



**VICTORIA  
UNIVERSITY**

**A NEW  
SCHOOL OF  
THOUGHT**

**TECH PACKS**

**THE SMITH FAMILY**

**FINAL REPORT**

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## 1. Executive Summary

From 2008 to 2010 families from a number of Australian communities were given an opportunity to receive a refurbished computer with internet connection and participate in basic computer training as part of the Technology Packs (Tech Packs) initiative instigated by The Smith Family of Australia. A team of researchers from the School of Education at Victoria University, Melbourne, Australia carried out an independent evaluation of the project over a period of two and a half years. This is the final report of the project and it outlines the findings from data collected from participants in the Tech Packs program over this time frame, from a number of locations.

Parent participants were asked to reflect on their computer experiences prior to receiving the computers and then to share how it had affected their family's lifestyle and circumstances once they had used it for a period of time. Data was collected through surveys and focus groups with a purpose to:

1. Establish baseline data about family demographics, lifestyle and prior use of computers before participation in the Tech Packs project
2. Explore the ways in which digital literacies were enhanced for the families
3. Outline the participants' ongoing concerns to ensure the successful use of new technologies in their lives.

Contemporary society is changing rapidly. At the start of the project in 2008, different technological, economic, social and political conditions existed than they do today. It has been a positive feature of the Tech Packs project that it has adapted to changing times so effectively and spontaneously, like shifting from dial-up connections to broadband.

The quantitative data and analyses derived from the pre and post pack surveys have shown the positive difference that having a computer with Internet access has made on the lives of families who previously did not have one due mainly to their economic circumstances. Families have reported an increase in opportunities regarding access and frequency of use that one would expect from a project of this type. More than three quarters of participants indicated that they were satisfied with the opportunity to participate and their confidence levels of using computers and the Internet increased considerably. This feeling of increased confidence with technology is an important one since use of computers and associated peripherals is integral to functioning effectively in society today.

The Tech Packs initiative has had benefits across the age spectrum. Although the focus of the project has been with families who have school aged children, it has also included participants who are retired and on a pension, children with physical disabilities and many parents who are long term unemployed. It is important to note that for these groups and individuals the ownership and use of a computer and connection to the Internet enabled them to not only seek out new information for pleasure and employment purposes but also enabled them to participate in communities of practice that were previously not available to them.

Specifically, the project has enabled participants to communicate with friends and family and for business purposes via email and through various web sites. The evaluation data highlights that participants used the internet for both study and leisure purposes; to access social network sites and gather information to assist with study and research.

Over the evaluation period there has been a noticeable shift in thinking about the purpose and intent of the project in terms of its original aims and objectives. The focus has moved from the notion of bridging the digital divide to thinking more deeply about social inclusion and participation in contemporary society. This shift means that there is a recognition that participation in the digital age is more than simply provision of hardware to ameliorate the gap between the technology 'haves' and the 'have nots' which was exemplified in the provision of refurbished computers. Social inclusion means having access to up-to date technologies, as well as the confidence and skills to participate and engage in more complex interaction. Knowing what is available and making informed choices about use, has been shown to be a key element to achieve social inclusion. A further measure of participation in today's knowledge society is the type of online activity users engage in. Increasingly, individuals are evaluating, creating and sharing content online by manipulating new media platforms such as Facebook, Twitter, You-tube, Flickr and Weblogs. Through the internet, people are not only consuming content, but becoming prosumers of information.

One of the most recent focus groups in Barrack Heights, Wollongong, highlighted the ways in which the new computers with wireless Internet, compulsory training and a supportive *Learning for Life* worker enabled a hugely successful project in a community. Outcomes included specific indicators that both parents and students have been participating in the digital world and manipulating various software applications. There are positive indications that the participants are starting to be consumers and prosumers of digital content.

Focus group participants reported specific examples of how they were engaging with technology and the internet in new ways in their everyday lives. Many children and parents reported an increase in the use of computers and other digital technologies since the start of the project. From the qualitative data, many parents reported feeling that their children in particular have improved their skills with digital technologies as a result of their participation and that this has increased their opportunities for success in home and school contexts. This is further highlighted in Chapter 6 and 10 of this report.

There is potential to extend the project with a specific focus on social inclusion and digital literacies which aligns with the current focus of Federal Government policy initiatives. There are benefits for Australia in supporting any program that successfully assists citizens to function effectively in society. This begins with positive self-esteem that comes from being successful with the resources that are available for use in contemporary society. Any citizen that has limited access to the technologies that are available today is by implication socially excluded from full participation in society and this issue needs to be fully addressed at the policy level.

## 2. The Tech Packs Project

### 2.1 Background information

The Millennials have been characterised as children born post 1985 who play around in digital spaces and communicate on a daily basis with peers, family and acquaintances for a variety of purposes using many devices [2]. It has been noted in various surveys that a large number of homes have a variety of media options that include televisions, mobile phones, computers, ipods, mp3 players, DVD machines, digital cameras, interactive toys and games, video game consoles and mobile devices. For example, for many years now in the United States, the Kaiser Family Foundation have conducted surveys pertaining to media use among children and teens [3]. The latest (third) report states that since the last survey conducted in 2004 there has been a major increase in use of new media that is mainly attributed to the ready access to mobile devices. For example, they report that in the past 5 years there has been a large increase in mobile phone ownership, from 39% to 66%, and the increase in ipod ownership has soared from 18% to 76%.

The most salient finding was that “Eight to eighteen year olds spend more time with media than in any other activity... an average of more than 7 ½ hours a day, seven days a week” [3]. It represents a greater amount of time than many adults spend in full time employment, and they do it seven days a week, not five days. The report also informs us that:

*In the last five years, home Internet access has expanded from 74% to 84% among young people; the proportion with a laptop has grown from just under 12% to 29%; and Internet access in the bedroom jumped from 20% to 33%. The quality of Internet access has improved as well, with high-speed access increasing from 31% to 59% (p.3).*

High speed Internet access and new applications have dramatically changed the ways that young people use the internet. The most popular computer activities are performed on social networking and video sites like YouTube. Such sites were not widely available in 2004 – but now account for an average of 37% of young peoples’ daily media time [3].

There is some space in the report to discuss demographic aspects of the data but this is confined to age, gender, race and parental educational levels. There is no specific consideration of socio economic status or parental income levels. Data shows that media use increases considerably in the years between 11 and 14 years of age. Girls spend more time than boys in social network contexts, listening to music and reading. Boys spend more time playing video and computer games and looking at YouTube.

Yet there remain children and families who are not able to participate in the so-called ‘digital revolution’ for a variety of reasons that tend to be closely aligned to social and economic circumstances. Studies conducted regarding the links between social and digital engagement, especially with reference to Internet use, increasingly show that those individuals who have access to ICT, generally come from families that have more schooling, higher incomes, and high status occupations. In discussing digital and social advantage, Helsper [4] noted that “those who are most deprived socially are also least likely to have access to digital resources such as online services” (p. 9).

Further, Helsper reported that when those from these demographic groups do participate in digital activity, it tends to be at the basic level and involve information seeking, obtaining leisure information, making purchases online and for individual communication with families and friends at a distance. In contrast, Helsper indicated that the advanced levels of activity characterized by social networking and civic engagement that allow participants to interact beyond their immediate networks, for example, are only conducted by 8% of the population. This then reinforces a gap since this qualitative difference in use enables those with more advanced technologies and applications to participate in activities that facilitate and extend their capabilities in cyber contexts, which are becoming increasingly important to be fluent in.

In this way, simply providing access via machines is not enough. Social and digital inclusion now need to be addressed by discussing ways in which creative and higher order contexts and opportunities for disadvantaged youth are provided. This can often be problematic, since new technologies are rapidly evolving and what constitutes digital inclusion changes accordingly. What was considered as advanced three years ago, would now be generally considered as basic to the lives of many citizens. Helsper also advised that studies have revealed that the main factors for digital inclusion are relevance to life, the nature of the experience and empowerment. This basically means that digital experiences have to be connected to the lives and needs of users and will only be perpetuated if they are positive and make life easier.

## **2.2 The digital divide**

The notion of a ‘digital divide’ came into prominence in around 1996 when then United States Vice President Al Gore used it in a speech considering the role of technology in society and highlighted that their use was uneven based on income and status levels. In this way, inequalities already in existence in society were being exacerbated by poor access to the new technology.

Thus, the digital divide was traditionally described in relation to physical availability of the computer and access to the Internet. It was described as being the difference between the technology ‘haves’ and ‘have nots’.

## **2.3 Digital Inclusion**

The disparity or ‘divide’ prompted concerns and action to minimize, or indeed eliminate, inequality of access to technology. This in turn, prompted inquiries and broader discussions about equity and social justice [5]. Schemes were developed to ‘deliver’ machines to the disadvantaged but there was not much concern or follow up about how they were used and if the ways in which they were used was productive. DiMaggio and Hargittai [6] stated:

*As the technology penetrates into every crevice of society, the pressing question will be not ‘who can find a network connection at home work, or in the library or community centre from which to log on?’, but instead, ‘what are people doing, and what are they able to do, when they go on-line?’*

Reconfiguration of the term “access” became the focus of literature that aimed to re-work the idea of the digital divide. According to Warschauer [7] “the simple binary

notion of technology haves and have nots does not quite compute” (p. 42). In his opinion the key issue is not merely access to computers but rather the unequal ways of using computers. It was conceived that the idea of “access” needed to be redefined in social as well as technological terms. Warschauer argues that in order to achieve better outcomes for communities, technology infusion needs to be supported by relevant educational experiences and social support.

DiMaggio and Hargittai highlight the role that society plays in affording all people access to the Internet by noting that the policies of public institutions shape patterns of inequality and effective Internet access and use. Everyone can potentially benefit from such policies and so it becomes increasingly important for public institutions and agencies to consider the issues around access and use of new technologies. Further, as technologies become more pervasive in our lives we also need to provide mechanisms by which assistance can be provided, both formally and informally, so that individuals and groups may participate fully in online experiences. Formal assistance may include backing from public organisations such as the library or private organisations such as the workplace. Personal assistance is likely to be sought from family, friends and colleagues.

## **2.4 The Tech Packs**

The initial focus of The Smith Family was to identify and distribute internet connected computers, and provide opportunities for low income families in the organisations’ *Learning for Life* communities throughout Australia to develop digital skills. This initiative was called the Tech Packs Project and provided families with refurbished computers, Internet access, training and support, in order for them to have the available technology resources to develop essential computer skills.

The Smith Family is a national, independent children's charity working together with philanthropic organisations to create opportunities for families to participate more fully and equitably in society. Typically, the Tech Packs cost families a relatively small amount, usually between \$50-\$100, and included a reliable refurbished computer with some basic software, Internet connection and technology support. Families were provided with access to refurbished Pentium desktop computers with 12 months of internet access<sup>1</sup>. Each Tech Pack included access to a helpdesk facility providing troubleshooting and technology support over the same 12 month period.

The Smith Family Tech Packs Project was initiated across communities throughout Australia, with the largest number being distributed in New South Wales, Queensland, Tasmania and Western Australia. This offer was made available in an effort to increase the connectivity of families to the local and global community.

At the start of the Tech Packs Project, information was provided via The Smith Family network by their *Learning for Life* staff based locally in each of the identified communities. The *Learning for Life* staff informed potential families about their possible participation and included specific details about training attached to the computer ownership.

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<sup>1</sup> The Internet connection changed over the duration of this evaluation from dialup to broadband so different communities had very different experiences depending on the type of Internet access.

Participating families in the Tech Packs Project were required to meet certain criteria in order to obtain a computer. The criteria varied slightly between communities but generally focused on ensuring the beneficiaries of the home computer were considered by the Smith Family to be 'disadvantaged' and additionally have children at school. Some of the initial eligibility criteria identified families as being from a low socio-economic background, such as being a holder of a Health Care Card or a Centrelink Concession Card, and having a child or children in school. Each community publicised the way families could apply for a Tech Packs computer and a Smith Family community worker or *Learning for Life (LFL)* worker, became responsible for identifying and overseeing the distribution of computers to eligible families.

The Smith Family used four different computer refurbishing organisations to deliver the project across Australia over the 2½ year evaluation period. These included, Infochange Green PC, Workventures, The Redcliffe Hospital Foundation and GreenFix Environmental. Each of these organisations provided helplines to families in the community following The Smith Family contractual arrangements.

Prior to participants receiving their computers, the families were required to attend training sessions. This varied slightly between communities and between available venues but also enabled The Smith Family *Learning for Life* workers to organise and establish contact for participation in evaluation research undertaken by staff from Victoria University, Melbourne, Victoria.

## ***2.5 The distribution of Tech Packs***

A number of residents in various communities throughout Australia do not necessarily experience the quality of life that others enjoy. They may be disadvantaged by unemployment, poverty, minimum levels of schooling, social isolation or disability. One of the aims of The Smith Family is to broaden digital inclusion and provide the skills, training and tools to assist disadvantaged families to become technologically literate [8]. In fact, a key aim for The Smith Family is to improve the digital literacy of individuals in order to connect communities through technology [9].

As a continuation of the digital literacy programs that had been initiated by the Smith Family since 1999, the organisation launched the Tech Packs Project in 2007. The first Tech Pack computers were distributed in 3 pilot communities in 2007 and 2008. Table 1<sup>2</sup> provides an overview of the distribution of computers across the Australian States and their respective communities, the number of computers available to each community, the date computers were delivered into each community, and the associated costs per family. This project continues to distribute Tech Packs across new communities throughout Australia.

