Summer 1999, pp. 28-31.

Selwyn N & Gorard S 2003, 'Reality bytes: examining the rhetoric of widening educational participation via ICT', *British Journal of Educational Technology*, vol. 34, no 2, pp. 169-181.

Selwyn N, Gorard S & Williams S 2002, 'We are guinea pigs really': Examining the realities of ICT-based adult learning', *Studies in the Education of Adults*, vol. 34, no. 1, Spring, pp. 23-41.

Simpson L, Daws L & Wood L 2003, 'More than just an Internet connection: Building Rural Social Capital Through Public Access', *Rural Society*, vol. 13, no. 2, pp. 113-25.

Tacticos T 2004, 'Cost Restraint: Tensions in Volunteer Use and Support', *Evolution, Devolution or Revolution*, 10<sup>th</sup> National Conference on Volunteering, Volunteering Australia, Melbourne, 2-4 June.

Warschauer M 2003, 'Demystifying the Digital Divide', *Scientific American*, vol. 289, no. 2, August, pp. 42-7.

Warschauer M 2002, 'Reconceptualizing the Digital Divide', *First Monday*, no. 7, June, viewed 3 March 2004, <a href="http://www.firstmonday.dk/issues/issue7\_7/warschauer/">http://www.firstmonday.dk/issues/issue7\_7/warschauer/</a>.

Zappala G (ed.) 2003, Barriers to Participation: Financial, Educational and Technological, A report into the barriers to societal participation among low-income Australians, The Smith Family, Camperdown.