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<sup>2</sup> Data for this Table have been supplied by The Smith Family (2010)

**Table 1: Distribution of Technology Packs**

| State       | Community   | # computers | Delivered        | Package               | Cost to families. |
|-------------|---|-------------|------------------|-----------------------|-------------------|
| <b>2008</b> |   |             |                  |                       |                   |
| NSW         | Fairfield   | 66          | Jan-07           | dial-up               | \$150             |
|             | Tamworth  | 33          | May-08           | dial-up               | \$100             |
| ACT         | Canberra  | 40          | Nov-08           | dial-up               |                   |
| QLD         | Townsville  | 50          | May-07           | dial-up               | \$150             |
|             | Deception Bay   | 39          | Nov-06           | dial-up               | \$200             |
|             | Labrador (Gold Coast )                                      | 100         | Jun-08           | dial-up               | \$100             |
|             | Ipswich   | 73          | May-08           | dial-up               | \$100             |
|             | Logan   | 28          | Jun-08           | dial-up               |                   |
|             | ACU Brisbane  | 34          | 2008             | dial-up               | \$150             |
| VIC         | Brimbank  | 100         | Jun-08           | dial-up               | \$100             |
| <b>2009</b> |   |             |                  |                       |                   |
| WA          | Maddington Group1   | 40          | Nov-08           | dial-up               | \$100             |
|             | Maddington Group2   | 18          | Aug & Sept<br>09 | dial-up               | \$100             |
|             | Collie  | 24          | Sep-09           | dial-up               | \$0               |
|             | Pilbara   | 42          | Oct-09           | dial-up               | \$0               |
| NSW         | Airds   | 40          | 12-Oct-09        | dial-up               | \$50              |
|             | Miller  | 40          | Aug-09           | dial-up               | \$50 or \$150     |
|             | Lithgow & Cranebrook  | 40          | Oct-09           | dial-up               | \$50 or \$100     |
|             | Wagga Wagga   | 20          | 25-May           | dial-up               | \$100             |
| QLD         | Coomera & Labrador  | 22          | June             | dial-up               | \$50              |
|             | Townsville  | 20          | Jun-09           | dial-up               | \$0               |
|             | DOH - 4 sites: Beenleigh,<br>Caboolture, Carole Park, Logan | 200         | July - Nov       | wireless<br>broadband | \$0               |
| TAS         | 3 Sites: North Tas - Wynyard,<br>Mayfled & Rocherlea.       | 120         | 21-Jul           | dial-up               | \$50              |
|             | South Tas – Gagebrook &<br>Chigwell                         |             | 9-Sep            | dial-up               | \$50              |
| <b>2010</b> |   |             |                  |                       |                   |
| WA          | Pilbara   | 27          | July & Aug       | dial up               | \$0               |
|             | Port Hedland  | 18          |                  | wireless              | \$0               |
| NSW         | Windale   | 16          | 13-May           | wireless              | \$100             |
|             | Barrack Heights   | 16          | 17-May           | wireless              | \$100             |
|             | Coffs Harbour   | 20          | 22-Jun           | wireless              | \$100             |
|             | Canberra  | 16          | June             | wireless              | \$0               |
|             | Seven Hills   | 30          | Sept             | wireless              | \$100             |
|             | Wiley Park  | 24          | Nov              | wireless              | \$100             |

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|     |                               |    |           |          |       |
|-----|-------------------------------|----|-----------|----------|-------|
|     | Orange                        | 26 | Dec       | wireless | \$100 |
|     | Dubbo                         | 25 | 22-Oct    | wireless | \$100 |
|     | Goulburn                      | 25 | 25-Oct    | wireless | \$100 |
|     | Lake Haven                    | 20 | 24-Aug    | wireless | \$100 |
|     | Dapto                         | 20 | 15-Nov    | wireless | \$100 |
|     | Tarrawanna                    | 20 | 25-Nov    | wireless | \$100 |
| QLD | Coolangatta                   | 12 | 11-Oct    | wireless | \$0   |
|     | Logan/ Mabel Park             | 14 | Oct & Nov | wireless | \$0   |
| TAS | Gagebrook, Chigwell, Mayfield | 24 | 10-Nov    | wireless | \$0   |

### 3. Method

Data for the evaluation was gathered during each year of the project using surveys and focus groups. Approval to collect data and interview community members was provided by the Victoria University, Committee for Ethics in Human Research.

#### 3.1 Surveys

The surveys were originally developed by The Smith Family research team to address the core topics for each cohort of participants. The surveys consisted of a 'prepack' survey which was adapted in discussions with The Smith Family to identify key themes about the participants. The Smith Family *Learning for Life* workers distributed surveys to willing participants at the time of initial computer training sessions. At the training sessions, prepack surveys were given to willing participants: parents who consented to the research and signed ethics forms. The surveys were intended to capture data about family demographics and their perceived computer skills and knowledge prior to receiving the Tech Packs computer.

The surveys were then redistributed after a four-six month period of home computer use and these were called post-pack surveys. This enabled the researchers the opportunity to evaluate the success of the technology support provided to Tech Pack participants. The redistribution of the same survey enabled a comparative analysis between the participants' prior skills and knowledge and their actual usage and attitudes toward the home computer after they had been using it for a period of time. However, it was also used to capture and report on the participants satisfaction levels about the technology support and training provided as part of the program. In total, there were 320 pre-pack surveys and 201 post-pack surveys received for the comparative analysis used in this report.

The post-pack surveys were much more challenging to distribute and collect. From the 320 pre-pack respondents who completed the initial survey at the first training session, the post-pack surveys were sent to individuals, completed at focus groups or gathered intermittently from The Smith Family *Learning for Life* workers.

#### 3.2 Focus groups

Once a community had completed the pre-pack surveys, and the Tech Packs computer had been in the home for 4-6 months, focus groups were organised with the assistance of the respective Smith Family workers. This enabled the research to evaluate the use of the computer following its introduction into the home for a good period of time. Focus groups were conducted in several communities in each of the Australian States (a total of 20 groups).

The Smith Family *Learning for Life* workers organised the focus group participants to ensure sufficient numbers at each focus group session. The focus groups concentrated on four major themes including:

- The benefits of having computers at home
- Important changes to daily activities/lifestyle
- Technology Pack support
- Perceived benefits/significance of the program

The semi-structured focus group protocol (Appendix) was fine-tuned in consultation with The Smith Family. The research team conducted the first two focus group interviews (in Wagga Wagga) as a team to ensure consistency in data collection and maximise the trustworthiness [10], or in other words reliability and validity, of data.

Generally the intention was to have about 10 willing participants per focus group prearranged to attend sessions but unfortunately the actual numbers who attended always lessened considerably on the day the researcher was present. When there were minimal numbers at sessions the researcher used semi-structured interviews with the group participants. The attendees provided very rich qualitative data and the small groups enabled the researcher to probe more fully to gain deeper understandings about the significance of receiving a Tech Packs computer.

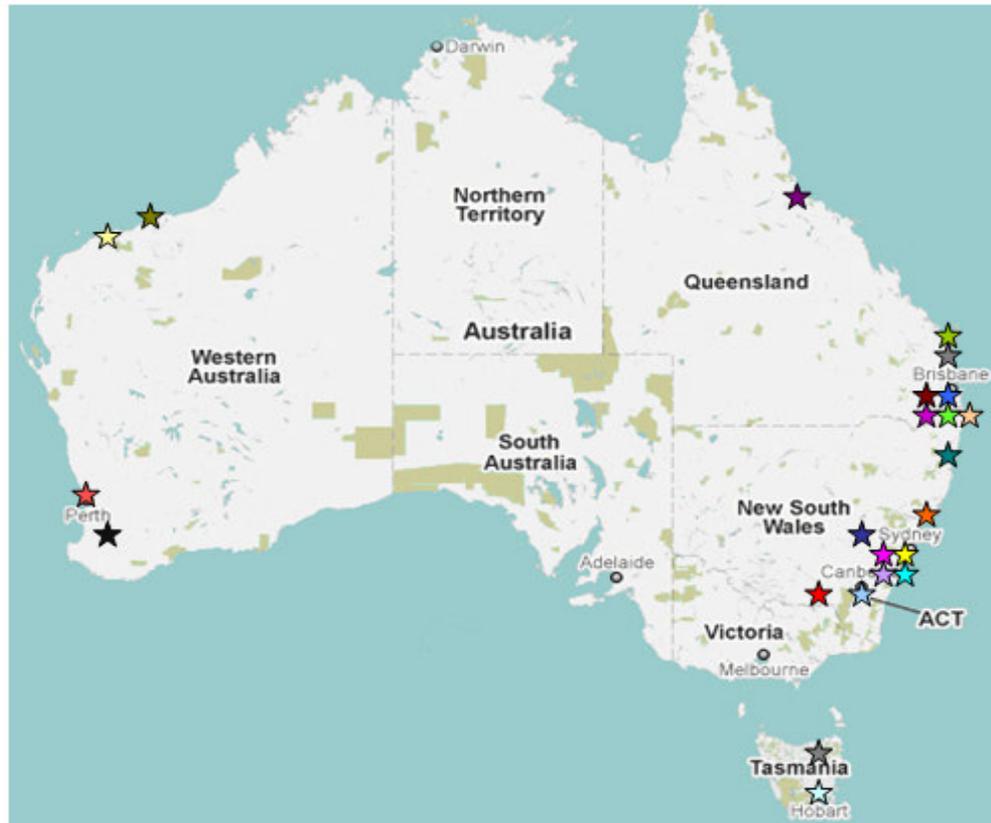
The pictures below show two examples of focus groups involved in this project.



The qualitative data representing the voice of the participants provided the opportunity to elaborate on and complement the findings of the quantitative survey data. This approach valued the attitudes of the Tech Packs participants and provided rich descriptions of home access to computers. All focus group interviews were audio-recorded and later transcribed.

At the time of this final evaluative report (end of 2010), there were 23 identified communities that actively participated and contributed to providing quantitative and/or qualitative data for the evaluation. This may have been in the form of completing surveys or participating in a one of the community focus groups. There were 20 focus groups undertaken throughout Australia including 8 in New South Wales, 5 in Western Australia, 4 in Queensland and 2 in Tasmania. The communities who participated in completing surveys and/or holding a focus group session are shown with their approximate geographical place within Australia in Figure 1.

**Figure 1: Technology Pack communities involved directly in this evaluation**



## 4. Context and demographics

The Tech Packs Project is a collaboration of a number of organisations and requires the support of The Smith Family *Learning for Life* workers in each community to manage and oversee local partnerships, family recruitment and ongoing administration. To comprehend the socio-economic background and demographics of the participants in this project, the survey collected relevant details to identify how participants described their quality of life.

From the 23 identified communities, there were 320 prepack surveys returned and collected for analysis. This included 60 from NSW (including 11 from the ACT), 142 from Queensland, 16 from Tasmania and 102 from Western Australia.

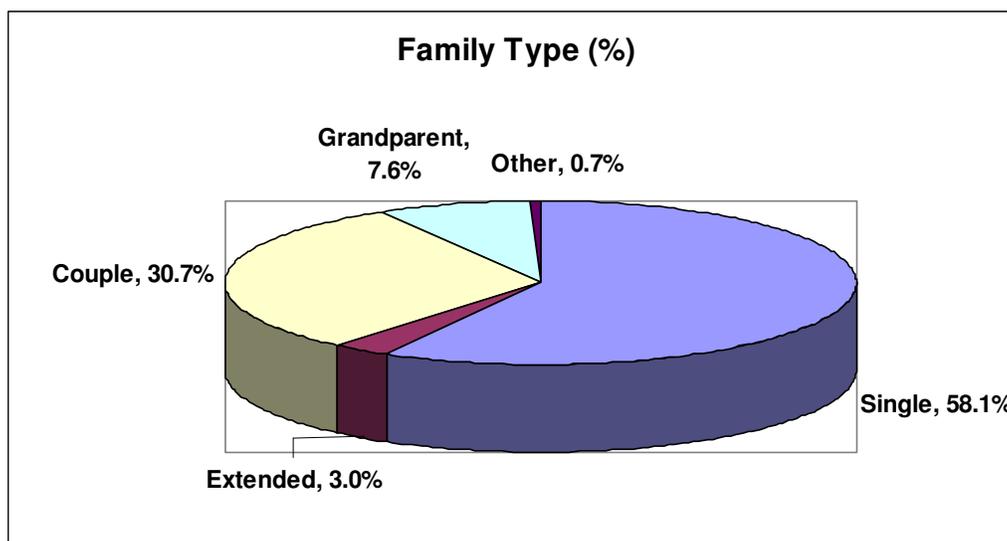
From the total number of survey respondents, 312 participants provided background details: 279 were females and 31 were males with an average age of 39 years. 61 of the respondents (18.7%) self-identified as Aboriginal and Torres Strait Islanders.

Of the total number of family responses across Australia, only 31% identified themselves as being in the context of a 'couple', that is, with two parents as the primary carers. 58% of the participants (176 in total) were from single parent families while nearly 8% had grandparents as the central parental figure/s in daily care of the children. The family structures are shown in Figure 2.

Single parent families often fall into the category of disadvantaged community members because of their financial difficulties, primarily as a result of their inability to obtain full time work.

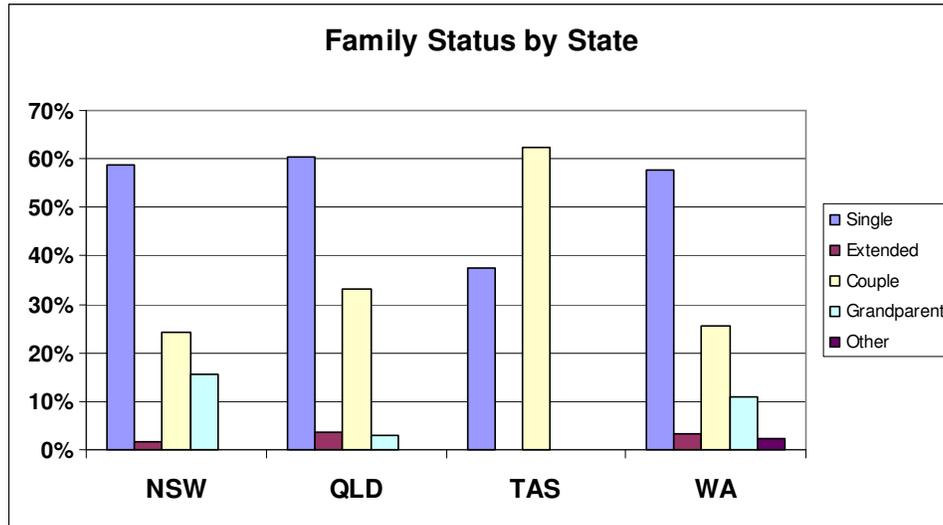
*I've been too busy being a single parent with four kids, and um, also coordinating the breakfast club at the local primary school and teaching cooking in my spare time, so to speak. But um, I've especially found you know, now the kids are getting older and I have um yeah I have to be more accountable to Centrelink as far as I know(Maddington, 2009).*

**Figure 2: Family structures**



The breakdown of family structures across each state is mirrored across the country. The exception to this was in Tasmania where there are over 60% of families represented as couples and the rest recorded as single families (see Figure 3). This representation is likely due to the small number of survey responses in Tasmania compared to other Australian States.

**Figure 3: Family structures in each Australian State**



Participating families in the Tech Packs program were required to meet certain low socio-economic criteria in order to obtain a computer. The criteria changed slightly between communities and States but generally focused on ensuring the beneficiaries of the home computer were considered by The Smith Family as a family of low socio-economic circumstances. Some eligibility criteria may have included those families living in Department of Community Housing, being a holder of a Health Care Card or Centrelink Concession Card. Each community publicised the way families could apply for a Tech Packs computer and a Smith Family *Learning for Life* worker became responsible for identifying and overseeing the distribution of computers to eligible families in each community

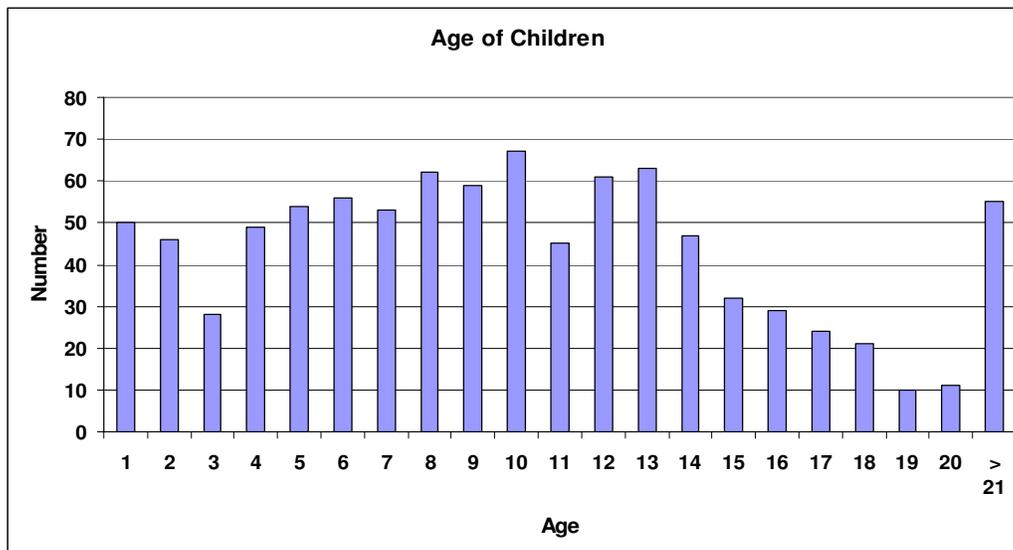
One identifiable socio-economic factor was the amount of funds families received through income (not including welfare). Table 2 highlights the family income from those who received a Tech Packs computer. It is clearly evident that the majority of recipients were in the lowest income bracket. There was one family who reported an income greater than \$80,000 yet still qualified under this particular project community’s criteria to receive the home computer. Furthermore, this parent was identified as a grandparent raising the grandchildren.

**Table 2: Family income**

| Income               | Number | %     |
|----------------------|--------|-------|
| 0-\$39,999           | 266    | 90.5% |
| \$40,000 - \$79,999  | 27     | 9.2%  |
| \$80,000 - \$119,999 | 1      | 0.3%  |
| \$120,000 or over    | 0      | 0.0%  |
| <i>No Response</i>   | 18     |       |

A second main criterion for families to participate in the Tech Packs Project was the requirement that families have children at school. The average number of children per family was 3, and the age range of the children is shown in Figure 4 below:

**Figure 4: Ages of participating children**



From the 312 survey respondents there was a total of 962 children involved in the Technology Packs Project over the 2½ years of the evaluation period. This works out to be an average of 3.1 children per family.

Another socio-economic determinant that affects the quality of life in Australia can be attributed to the lack of English speaking skills. While the most commonly used first language spoken in the homes of the participating families was English, as indicated by 270 parents – 87% of the group (includes predominantly families from Australia and New Zealand), 13% of families identified other languages being used at home on a regular basis. The 13% does not include families who indicated they spoke a combination of English and their mother language at home at various times. The distribution of sample based on languages other than English spoken at home, which included signing for the deaf, is presented in Table 3.

**Table 3: Main languages spoken at home:**

| Language    | Number | % of total | Language   | Number | % of total |
|-------------|--------|------------|------------|--------|------------|
| Amharic     | 1      | 0.3%       | Kirundi    | 2      | 0.6%       |
| Arabic      | 5      | 1.6%       | Kurundi    | 3      | 1.0%       |
| Cook Island | 1      | 0.3%       | Samoan     | 9      | 2.9%       |
| Dari        | 1      | 0.3%       | Signing    | 1      | 0.3%       |
| English     | 270    | 86.8%      | Suhali     | 1      | 0.3%       |
| Indonesian  | 2      | 0.6%       | Tigrinya   | 1      | 0.3%       |
| Narungan    | 1      | 0.3%       | Tongan     | 1      | 0.3%       |
| Hindi       | 1      | 0.3%       | Vietnamese | 11     | 3.5%       |
| No Response | 1      |            |            |        |            |

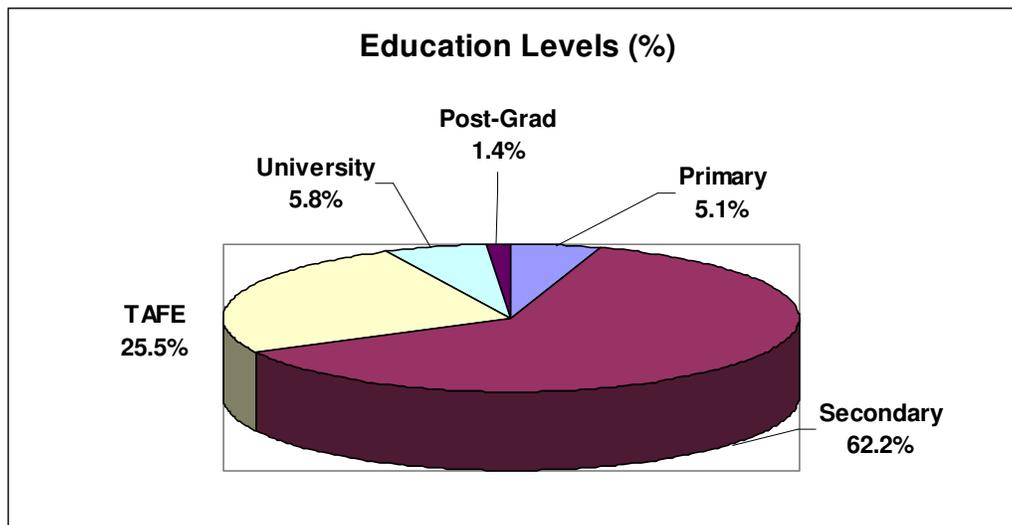
The main spoken language can be generally attributable to the parents' country of birth as shown in Table 4 where it is evident the majority of parents were born in English speaking countries.

**Table 4: Parents/carers Country of Birth**

| Country      | Number | %     | Country            | Number | %    |
|--------------|--------|-------|--------------------|--------|------|
| Afghanistan  | 1      | 0.3%  | Malaysia           | 1      | 0.3% |
| Ariq         | 1      | 0.3%  | New Zealand        | 18     | 5.8% |
| Australia    | 233    | 75.6% | Rwanda             | 1      | 0.3% |
| Burundi      | 4      | 1.3%  | Samoa              | 17     | 5.5% |
| Cook Islands | 2      | 0.6%  | Somalia            | 2      | 0.6% |
| Ethiopia     | 2      | 0.6%  | Sudan              | 2      | 0.6% |
| Fiji         | 2      | 0.6%  | Tonga              | 2      | 0.6% |
| Germany      | 1      | 0.3%  | Turkey             | 1      | 0.3% |
| Greece       | 1      | 0.3%  | United Kingdom     | 4      | 1.3% |
| Indonesia    | 3      | 1.0%  | Vietnam            | 10     | 3.2% |
|              |        |       | <i>No Response</i> | 4      |      |

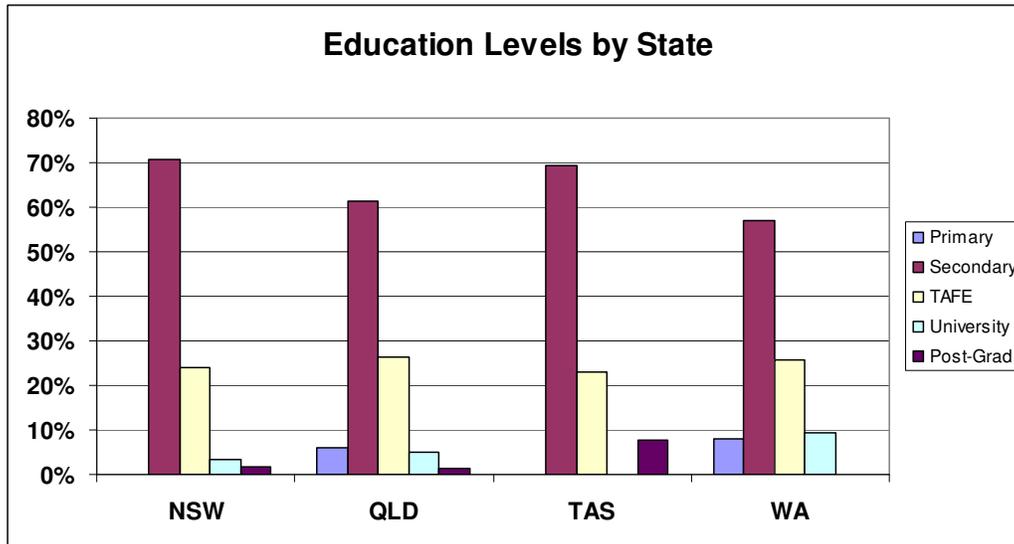
Another socio-economic indicator is the attained level of education of respondents which is often a direct link to the type/s of employment and therefore associated levels of income. The education levels reached can be seen in Figure 5. 62% of respondents indicated secondary schooling as their highest level of schooling and 25% indicated TAFE. Only 7.2% of the cohort indicated higher education as their attained education level (University 5.8% and post-graduation 1.4%).

**Figure 5: Highest attained education levels in Australia**



These statistics are similarly reflected in each of the States of Australia as shown in Figure 6.

**Figure 6: Highest attained education levels in each State**



In summary, the Tech Pack participants self-identified aspects of their quality of life that impact directly or indirectly on their ability to fully participate in today’s society. Their social and economic circumstances affect their opportunities to become digitally literate, a skill set regarded as a “key component of engaging individuals in lifelong learning and contributing to social inclusion” [7]. To this end, the Technology Packs Project aims to:

- Connect families to technology
- Increase computer literacy skills
- Increase opportunities for society engagement,
- Increase school and educational benefits

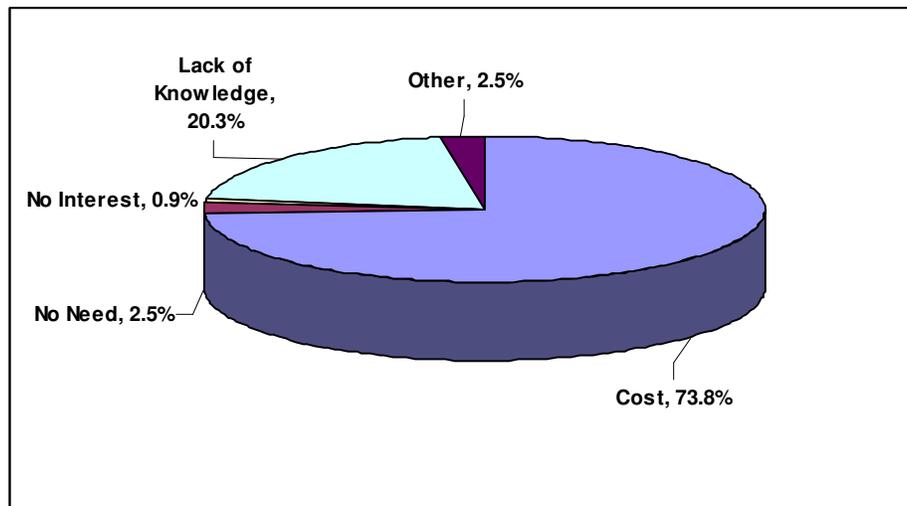
As such, the report considers what impact the Tech Packs initiative has afforded families across different communities and will define whether there has been a desired impact on the lives of disadvantaged children and families. The report will present and discuss the findings according to key indicators as determined by The Smith Family Logframe (2008). The report is structured in order to address the main themes centred on opportunities for connectivity and communication, digital access, technology support, digital skills and training. Each of the themes will be discussed and will include relevant data that addresses the aforementioned aims of the Project. Data from surveys and focus groups will be used to report on the key aims of the Technology Packs initiative.

## 5. Connectivity and communication

A computer enables users opportunities to share information and knowledge, undertake projects and pursue interests. Cuban [11] states that everyday citizens should be prepared for life and work in a technological society. In fact, when people become connected via new technologies that include the Internet, engagement in online communities soon becomes a very common practice [12]. Unfortunately for many families, they do not have readily available access to an Internet-connected computer which inhibits their academic, economic and social inclusion.

For those families who participated in the Tech Packs project, the most significant inhibitor to purchasing their own computer has been the lack of available funds. Approximately three quarters of the survey respondents indicated 'cost' as the main reason for not owning a home computer, as shown in Figure 7. Another one fifth of the total participants indicated their own lack of computer knowledge as a factor in not previously purchasing a home computer.

**Figure 7: Barriers to owning a home computer**



In one of the focus groups, a grandmother described her daughter's family situation and the immediate effect the introduction of the Tech Packs home computer had on the family.

*Donna<sup>3</sup> is a single mother of 6 children so there is not a lot of money to spare. The Technology Pack was a God send as it was affordable. The kids thought it was Christmas when it arrived. All the children are at school and Donna is doing a TAFE course. She has no transport and has to rely on other people to get around. The kids use it to look up stuff and the older ones print out their work. It has made her and the kids more independent and they don't have to rely on other people so much now.*

A large number of parents commented that the cost of purchasing their own computer had prevented them from owning a computer. The Tech Packs project had provided

<sup>3</sup> Donna is a pseudonym. All names of real people used in this report are pseudonyms.

an affordable option. A range of comments were received and are exemplified by the following:

*I would not have been able to afford a computer for years.*

*Our family thanks The Smith Family very much as I could not have afforded a computer without them.*

*Thank you so much. The computer has been a great help with homework. My kids say a big thank you for letting them have a computer at home.*

The difficult financial circumstances are summarised in the response from a single parent:

*I have two children...Due to personal things, finances stuff...It is difficult just to provide children with what they need. At the moment ...just find it very, very difficult at this time. I have only got two (children) but you know on a pension it's hard...You can barely make it for children's food (South Hedland, 2010).*

Whilst the participants in the Tech Packs Project had to meet certain criteria, as outlined by The Smith Family, the criteria still allowed for families to receive a Tech Packs computer even if they previously owned or in fact still owned another computer at the time of the Tech Packs offer, since they were frequently outdated and not connected to the Internet. Of the 320 survey respondents, 116 (36% of the total) said they had access to a computer in their home. The figures for computer ownership for each State are shown in Table 5.

**Table 5: Access to a home computer**

| Access                                       | NSW |      | QLD |      | TAS |      | WA  |      |
|--|-----|------|-----|------|-----|------|-----|------|
|  | No. | %    | No. | %    | No. | %    | No. | %    |
| <b>Have access to a home computer</b>        | 8   | 13.3 | 64  | 45.1 | 7   | 43.8 | 37  | 36.3 |
| <b>Do not have access to a home computer</b> | 52  | 86.7 | 78  | 54.9 | 9   | 56.3 | 65  | 63.7 |
| <b>Total</b>                                 | 60  | 100% | 142 | 100% | 16  | 100% | 102 | 100% |

Not all home computers offered the users the same software programs, speed, memory or hardware storage. Home computers varied depending on the configuration of computer in terms of processor, memory, system type, available applications on the machine and whether the computer had an Internet connection. The type of Internet connection also varied between dial-up, broadband and/ or wireless, and these were additionally affected by the different service providers and the type of plan the user subscribed to.

There were 79 families from the group of 116 who said they had a computer with Internet access with the other 37 indicating they did not have Internet access. Of the 79 respondents, 27 indicated they had fixed broadband, 25 had wireless broadband and 12 had dial-up<sup>4</sup>. One family reported mobile Internet access.<sup>5</sup> The breakdown of the type of Internet access in each community was shown in Table 1 (pages 6-7).

<sup>4</sup> Dial-up was a readily available Internet connection type when the Technology Packs project started but since 2009 broadband wireless access have become much more accessible for many Internet users.

In the early years of the Project, a dial-up connection was part of the deal and this was frequently problematic for the participants. This was reflected in their comments which included *we find it very slow* and the *computer needs to be faster*.

In one family's case the experience with dial-up Internet caused sufficient frustration that they decided they needed to finance their own Broadband access:

*It's much quicker. It's put the child's mind at rest. So he can learn things very quickly with broadband he does not have to wait like with the dial up, he just kept sort of begging me...so we sort of stretched the budget right to the limit (Maddington, 2009).*

For some families who had access to other computers, their solution was to use the faster and more reliable Internet connection. For example:

*It's very, very slow and at the moment we're actually having problems logging in. Because I've actually got broadband on my other computer, we've just given up with that one (the Technology Pack's computer). We just get really frustrated (laughs) (Collie, 2010).*

Another participant from South Hedland decided to purchase a USB 'dongle' that was supposed to provide access to pre-paid mobile broadband Internet. However, because of the poor coverage in the area, she had to return it and ask for a refund.

Due to budgetary restrictions, for many families the dial-up connection to the Internet was the only option. In some instances it was regarded as better than having no access at all and because it came as part of the package, they put up with it.

## **5.1 Increasing connectedness**

A strategic aim of the project for The Smith Family was to provide Internet-enabled computers to families to increase their connectedness. That is, connectedness between family members, between families and communities, and between individuals and external (global and local) information resources. The aim of the Tech Packs project was to engage disadvantaged groups so they could participate more fully in today's society and economy through technology.

It became very apparent to the research team that parents perceived the use of computers as synonymous with social interaction. Having convenient access to the Internet provided participants with more opportunities to communicate with family and friends. For example, three families responding to the survey saw the value of the home computer and its immediate effect on improving family relationships:

*I am glad to be able to have the computer for my son to use as he gets older for school projects etc. It brings me and my child closer, working together on the computer.*

*This experience has brought our family closer together and my daughter especially loves using it, but so do my two boys.*

*They get together (her two boys) a lot more now. Like they actually sit there and get on the computer together (Maddington, 2009).*

As a resource for social interaction, many focus group participants indicated that they had been encouraged by the positive experiences of the home computer for improved communications. There were a number of comments recorded to indicate the ways in which the computer improved their opportunities for socialisation since it was regarded as a cheaper option than other forms of communication:

*It also helped me and my family because phone is very expensive. I talk to my family and I send photos (South Hedland, 2010)*

Additionally, it was valued because it enabled participants to connect easily to others in the local and global community.

*Yes, when I first started with the computer I set up my email account and I could email my friends...and receive emails (Maddington, 2009)*

*I email my family and friends in South Australia and Western Australia (Collie, 2010).*

With the obvious uptake of the home computer as a device to connect between and within families, we refer you to the report's section 9 on digital skills that specifically discusses how the Tech Packs computer has had an impact on home and family life.

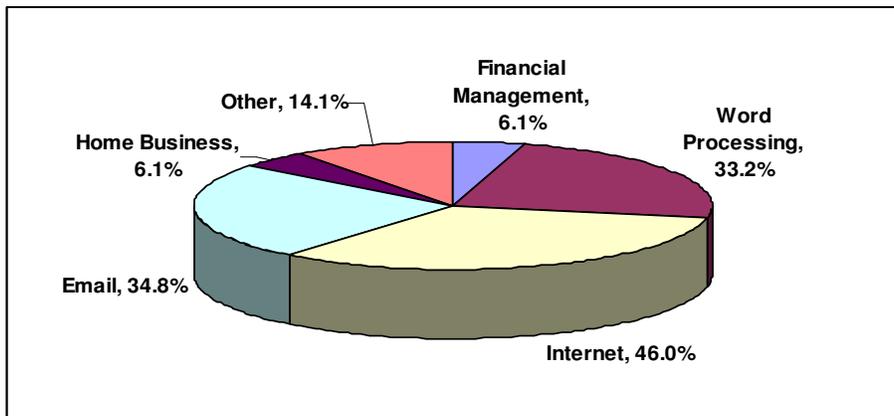
## 6. Digital Access

### 6.1 Connecting with society

Contemporary societies are often described as being information rich or as knowledge societies. It is regarded as fundamental that all citizens should benefit from the advantages that new technologies provide. Yet some people are excluded from these and this is fundamentally caused by social, economic circumstances or accessibility issues. In this section of the report, it is important to understand the possibilities that are created for families who gain digital access from receiving their own Tech Packs computer.

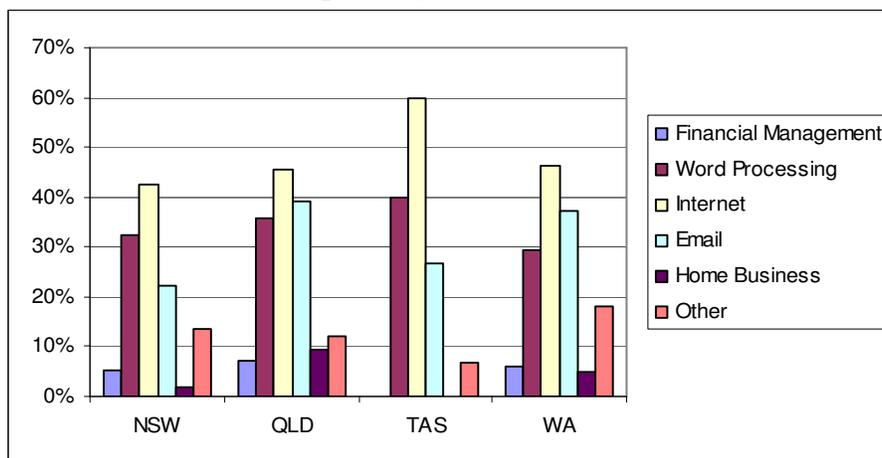
Prior to the families receiving a home computer there were opportunities for many to access and use computers within the wider community. However, around 1 in 5 (17% of the total) survey respondents (55 of the 320) stated they had never used a computer before. Figure 8 highlights the various applications reported by the 83% (258 of the 320) had previously used a computer i.e. prior to receiving the Technology Pack offer.

**Figure 8: Previous uses of a computer**



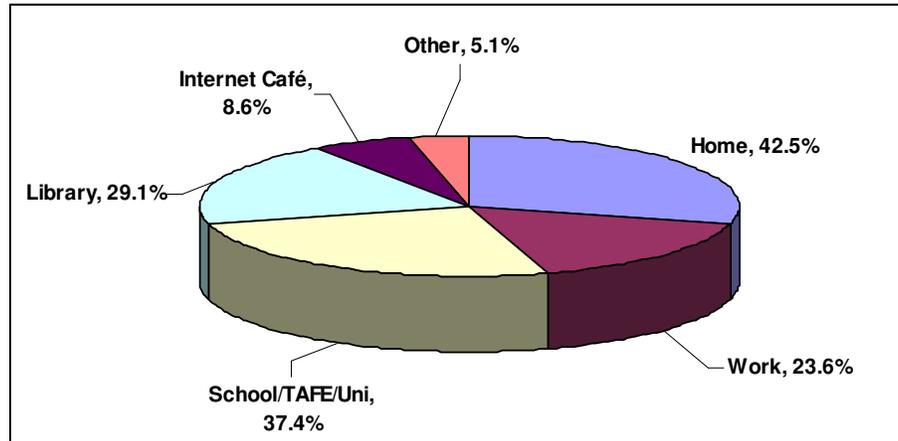
The Internet (46%), Email (34.8%) and Word Processing (33.2%) were the three most commonly identified uses. This was fairly consistent across each State as well as shown in Table 6:

**Table 6: Previous uses of Computer by States**



The depicted information shows that a considerable number of participants have at least some previous computer experience. This occurred because they were able to access computers at various places in their community as shown in Figure 9:

**Figure 9: Where participants have previously used a computer**

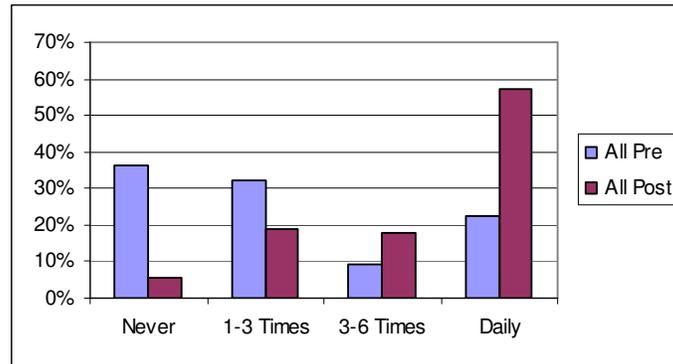


42% of the participants learnt to use a computer through previous access to a computer at home. However, for many survey respondents, educational institutions (37.4%) such as schools and TAFE institutions were seen as the most common place where computer associated learning occurred. Libraries (29.1%) were the next most popular venue which suggests they are places that are quite convenient and provide access to a number of computers in a safe and supportive environment. Work places (23.6%) only provided for 1 in 4 respondents selection, which provides further confirmation about the high proportion of unemployed within these disadvantaged communities.

Before obtaining the home computer, participants were asked in the prepack survey how often they accessed and used a computer. This was measured from 'never' to 'daily'. A relatively high number (36.3%) of the survey participants who previously owned a computer still stated they never used the computer prior to receiving the Tech Packs. This may be attributed to being influenced by the training and/or the novelty of the new Internet connected computer. Nearly a quarter of the respondents stated they had no interest, no knowledge or no need to use a computer. Thirty-two percent of the respondents stated they used a computer 1-3 times per week, 9.2% saying they used a computer 3-6 times per week and 22.4% said they used a computer on a daily basis. It is worth noting, as stated earlier in the report, 116 (36% of the total) said they had access to a computer in their home prior to the Technology Pack which could account for the 1 in 5 daily use response.

A second survey, called the post-pack survey, was distributed to participants approximately 6 months after receiving the home computer and posed the same questions about frequency of computer usage. The data sets have been used for a comparative analysis and the results are shown in Figure 10:

**Figure 10: Average times of computer use per week**



It is quite evident that once the computer is in the home there is a marked increase in use by family members. The daily use<sup>6</sup> of computers increased from 22.4% to 57.3% - which is more than half the users showing an increase. The percentage of non-users has also decreased significantly from 36.3% to only 5.6%. This indicates that just over 94% of the total respondents are using the home computer at least once a week. It suggests that participants are either more willing or more motivated to use the resource in the 'comfort' of their own home. One parent who self-identified as a novice computer user indicated how quickly this enabled her to become a daily user:

*I use it every day. Oh, probably an hour, maybe more depending on what else I've got to do. Mainly at night time. That's when I find it an advantage, late at night when my kids are in bed I can do what I need to do: pay my bills, whatever else I have to do. Once everything's done, dishes, cleaning, washing it's like well its computer time now. My time. (Collie, 2010).*

Whilst the Collie parent values the home computer as a 'good thing' because of increased access time, there are some disadvantages and concerns often raised about the possible negative effects. It has been reported in the media that excessive computer time can promote anti-social behaviours, may create a more sedentary lifestyle, or may be detrimental to one's health such as looking at a screen for too long. An example of a negative aspect of computer access is evident in the following:

*Oh, yes I was a housework fanatic. I don't do any housework now 'cause I'm hooked to Facebook. I'm hooked to Farmville, I'm hooked to farm town, fish world, you name it. I have to get home and play my games, so yeah, it's the best thing ever! (Logan, 2009)*

The novelty of the new tool can be quite captivating for parents and children alike but is hoped that the computer is used for good intentions rather than as a distraction to the necessary and essential practices required to be completed in our daily lives.

## **6.2 Perceived benefits**

The Internet connection provides family members with a new sense of belonging in their community and society. It enables people to feel connected to others and that

<sup>6</sup> Daily use was measured as the number of times someone in the family worked on the computer or the Internet. The survey did not measure how long a person used the computer in a designated session.

they have the same opportunities as others. This was reiterated by focus group participants who expressed their excitement about being involved in the project. Interviewees identified a number of ways the project had positively impacted their lives. These included feelings of increased social inclusion or “keeping up with the rest of the world”. Social inclusion was one of the strongest themes emerging from the interviews:

*Well, we feel like we're in the twenty first century, keeping up with the rest of the world... there's less of a gap in those who have and those who don't, so we're feeling, I feel a little bit more, you don't feel ashamed if someone says, aw, what's your email address, like everyone's asking for email, and I used to say, aw, I don't have one, and be a little bit ashamed that I didn't have one, but I feel better, more like everyone else. (Ashmont, 2009)*

Parents participating in the project highlighted the value of having computer access at home particularly for their children. Having access to computers at home was perceived as a catalyst for personal growth and regarded as important to feel like a ‘normal’ community member living within the knowledge society.

*These days, kids, without computer access they're not getting the knowledge they need, these days everything is to do with technology and that's our future so, it is helping our kids moving along with the future because if we didn't have the chance to get these computers, our kids wouldn't be able to grow with the technology, and now it seems like they're going to grow. (Tolland, 2009)*

Parents also understood and valued the immediate benefits of having a home computer connected to the Internet for achieving better learning outcomes. Children, who previously felt excluded because of the lack of access to digital technologies, in their homes, could now navigate the Internet to gain access to a wealth of information, additional homework and extracurricular activities suggested by their teachers. As the next interview excerpt demonstrates, the advantages of having a computer at home went beyond access to infrastructure and opened up opportunities for social inclusion and new ways of connecting learning at school and homework.

*The twelve year old, um she's got a new teacher now but the one she had last term she was on a particular site, ah I forget the name of it but it was a teaching site, and she would add extra homework for kids who could access the internet. And they'd do spelling tests and everything, every week their spelling words were on it. They could go online, do their spelling test and they'd get an award at the end if they got them right. Though we don't have a printer so we couldn't print it out but, so she loved to come home every Monday with her list of words and get online but then she's good at that anyway, so it didn't change the fact that she'd still have done it. But it got her brownie points at school because she could get online and do the extra homework that some kids, even if they had the internet, didn't choose to do. She felt good that she could, 'cos she wasn't coming home saying that 'oh I wish we had the internet on like everybody else. (Ashmont, 2009)*

An encouraging example of using the home computer for personal development was brought to our attention by one of the program facilitators about a participant of the Tech Packs project who had applied for a position at the local supermarket online:

*We've just had Aldi open here and they got offered [a job]. They did the application online, with the computer that they couldn't have done before, but because they had um they had to go to Canberra for training, and a single parent with young children at home, couldn't actually take it, but they're hoping that with the next round of staff that they will put their names down for that. (Program facilitator, Ashmont, 2009)*

Participants also reported that access to a home computer can save time and money, and provide new opportunities as shown by the previous users. These are important considerations for many people and particularly those who find themselves financially disadvantaged. Being able to access a home computer has become a significant positive feature of their lives as shown in the statements:

*Instead of going to the library and using their computers to write up our resume, we got our own now, we can update it when we want (South Hedland, 2010).*

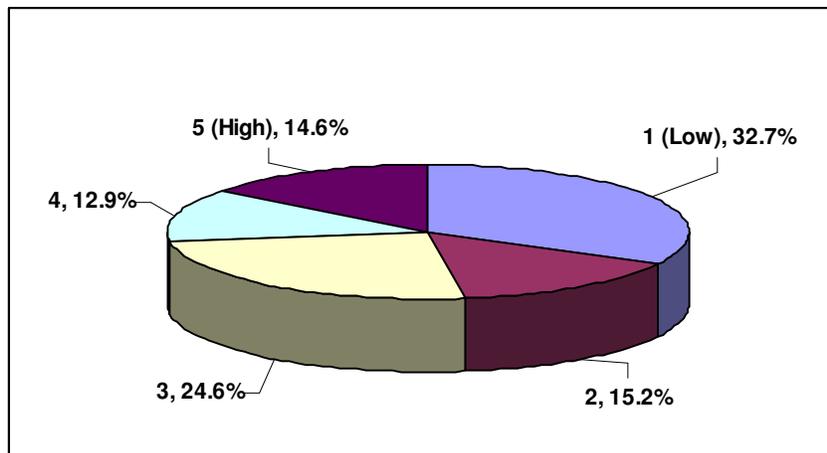
*Researcher: Before you had this Tech Pack did you have to take your daughter to the library?*

*Yeah, or she'd go to my mums. My daughter's doing HSC so she can do it all at home now, and I'm doing an online course, at home. I'm doing Community Services four. I wouldn't have been able to do that before. (Wollongong, 2010).*

### 6.3 Installing the computer

Even if computer technology is available, a person will still be excluded if he or she cannot use the technology efficiently and safely. On receiving the Tech Packs computer, parents were required to set them up in their own home. Each community provided compulsory training sessions for parents and one of the training sessions was devoted to home installation. The self reported confidence associated with this task reported from the post-pack survey is outlined in Figure 11 where respondents specify their level of agreement to a statement ranked from 1 to 5 on a Likert-type scale. 101 respondents scored themselves as having very low confidence (scored a 1) whilst 45 respondents indicated a very high confidence rating. The average score was 2.61 (out of 5), which provides an understanding of where the respondents positioned themselves in terms of their confidence levels—slightly above average (2.5).

**Figure 11: Confidence in setting up the home computer**

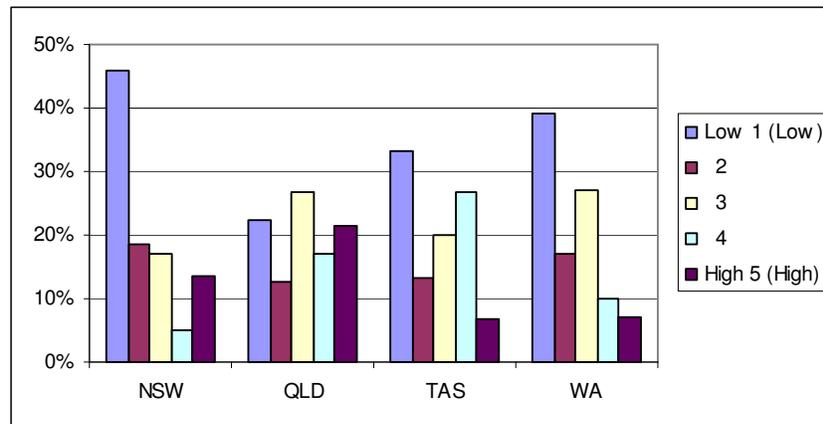


With nearly 1 in 2 parent participants (47.9%) lacking in confidence to set up the computer and only 1 in 7 parents highly confident (14.6%), the parents were still able to verbalise their success at managing and self-installing the computer following the training sessions. Comments such as *no drama* and *we had no trouble at all and I*

*don't know anything about it* were typical confirmation statements from focus group participants.

However, there were variances in confidence levels between States with parents in NSW and WA being far less confident than those in Queensland as shown in Figure 12.

**Figure 12: Confidence in setting up the home computer in each State**



With such variances, there were different responses captured from the participants in their respective States about the experience. One example of the frustration for a WA parent involved in the installation process is outlined below:

*My husband and I knew nothing about computers. I went down to the course to see how you plugged them in and all the rest of it but when we actually got them home there was no directions to tell us what we had to plug them into, so I had to ring them back and said 'look I've got no power to the screen but everything else is working'. We had one plug left over, we didn't know where that went. Because we'd never used it, it went right up underneath (Collie, 2010).*

Whilst it was only a minor problem and quickly rectified, it did prevent the parent from successfully installing the computer in the first instance. For others however, the installation process did cause unnecessary delays and there were several main reasons given for dissatisfaction with the installation which included:

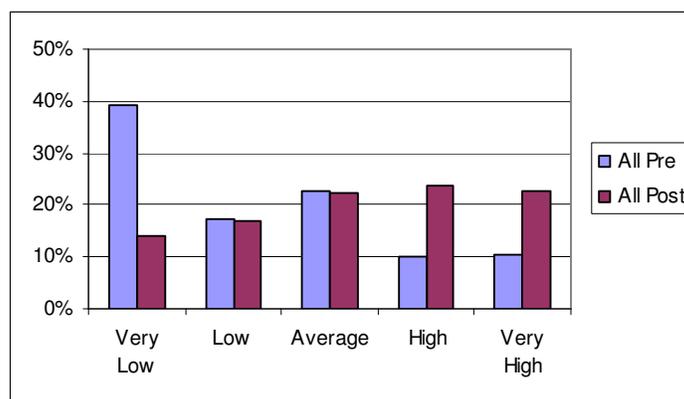
- Had computer/hardware problems
- Inexperience/reluctance to set up computer
- Not sure how to operate computer
- Not able to connect immediately to the Internet
- Experienced password/account problems

Given the identified problems were short-lived, most parents received sufficient support from either the helpdesk or the *Learning for Life* workers to overcome the problems and appreciate the opportunity the Tech Pack computer offered the family.

## 6.2 Installing software

Once parents successfully connected the home computer and had access to the Internet, they could also download or add new software as needed. This included updating virus protection software, downloading updates, or adding new software applications purchased from stores. The pre and post surveys asked participants to indicate their confidence levels at completing this task and it was noted that there was a major shift in confidence after having the computer in their home for approximately six months as shown in Figure 13.

**Figure 13: Confidence in downloading or adding new software**



It was apparent that prior to receiving the home computer, nearly 60% of all respondents - had low or very low confidence with downloading or adding software applications. This has become a basic skill for the 21<sup>st</sup> century. Yet, for many parents, it was a major challenge and continued to be a challenge even after months of home computer use. The comparison between States is shown in Table 7 where there remain large percentages of parents lacking in confidence to fulfil this sort of digital competence. In fact, about 30% of participants in the post-pack surveys in each State remain low in confidence, which can inhibit opportunities for the home computer users.

**Table 7: Confidence in downloading software**

| Confidence levels | Aust. Total |      | NSW   |      | QLD   |      | TAS   |      | WA    |      |
|-------------------|-------------|------|-------|------|-------|------|-------|------|-------|------|
|                   | Pre         | Post | Pre   | Post | Pre   | Post | Pre   | Post | Pre   | Post |
| Very Low          | 39.3%       | 14%  | 55.2% | 16%  | 25.6% | 13%  | 60.0% | 14%  | 45.5% | 14%  |
| Low               | 17.4%       | 17%  | 19.0% | 20%  | 18.0% | 16%  | 0.0%  | 19%  | 18.2% | 14%  |
| Average           | 22.6%       | 22%  | 19.0% | 20%  | 27.1% | 25%  | 6.7%  | 19%  | 21.2% | 21%  |
| High              | 10.2%       | 24%  | 3.4%  | 20%  | 12.8% | 22%  | 26.7% | 33%  | 8.1%  | 26%  |
| Very High         | 10.5%       | 23%  | 3.4%  | 23%  | 16.5% | 25%  | 6.7%  | 14%  | 7.1%  | 24%  |

For many parents it was evident that they were somewhat uninformed about what downloading meant to them and their computer. If they knew about downloading things such as virus updates, they generally had the ability to self-download required updates. If they understood downloading to be more about copying music or capturing photographs on the computer then they generally relied on their children or other extended family members who they considered as more proficient. For example, in some of the focus groups parents highlighted clear examples of when their children were 'downloading':

*And the kids, the kids get to play with it um, every time they come over on access (visiting time to the home), and um they're always on YouTube, or some musical thing, where they're looking up new songs. They're right into music um, they know how to download before I do. They don't seem to move any files or anything like that, they've done some downloading and um, printing (Wagga Wagga, 2009).*

*My son, he's worked out how to do video clips. Something happened to my computer once but because he's very good at making PowerPoint and I wanted to put it on the computer, cause I had a virus on my computer. He transferred my photos to his computer and onto his ipod (laughs) (Collie, 2010)*

*My kids download things on there too, costs 'em nothing, rather than paying for it on iTunes. They get things from Limewire and Fairshare<sup>7</sup> (Wollongong, 2010).*

The confidence levels of the parents were closely aligned to their own degree of competence. This varied greatly between users so the technology support and the training (sections 7 and 8) were important contributors to improving both their levels of confidence and levels of proficiency.

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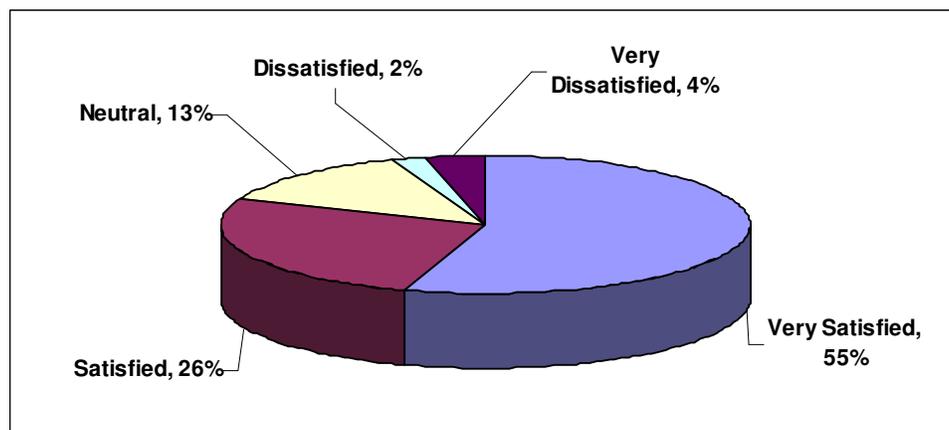
<sup>7</sup> Limewire and Fairshare are programs designed for people to share files via downloading

## 7. The Tech Pack

The Tech Pack recipients were to receive a reliable refurbished computer with some basic software, access to a 12 month Internet connection<sup>8</sup>, access to a helpdesk facility and technology support over a period of 12 months. In order to evaluate whether parents were satisfied with the computer package, post-pack surveys enabled a statistical overview with focus groups used for additional detail.

There were only 201 post-pack surveys received (compared to 320 pre-pack surveys) – 50 from New South Wales, 78 from Queensland, 29 from Tasmania and 44 from Western Australia. From the 201 respondents, 81% of the Tech Pack recipients were either satisfied or very satisfied with the quality of the computer package (Figure 14), that is, the Pentium computer, the technology support, internet and the training. There were only 6% in total dissatisfied with the Pack and that consisted of 8 families from NSW, 1 from Queensland and 2 from Western Australia.

**Figure 14: Levels of satisfaction with the Technology Pack**



Written comments from the post-pack survey showed 7 parents thought the packs should have been delivered and installed into the homes, another 7 thought there should have been better Internet service (these were from families who were on dial-up Internet), 6 families experienced hardware problems at the initial installation stage, and 4 people were not able to initially connect to the Internet<sup>9</sup>. However, only about 12% of the post-pack survey respondents expressed concerns.

The most negative comments about the Tech Pack emerged from communities that received dial-up Internet<sup>10</sup>. The Tech Packs computer included a free 12 month connection and this offer was made available in an effort to increase the connectivity of families to local and global communities. At the time this evaluation started,

<sup>8</sup> The Internet connection changed over the duration of this evaluation from dialup to broadband so different communities had very different experiences depending on the type of Internet access.

<sup>9</sup> Some communities did in fact receive a printer as part of their Technology Pack but communities were unaware to what other communities received.

<sup>10</sup> Communities that received their Technology Pack in 2010 or will receive their Pack in the future, they are connected by broadband or wireless Internet access.

communities were receiving dial-up Internet and this type of connection created speed issues for the recipients. Comments such as; *we find it very slow or, it's just too slow* were quite common. This was further complicated by some participants not having access to landline phone service. Several issues were brought up in the focus group interviews relating to dial-up Internet access. These included the unstable nature of the Internet connection when lines frequently dropped out, additional costs associated with having to repeatedly connect to the provider, not having access to the Internet and the home phone at the same time, and the inability to view or use complex web applications and/or download multimedia content. One of the focus group participants expressed her frustration:

*You get so tired of waiting. It took me half an hour to get onto a site last night. And I'm sorry, I was just so close to 'I've had this' I walked away from it. It is just so slow. (Ashmont, 2009)*

Typically though, people were reluctant to criticise the slowness because they considered the dial-up to be better than no connection and did not want to appear ungrateful to The Smith Family. One example highlights this reasoning:

*She's just happy to have access to the internet. Rather than it coming up straight away you have to sit but it comes up eventually. But trying to get something on Google, like if I want to get a map of my street it takes a fair while to come up. They [The Smith Family] gave me an opportunity to have the internet and I appreciate that and I think it's a great service (Logan, 2009).*

However, for those that had experienced broadband or wireless Internet, dial-up was considered inefficient. In fact, for some families if they had access to other computers they preferred to use it for their Internet connection. Two comments highlighted their solution to the issue:

*It's very, very slow and at the moment we're actually having problems logging in [dial-up]. Because I've actually got broadband on my other computer, we've just given up with that one [the Technology Pack computer]. We just get really frustrated (laughs) (Collie, 2010).*

*It's much quicker [broadband]. It's put the child's mind at rest. So he can learn things very quickly with broadband he does not have to wait like with the dial up, he just kept sort of begging me...so we sort of stretched the budget right to the limit (Maddington, 2009).*

Due to budgetary restrictions, for many families the dial-up connection to the Internet was the only option. It was appreciated, *because it's free*, but as the Technology Packs continued to be rolled out into various communities, dial-up was replaced with broadband or wireless. Despite the difficulties, the use of the Internet was perceived to be one of the main benefits of the Tech-Packs program. As a participant from Ashmont put it: *We'll definitely keep with the Internet in some way because once we're in it now I don't know how we could do without it.* In fact, many of them indicated their intention to upgrade their Internet service to a broadband connection in the future.

Most participants also expressed the need for having peripherals such as a printer or camera to support Internet-based activities. Table 8 lists the computer peripherals that participants nominated they owned on the pre-test survey to provide an indication of the sorts of technologies that were initially available in the home.

**Table 8: Computer Peripherals:**

| <b>Peripherals</b> | <b>All</b> | <b>NSW</b> | <b>QLD</b> | <b>TAS</b> | <b>WA</b> |
|--------------------|------------|------------|------------|------------|-----------|
|                    | No.        | No.        | No.        | No.        | No.       |
| Printer            | 69         | 5          | 35         | 6          | 23        |
| Scanner            | 27         | 2          | 16         | 2          | 7         |
| Camera             | 12         | 1          | 8          | 2          | 1         |
| Headphones         | 11         | 1          | 6          | 1          | 3         |
| Speakers           | 47         | 2          | 30         | 2          | 13        |
| <b>Total</b>       | <b>166</b> | <b>11</b>  | <b>95</b>  | <b>13</b>  | <b>47</b> |

The post-pack survey did not seek information about additional peripherals and therefore there is evidence to suggest whether the Tech Packs encouraged families to purchase additional resources. However, one feature of the Tech Pack, according to the participants, that should have been included was the addition of a DVD burner built into the computer. Participants indicated that they would use it for backing up various forms of data, such as photos and music.

*... just so with a burner, you can do your back up and everything like all of your information you can burn into onto a disk so you aren't going to loose that information if anything happens , it's always good to have a back up because I've known of people who have lost everything. (Ashmont, 2009)*

Overwhelmingly, comments from the participants clearly indicated a favourable response about the Tech Pack and there were many statements of gratitude for the opportunity it provided them and their family. Three typical samples of positive remarks from the Western Australian communities included:

*Thank you for the opportunity. The Tech Pack has been a wonderful helping aid in my family.*

*Thanks to The Smith Family very much for the opportunity that it has given my family to learn and understand about the computer life style.*

*I am very grateful to have been part of this program and hope that many more families can benefit from this as well.*

## 8. Training and technology support

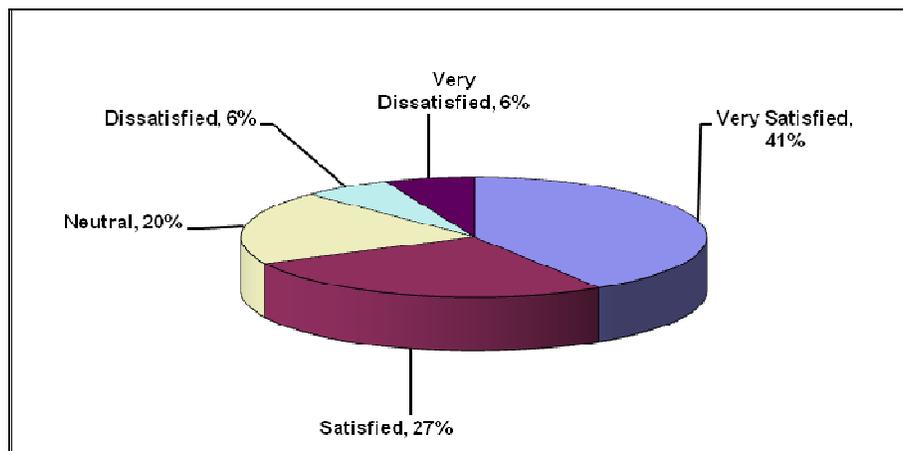
### 8.1 Introduction

For 204 of the total survey respondents, the Tech Pack was their first home computer. As such, the training and the ongoing technical support was regarded as being critical in supporting them to install their computers at home, understand how to use the computer to get the most out of the package, and ensure that they remain in good working order.

As part of the Tech Packs initiative, training was a prerequisite to receiving the computer. The *Learning for Life* facilitators in each community carefully selected suitable local candidates to be the trainer, with an important consideration being the trainers' ability to relate to people who may experience trouble with the basics. To ensure recipients had a basic understanding of how to connect and operate the computer and the Internet, training was part of the agreement to receive the computer.

The training sessions were arranged at venues that were available for the community and organised by The Smith Family *Learning for Life* workers. The venues all provided computer access, often this was in the local community centre, and were often arranged to be available once a week over a designated number of weeks (determined by each community but usually 3-4 weeks duration). The high levels of satisfaction with the training are shown in Figure 15.

**Figure 15: Levels of satisfaction with the Technology Pack training**



For the parents who had never owned a computer the training sessions were seen as invaluable and comments included:

*I could have been given a computer, but without the training it would have been put in a box at home, cause yeah, without the training it was useless. So yeah as a packaged thing I'd highly recommend it. (Wollongong, 2010)*

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*The course that we did, which I was grateful for .... I have got all the pieces of the paper that the trainer gave us all through the laundry stuck up with blue tack to remind me about all the things I need to think about...You realize that it's not that hard it's just changing my mindset (Maddington, 2009).*

*I wasn't doing any type of education and I wasn't working at the time. I went along [to the training] met [community leader] and he told me about the course, and it sounded really great to get me back involved with people and education. I thoroughly enjoyed it (Launceston, 2009)*

Some of the main suggestions made by parents who had not previously possessed a home computer and who regarded themselves as novice users to improve the training included:

- Need for a better venue
- Need for longer or more sessions as there was not enough time to learn everything
- More trouble-shooting advice required
- Provide printed material from training sessions, and
- Issue the computer at the first session so that parents can immediately practice what had been taught at the training session.

Some of the main suggestions to improve the training from parents who previously owned a computer, and were more likely to be more computer literate, included:

- Need for a better venue
- Run training sessions at more convenient times, and
- Run different sessions with different purposes/topics because the training was too basic for all participants.

Some of the venues were considered sub-standard by some of the participants in that they *had no power and there were not enough computers for all the parents to use*. One trainer mentioned how *the room is not the ideal learning environment. screen and projector facilities could be useful*. But it was difficult to find suitable venues within the community. The *Learning for Life* workers tried to organise the best available place at the time. However, even though some venues were not well regarded, the computer recipients were very supportive of *Learning for Life* workers as well as the trainers. According to the participants, the training sessions were conducted in a relaxed, friendly manner, providing everyone with ample opportunities to ask questions. Many positive comments about the trainers were provided, such as how helpful, courteous and cooperative they were at the training sessions:

*Because he came over to us, he'd tell us to do something and then we'd finish that off, and he'd say 'well go back and do it', and I couldn't do it, so he came over and told me how to do it again. [laughs] So yeah, he was really patient and we learned a lot, yeah (Airds, 2009).*

*It was informal, but that was the beauty of it too because it was laid back, and we knew it wasn't hard to ask you a question and get the answer you know some people would be too straight and you'd be scared to put your hand up and say you didn't understand, and the fact that we could walk in and out if we had to. (Ashmont, 2009)*

*She [trainer] was actually good. She was down to earth and um, just worked with one on one basis. Like she seen (sic) what we could do, and asked us what we wanted and what we'd like to do and stuff like that and just went through each one and asked us if we were alright and if we had troubles. She was there to help us get through it. (Tolland, 2009)*

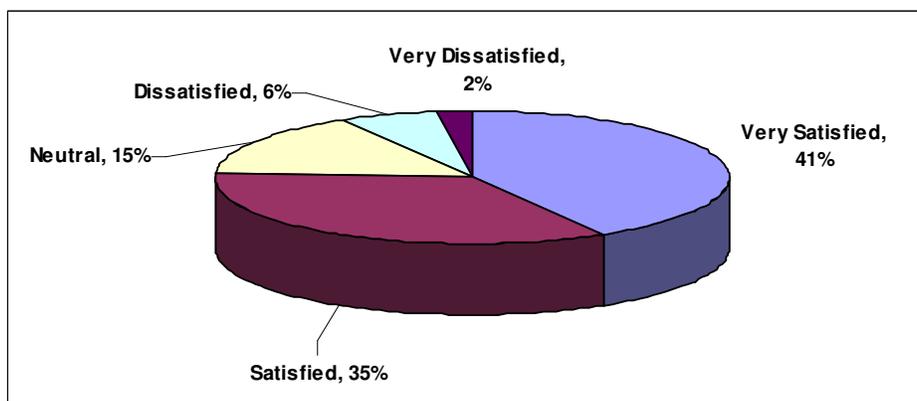
However, some participants' responses also highlighted their need to have access to computers at home during the training sessions because it hindered the effectiveness of the training process and created additional difficulties for those with a lack of technical skills.

*Not having the computers at home while having the training session made things a bit difficult. Not everybody can remember everything. And you need to go home and you like go through those steps, cos the more you do it the more familiar you are. (Ashmont, 2009)*

## 8.2 The final training session and the distribution of the computer

In every community, the last training session was devoted to providing the Tech Packs computer and outlining the installation process. For many participants, particularly those who had not previously owned a computer, their lack of confidence to self-install (see Figures 12 and 13) was seen as a real challenge to configure the computer into their home. However, the vast majority (76%) of adult participants were satisfied or very satisfied with the installation session in the final training session. There were only 6% dissatisfied and 2% very dissatisfied with the process.

**Figure 16: Levels of satisfaction with the installation session**



The specific numbers from each State can be seen and compared to the total Australian cohort numbers in Table 9.

**Table 9: Levels of satisfaction with installation – numbers per State**

| Levels of Satisfaction | Australia | Australia | NSW | QLD | TAS | WA |
|------------------------|-----------|-----------|-----|-----|-----|----|
| Very Satisfied         | 41%       | 75        | 16  | 33  | 10  | 16 |
| Satisfied              | 35%       | 63        | 16  | 29  | 8   | 10 |
| Neutral                | 15%       | 28        | 8   | 12  | 1   | 7  |
| Dissatisfied           | 6%        | 11        | 5   | 2   | 2   | 2  |
| Very Dissatisfied      | 2%        | 4         | 3   | 0   | 0   | 1  |
| No Response            |           | 20        | 2   | 2   | 8   | 8  |

When asked specifically about the installation process in the focus groups, a large number of participants spoke positively of the experience. The findings of the focus group interviews indicate that none of the participants faced significant challenges in

setting up their Tech Packs at home. Many were able to set up the computers themselves and only a few needed help from family members or other participants. For many it was,

*Easy. We had no trouble at all and I don't know anything about it (Gold Coast, 2009).*

For others they used external help which often included family or extended family,

*Actually I didn't do anything, my older sister she did it all. She is in IT (at TAFE). She set it all up (Gold Coast, 2009).*

Whilst for some, there were problems:

*One program kept popping up every 15 minutes and I did contact the centre because its actually changed my whole home page and yeh their instructions they gave me haven't fixed it so I have just left it as it is and work around it. It comes up with a circle that keeps going round and round saying connecting (Logan, 2009)*

### **8.3 The trainers' perspectives**

The aim of the training was to improve the skills and knowledge of the computer users. It is important to capture the views of the trainers and ascertain their reactions to the participants involved in the training. In this way, all parties are represented and issues are clarified surrounding the delivery of the training service. However, only 5 trainers responded to the surveys<sup>11</sup>.

All 5 trainers, 4 male and one female, indicated they had previously undertaken postgraduate studies including two who had a Bachelor degree with Information Technology. They were all consistent in their views that the course content was appropriate (in some cases there was a manual provided) and covered a good range of skills applications, with appropriate attention to cyber safety and virus software. All trainers were satisfied with the way they presented the content and when asked on the survey what they felt was their biggest achievement, two written comments included:

*Inspiring some participants to learn more and addressing confidence issues.*

*To see someone who had never used a computer create, save, format and retrieve a document.*

The first session was considered to be an important lead in to future sessions as it was critical to ensure participants returned for future classes. All trainers reported that there was a focus on the basic operations of the computer but felt that some technical details were not understood by new computer users. In fact, from the first session the trainers soon realised the diverse range of computer experience within their training group which made the delivery of content quite challenging. This was summed up by two responses:

*Varied experience, mostly keen and enthusiastic. A bit boring and basic for the one or two who had good computing skills.*

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<sup>11</sup> Whilst there were only 5 trainer responses from the many communities to receive training, there would have been a number of reasons trainers may not have received or sent surveys.

*It was difficult at times to coordinate a program to suit every participant. They were all at such different levels.*

The diversity of abilities in each group was one of the biggest challenges facing the trainers. In addition, it was evident that some participants turned up to the training because they had to (as part of the Technology Pack requirement in order to receive the computer) rather than because they felt they had a chance to improve their digital skills. As the training sessions continued, this was identified by 4 of the trainers as a problem. According to one trainer, the diversity in skill levels, lack of motivation and irregular attendance often hindered effective delivery of planned content knowledge and the acquisition of necessary skills:

*I would make a lesson plan and could never follow it, because of one reason or another whether it be people being at different levels, um people just not caring, people not turning up, um so there was just, like I have books at home, full of notes and things on the way I was going to run it, but you don't, you just can't really stick to anything. I don't know if you should have a class of people who 'really wanna be here' and then (laughs) people 'who are here just to get the computer' you know, cos I think that that was hard, and just the inconsistency of people turning up and then not turning up. (Trainer)*

As a response to these difficulties the trainer embraced a negotiated approach to learning, adapting her teaching style and choice of topics to participants' needs and interests:

*... we went in and talked about what we wanted to learn. They wanted to learn about the Internet, they wanted to know how to download pictures, they basically wanted to learn things that helped them connect with their own family. They were the main things. Email and Facebook were the biggest ones. (Trainer)*

The only other significant concerns identified by the trainers were based around the poor quality of the training venue. It was reported by some of the trainers (including responses from The Smith Family trainers who were in attendance at focus group sessions), that there were some venues that:

- did not have sufficient working computers for the number of attendees
- the Internet was not always reliable, and
- there was a lack of resources for the trainer e.g. Data projector.

This was a difficult task for The Smith Family *Learning for Life* workers as they were often inhibited in their choice of venue and/or not supported by local schools with better facilities. In one community they experienced much difficulty in being able to even locate and employ a suitable trainer.

As well as the training, the Tech Pack included ongoing technical support to aid and assist participants to resolve any matters that inhibited their computer use once it was in their home.

### ***8.4 Ongoing technical support – the helpdesk***

To provide a positive user experience and increase the success of the program in the post-training period, technical assistance<sup>12</sup> was made available to participants of the

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<sup>12</sup> During the course of this evaluation there were 3 different organisations providing the helpdesk support so there are differences in responses across the various communities

Tech Packs program via a free helpdesk line. The helpdesk was used by 77 families (from the 201 post-pack survey respondents) at one time or other for a multitude of issues. The various reasons for using the helpdesk were generally centred on problems associated with hardware malfunctions or the families being unable to connect to the Internet. The main reasons given by 53 of the survey respondents that required them to contact the helpdesk included:

- Hardware problems – faulty parts e.g. CD drive 18
- Unable to connect to the Internet 12
- Password/username problems 7
- Computer crashed 4
- Computer viruses 4
- Printer problems 3
- Software problems 3
- Other (e.g. dial up and home phone) 2

The levels of satisfaction, as reported from the surveys and shown in Table 10, suggest that most people were generally satisfied with the helpdesk service. There were higher levels of dissatisfaction from families in NSW and Tasmania.

**Table 10: Levels of satisfaction with the helpdesk**

| Levels of satisfaction | All | NSW | QLD | TAS | WA  |
|------------------------|-----|-----|-----|-----|-----|
| Very Satisfied         | 50% | 35% | 57% | 50% | 52% |
| Satisfied              | 22% | 15% | 20% | 30% | 26% |
| Neutral                | 16% | 31% | 14% | 0%  | 13% |
| Dissatisfied           | 7%  | 12% | 4%  | 10% | 6%  |
| Very Dissatisfied      | 5%  | 8%  | 4%  | 10% | 3%  |

The focus groups in particular, revealed that not all participants had a clear understanding of the role of the helpline. While a number of participants experienced technical difficulties such as forgotten logon details, a flickering screen, crashing computers and difficulties with connecting peripherals such as printers and digital cameras, many of them were reluctant to contact technical support. Reasons for not using the available resources included embarrassment, feelings of incompetence, and/or being concerned about not being able to explain the problem:

*I worry that I'm not going to understand what they're trying to tell me anyway and that I'm going to sound even more stupid (Ashmont, 2009).*

Other issues included spending prolonged periods on the phone and not being able to talk to the same person twice. This was particularly relevant to the communities that had dial-up connection.

*They'll try [to] do something for you, and then you hang up. Then when you ring back you get a different person who's got no idea what's going on (Ashmont, 2009).*

Other participants indicated that they would rather seek out family or friends to resolve issues and problems rather than contact a help line. In this way, children, grandchildren and friends were often approached when help was required rather than

the helpdesk. For example, one of the senior participants was given a printer for her birthday which when connected, crashed her computer. She rang a local friend to ask for help:

*I sent a text message to a friend that lives down round the corner that's supposed to be sort of like an IT person, and she actually told me what to do and to go away and just unplug it and do whatever she said, is it out of a jail time once, and at that time I didn't have a printer, but she was going to send to me via email, what to do if it ever happened again, um but I didn't have a printer to print it out, so I'll have to get her to do it again, and um serious, every single thing we went to, if there was anything wrong with the computer, I got it. When we, when we went over to that day, I got it. (Ashmont, 2009)*

Some participants simply put up with faulty equipment and developed their own strategies to cope with challenges posed by owning a computer:

*My screen blinks off every now and then when I go to turn it off, I turn it off at the power point and count to twenty seconds, turn it back on, and it usually comes back on (Tolland, 2009).*

While this section of the report revealed a number of technical challenges, the Tech Packs program was certainly well-received and this was clearly highlighted by the focus group participants and from survey results. To report on the changes and benefits of the program the next section includes data appropriate to digital skills and digital literacies.

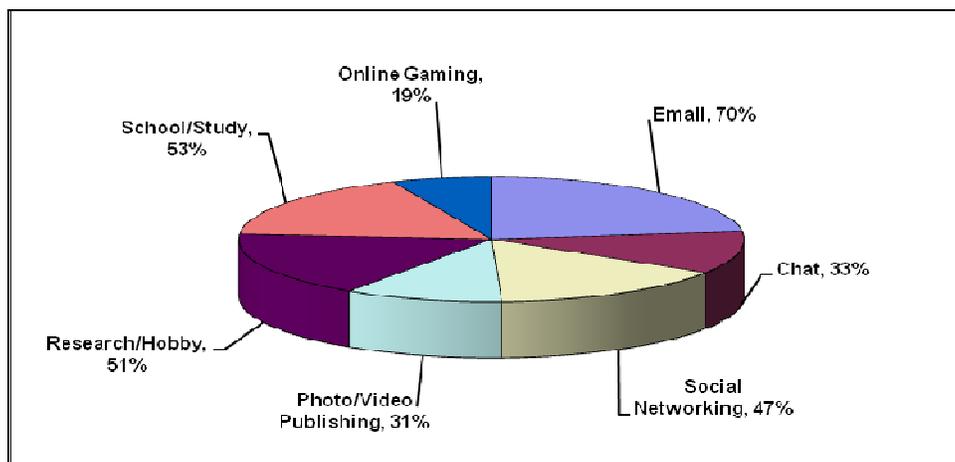
## 9. Digital skills: Parents

### 9.1 Increased social opportunities

One of the most significant benefits of the Tech Packs project was to increase opportunities for social access and participation for all family members and its potential to act as a catalyst for achieving better educational outcomes for children.

The post-pack surveys captured participants' digital skills acquisition, their choice of computer applications and the benefits specifically matched to parents and to children. The survey responses are enriched by the inclusion of focus group responses that help to describe the shift in the acquisition of digital skills since receiving the Tech Packs. Figures<sup>13</sup> 17 and 19 provide an overview of the various computer applications used specifically by parents. Figure 17 highlights those applications considered as self-interest type, whereas Figure 19 focuses on applications more aligned to work or business functions.

**Figure 17: Self-interest Internet applications**



It is evident from Figure 17, that parent's use of the Internet included searching for information for both personal interest and education-related matters. Additionally, emailing, social networking and chatting are all very popular activities and enable communication between users in a local and global space. Indications from interviews suggest that social network sites, particularly Facebook, are an increasing trend for parents to access and use on a regular basis. Evidence of this occurred at many of the focus groups where parents or members of their family engaged in some sort of social networking process as a communication resource:

*It is a social network. Um it's important to my kids cause their dad's in Perth so that's the way they connect with him (Seven Hills, 2010).*

*His family [her husband] is in Melbourne and I talk to them through Chat and Facebook. (South Hedland, 2010).*

<sup>13</sup> Figures 17 and 19 would suggest a total greater than 100% but parents were able to indicate more than one response so the percentages are the total participants who indicated each of the applications.

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*My oldest daughter [reported as a working adult] as well she's on Facebook so she can communicate with her aunties and that. We've got a lot of family spread around everywhere (Collie, 2010).*

*When I'm on Facebook I can also chat to my friend [via Facebook's chat facility]. The great thing about Facebook is, like, I can talk to all my family 'cos my family is so spread out. I've caught up with all my Year Seven friends from school and we're having a reunion at the end of the year (Collie, 2010).*

*I use Facebook for communication with my friends and games. I made a new friend from Canada (Launceston, 2009)*

*I only use the computer now to go on and speak to family, yeah through email or Facebook (Seven Hills, 2010).*

*... 'cause I'm from New Zealand, I've picked up so many friends I used to go to school with, now, that have contacted me, and I haven't been back for ten years. It's really good, I love it, and yeah it's the best thing ever (Logan, 2009)*

Facebook was also popular for non-communication reasons:

*Through Facebook we're looking for another house, and yeah even looking for a house it's made it so much easier. It's just made a lot of aspects of our life so much easier (Wollongong, 2010).*

*I play Farmville. I've got a crop going so I've got ta go on and harvest a crop then ...(laughs) (Collie, 2010)*

Using the Internet for education purposes was also popular with parents and it helped them in their own study pursuits, particularly courses linked to TAFE studies. The first example shows how the Tech Pack allows the parent to do their studies at home rather than have to remain at the institution to complete their work. The second example shows how the computer has become an integral part of the daily routine including their TAFE study. The third example highlights the value of the home computer for nurturing the family relationship and meeting study requirements for a younger member of the family. All examples provide evidence of the value the home computer contributes to family members, who previously had to find alternative, and often inconvenient, ways to fulfilling their study requirements.

*Well I'm a full time student at TAFE and it's helped me a lot. I've been at TAFE six years, so now I can take my homework home from TAFE and do it at home as well (Collie, 2010).*

*I have come a long way since July. When we lost the password a few weeks ago I felt like I'd had my arm cut off. I could not operate without it. I probably use it more than the kids. I use it for everything but don't use it for banking. I use it for my TAFE course, community services (Gold Coast, 2009).*

*My son's doing business at school, and he's gotta do Excel. I've studied in Excel so I can give him, ah, give him the help with his Excel for school. And um, he's been downloading, he's been putting stuff onto his little ah USB, and taking them to school, and making sure that they're up to date You can do it at home, and you can take it to school, and then they'll teach them the next step up, and then I'll show him. I'll show him how to do that, and then he'll go to school and he'll feel more confident with it (Logan, 2009)*

For many disadvantaged families it is well documented that household budgets are very tight with little money to spare, as demonstrated from family incomes in Table 2.

After receiving the home computer some of the parents were pleasantly surprised by the small cost savings they could make simply by using the computer rather than the telephone to communicate with family. Two examples highlight their awareness:

*I do it on Facebook with my sister. She doesn't live very far but it's easier and cheaper than talking to her on the mobile (Launceston, 2009)*

*Oh yeah, it's enabled me to be in more contact with my family than I would have been because you know, you can't afford to ring long distance all the time. Whereas you go onto the computer and it's like 25cents [a guesstimate of computer cost] and I've spoken to this person on Facebook and yeah so it's made life a lot nicer for us being able to speak to family members (Airds, 2010).*

There were many examples of recreational uses of the computer reported by focus group participants. Readily available access provided parents with the opportunity to do their own research in their own time and space. Three examples that demonstrate some of the diversity of interests from just one focus group included:

*I like the GWN news, the everyday news that comes onto the television later on during the day. If you go on the internet you can get it before it comes on the TV. I enjoy that. My husband's always on it. He looks at the older model cars, motorbikes, things that interest him (Collie, 2010).*

*I've found it good to look for medical, medications that my family are taking and I can have a read up on the good and bad of them I find that helps me a lot (Collie, 2010).*

*I browse for recipes and things like that and its quite interesting (Collie, 2010).*

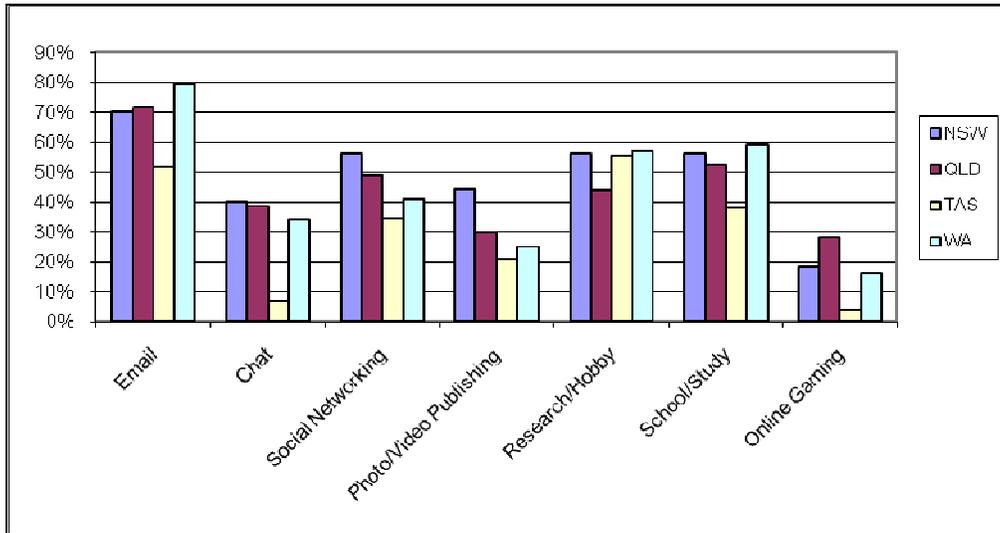
For many parents, the opportunity to use photographs and/or publishing software was also popular and provided many an avenue to be involved in sharing their life with others. As one parent said, *she likes to make her own little photos*. However, like any new tool, the computer and all its different programs and applications takes a willingness to try and a need to use it. So for many new parent users the computer remains a learning process in the home and it takes time to get to know which applications are available and how to use them. Two parents explained their learning curve:

*She [her daughter] gets on and finds the photos and stuff like that. She knows how to get them off the camera, I don't. I sit there and watch her (Collie, 2010).*

*There's like photos on mine, cause we got one of those printer scanner, I think from the post office, one of those three in one things, for like fifty something dollars and when you scan a picture in for me to get the photo onto Facebook, it doesn't scan as JPEG. It scans as something else, and so it wouldn't go on Facebook and I was getting really angry and going, "Why won't it go on there?" I ended up having to take it to a computer place and he downloaded some software for me so it would be a JPEG instead of something else (Maddington, 2009)*

The number of parent respondents who highlighted their personal usage in each State is shown in Figure 18. The Figure displays the percentage of parents who used the different applications from respective States. The use of Email is clearly the most popular application with online gaming as the least reported application. The results suggest there are no significant differences between families across Australia except for Tasmania's much smaller response to using Chat and online gaming.

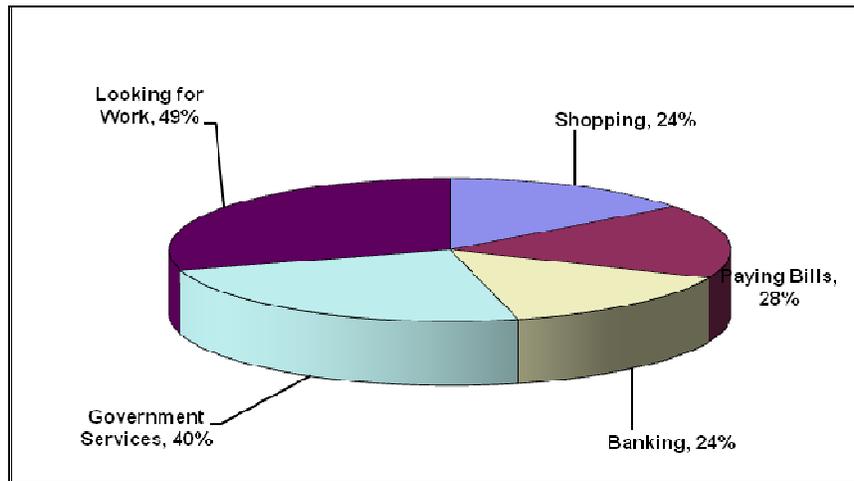
**Figure 18: Self-interest Internet applications by State**



### 9.2 Increased work opportunities

There appeared to be 5 main ways in which parents used the Internet for work-related or business type activities. These included using the Internet for shopping or banking, paying bills online, accessing government services such as Centrelink, or seeking jobs online. Figure<sup>14</sup> 18 outlines the percentage of post-pack survey respondents who indicated they utilise the described services or practices on a regular basis.

**Figure 19: Work or business type applications**



Accessing and using work or business type Internet sites allowed the parents to fulfill some daily routines from home and provided opportunities to be involved in employment activities. Previously for many parents this was either not possible, not convenient or they were unaware of the possibilities.

<sup>14</sup> Figure 18 will have a total percentage greater than 100 because parents were able to nominate more than one of the 5 identified practices.

Of the 201 parent respondents in the post-pack survey, 99 (49%) of them used the Tech Packs computer to look for work. In Queensland, 63% of the parents reported this as one of their main Internet activities. In contrast, only 21% of the Tasmania respondents used the Internet to seek work, although one good example is shared from a Launceston person who reported the potential of the computer for work-related purposes:

*I'm actually doing my diploma in massage, and I go to Launceston 2 days every 4 weeks. I do all my other work correspondently so I'll be using it quite a bit. (Launceston, 2009)*

Three focus group participants shared their thoughts that emphasise the value of the home computer for job seeking and work related activities that were previously unavailable to them:

*It's helped me with my work. My boss can email me, instead of sending me dodgy text messages (Logan, 2009).*

*I do voluntary work at the Salvation Army in the office so things that I learn up there I can actually now do at home as well. When I am ready to go out into the workforce I know more about computers so it [the home computer] gives me that opportunity (Gold Coast, 2009).*

*Looking for work, without the computer I'd have had to walk around and drop resumes in. Wouldn't be easy. Have to go to the library and use their computer (Wollongong, 2010).*

*I just look up anything that my other half can go and work (laughs) (Collie, 2010)*

*Yeah I go onto the national job seeker website and I go in there and put in information and look for work. (Airds, 2009).*

Accessing government services was another important Internet use for the parents with 40% of post-survey participants stating this as an important and useful addition into their way of life. Queensland (49%) and NSW (44%) respondents were the two States that used these services more frequently than the others. Typical examples included:

*I go check on Centrelink sites, and I go looking on job network sites looking for work. (Airds, 2009)*

*Yeah Centrelink, banking I do them online. You don't have to stand in the bank queue (Launceston, 2009)*

Paying bills and banking were also seen as valuable Internet applications with every State having a core group of parents using these applications as part of their everyday life. 28% of the total number of respondents said they used the Internet to pay their bills online while 24% stated they used Internet banking. This was fairly consistent across the four States as evidenced by the following three comments:

*Banking I do yeah 'cause it's easier to go on there and click your account balance than to sit on the phone and... Sometimes, yeah just checking my account balances, sometimes checking my car payments, yeah I do, make transfers through my car payments (Tasmania, 2009)*

*What I do on pay day, the money's in the bank, and I just sit there and Bpay out of my bank account over the internet, and then I know how much money I've got left and I know that they've instantly been paid and it's just 10minutes of your time that just would otherwise be parking, walking around, walking around and into this place paying here doing this, doin' that. Then going down to the post office, and it's not only that it's a risk to take the money in your wallet to get to the post office to pay your rent (Airds. 2009)*

*Internet banking, yeah it's great I really like that. I don't have to go down to the post office to pay all my bills. They're even gunna send me my bill through internet banking, and then I just pay it! (Seven Hills, 2010)*

It was very noticeable from communities throughout Australia that when Internet banking or shopping were mentioned, the attention was drawn to discussions around safety and security as integral to online use. Initially too, new computer users are reluctant to deal with money online, but as computer confidence and knowledge grows, so too does the willingness to do computer transactions.

*Banking's a little scary because you know, you're still, a little suss. I use my Bendigo bank account when I want to transfer money or pay something. Before it comes out of my account this thing beeps, and I've got one minute to put that code in to the computer in a section and it's never the same code. So that's not bad. That helped me, gave me a little confidence. (Collie, 2010).*

*I have had people email me and tell me to put in my password and I just delete it. I don't take any notice because the bank actually tells you 'we will never ask for that information' and I know there's lots of scamming people around that. I know it's a bit risky but... (Airds, 2009)*

*I can't use money things on it yet, 'cause I'm trying to fix my security internet, so I'm not very um, game on doing it just yet, but um, I use it for emails and that, yeah, it's more for leisure (Maddington, 2009)*

*I can't use money things on it yet cause I'm trying to fix my Internet security (Port Hedland, 2010).*

Parents' descriptions of online shopping highlighted how quickly many of them had changed their thinking and had started to appreciate the Internet as an important resource for convenience and as a money saving device. This is elaborated by many favourable comments received at focus group sessions.

*I pay all my bills, everything: my electricity, water, my rent, anything that I buy online I pay through that as well. Cos it's just so easy. You don't even have to leave the house to spend money. (Wollongong, 2010)*

*So it's there every Wednesday of every fortnight and I can go and pay it straight away and I have proof on my statement, that I paid rent on such 'n such date and I have the proof. There's a history in the bank site and a receipt number. So I've got my proof on my end that I paid it. And it's just, I'm very wary of carrying money around, and especially over there because there's been a couple of people at the ATM's been robbed (Airds, 2009)*

*Yeah my partner uses it, ebay buying carparts, motorbike parts. Yeah cause he can get things from wherever and it's a lot easier than having to make 20million phone calls (Collie, 2010)*

Whether for leisure or work-related reasons, the evidence from the parents clearly highlights how the home computer has become an integral part of their life and an important addition to the way they manage and use their time.

### **9.3 Increased confidence with different applications**

To further comprehend the changes in parents' confidence levels, the following tables compare the post-pack survey responses (n= 201) with the pre-pack survey responses (n=320) with regard to five of the more popular computer applications. The tables show the responses for all states as well as for individual states. They outline the percentages of respondents specifying their level of agreement to given statements.

Each table presents a comparison over time and the figures are percentages of the total post-pack responses. They have been rounded off for ease of reading.

***Parents and Email***

In Table 11, parents’ responses are recorded to show how confident and competent they perceive themselves at using email. The results depict a significant increase in confidence levels for a large proportion of parents across Australia. Prior to receiving the computer 57% of the parents rated themselves as being low or very low in confidence in using email. Approximately six months later 26% of the parents increased their confidence levels, with 47% of the parents indicating high to very high levels of confidence. However, even after 6 months with the home computer 31% (approximately 1 in 3 parent respondents) still had low levels of confidence about using email.

**Table 11: Confidence levels with email**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 40  | 14   | 55  | 16   | 26  | 13   | 60  | 14   | 46  | 14   |
| Low       | 17  | 17   | 19  | 20   | 18  | 16   | 0   | 19   | 18  | 14   |
| Average   | 23  | 22   | 19  | 20   | 27  | 25   | 8   | 19   | 21  | 21   |
| High      | 10  | 24   | 3   | 20   | 13  | 22   | 27  | 33   | 8   | 26   |
| Very High | 11  | 23   | 3   | 23   | 17  | 25   | 8   | 14   | 7   | 24   |

***Parents and the Internet***

In Table 12, parents’ responses to their levels of confidence and competence are presented for their use of the Internet. This appears to be the most used application by parents. The figures reveal that 72% of total responses across all states indicated that they felt highly or very highly confident as Internet users. This is a significant shift from 36% in the pre pack survey.

**Table 12: Confidence levels with the Internet**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 25  | 6    | 35  | 5    | 18  | 7    | 40  | 5    | 26  | 7    |
| Low       | 14  | 6    | 22  | 5    | 9   | 7    | 7   | 11   | 16  | 5    |
| Average   | 26  | 15   | 26  | 19   | 26  | 13   | 27  | 21   | 26  | 12   |
| High      | 16  | 33   | 9   | 37   | 19  | 31   | 13  | 26   | 15  | 34   |
| Very High | 20  | 39   | 9   | 35   | 28  | 41   | 13  | 37   | 18  | 41   |

***Parents and word processing***

Word processing appears is probably the most widely used application in terms of being regarded as a (digital) skill in the knowledge society. It is probably the most common computer application used in schools and workplaces. Yet the word processing skills of parent participants was reported as being very varied in the context of this research. Approximately one third of the Tech Packs participants reported high levels of confidence in using word processing software. Table 13 presents the distribution of the survey responses submitted by parents regarding their confidence and competence in using this software application. From the statistical data it is evident that around half of the parents in each of the States initially lacked confidence with word processing skills. However, over time, the total number of parent indicated that they experienced an increase in confidence and a vast improvement from their initial 35% with very low levels of confidence. In fact, 59% of parents reported high and very high confidence with regard to using a word processor after six months in the Tech Pack project.

**Table 13: Confidence levels with word processing**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 35  | 10   | 51  | 3    | 23  | 13   | 53  | 5    | 37  | 15   |
| Low       | 11  | 15   | 10  | 21   | 12  | 9    | 0   | 11   | 13  | 21   |
| Average   | 23  | 16   | 24  | 21   | 21  | 16   | 20  | 16   | 25  | 10   |
| High      | 19  | 32   | 12  | 33   | 25  | 31   | 13  | 42   | 16  | 26   |
| Very High | 12  | 27   | 3   | 23   | 19  | 30   | 13  | 26   | 10  | 28   |

***Parents and spreadsheets***

Similarly, spreadsheets are another commonly used application in schools and in some work situations, although it is not as commonly used for home purposes. Home exceptions to this might be those people who use it for a small business or record keeping for home finances (e.g. taxation records). The figures shown in Table 14 suggest that not more than 22% of survey respondents perceived themselves highly competent in using this software package across the four States, with participants from Tasmania reporting the lowest levels of confidence. The trend does show a decline in very low confidence levels and significantly shifts from 47% to 22% over time. Commensurately, there is a gradual increase in confidence levels occurring over time but the high confidence levels are still only reported by a third of the parents (33%).

**Table 14: Confidence levels with spreadsheets**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 47  | 22   | 60  | 13   | 36  | 24   | 60  | 27   | 51  | 24   |
| Low       | 18  | 23   | 16  | 34   | 22  | 14   | 20  | 36   | 15  | 24   |
| Average   | 20  | 22   | 16  | 16   | 23  | 26   | 0   | 18   | 21  | 22   |
| High      | 9   | 15   | 9   | 16   | 11  | 18   | 13  | 18   | 8   | 8    |
| Very High | 6   | 18   | 0   | 21   | 9   | 18   | 7   | 0    | 6   | 22   |

***Parents and PowerPoint***

The presentation software PowerPoint was also available to Tech Pack participants to use. In Table 15, parents responded to how confident and competent they perceived themselves at using PowerPoint. While there are increases in the reporting of higher confidence levels in using PowerPoint over the time period from the pre to the post pack surveys, there still seems to be less interest or use, of this particular application. Only 21% reported high levels of confidence with PowerPoint, across the states. This may be explained by the lack of relevance of this application to parents' lives and daily activities.

**Table 15: Confidence levels with PowerPoint**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 50  | 28   | 66  | 23   | 37  | 26   | 53  | 20   | 56  | 39   |
| Low       | 14  | 14   | 11  | 21   | 17  | 9    | 7   | 30   | 14  | 13   |
| Average   | 18  | 22   | 16  | 26   | 21  | 24   | 13  | 10   | 17  | 16   |
| High      | 8   | 15   | 5   | 10   | 12  | 15   | 7   | 30   | 7   | 16   |
| Very High | 10  | 21   | 3   | 21   | 14  | 26   | 20  | 10   | 7   | 16   |

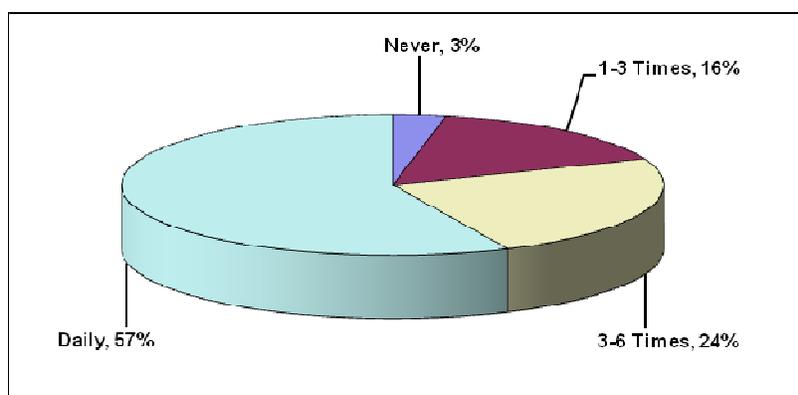
The next section of the report outlines the digital skills of the children in the context of their home computer use.

## 10. Digital skills: Children

### 10.1 Children and the home computer

In this section of the report, attention is given to the ways in which the children perceived the benefits of the computer since its introduction into their homes. There were 170 children responses to the post-pack survey questions. It was this group that provided the follow-up statistical data to evaluate their involvement in the Tech Packs program. The children were not involved in focus groups and therefore the statistical data does not include more detailed follow up comments. They also indicated the number of times they used a computer each week (Figure 20).

**Figure 20: Times children use the computer**



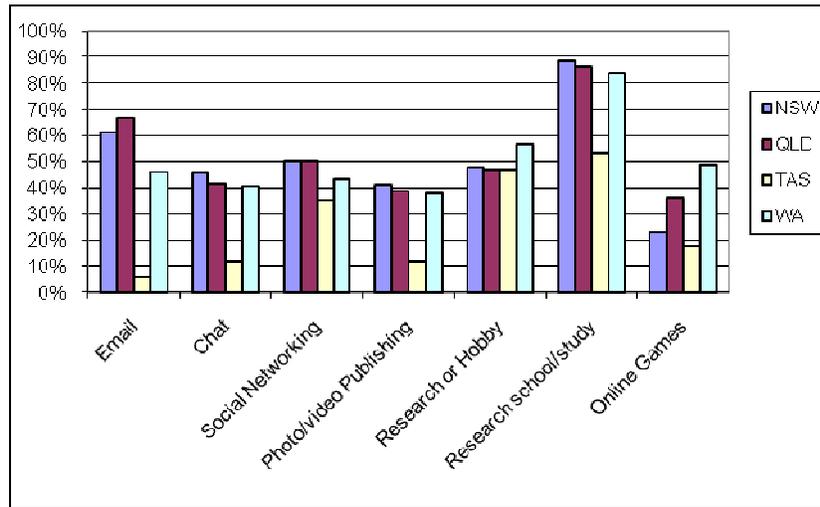
The majority of participating children (81%) stated they use a computer at least three times a week (NB: this can also include a school computer). This indicates that the children are active users of technology although the survey only captures the frequency of use, not the length of time they spend on the computer

**Table 16: Uses of the Internet in the home**

| Internet Uses                 | All (n=170) |     | NSW (n=44) |     | QLD (n=72) |     | TAS (n=17) |     | WA (n=37) |     |
|-------------------------------|-------------|-----|------------|-----|------------|-----|------------|-----|-----------|-----|
|                               | No.         | %   | No.        | %   | No.        | %   | No.        | %   | No.       | %   |
| <b>Email</b>                  | 93          | 55% | 27         | 61% | 48         | 67% | 1          | 6%  | 17        | 46% |
| <b>Chat</b>                   | 67          | 39% | 20         | 45% | 30         | 42% | 2          | 12% | 15        | 41% |
| <b>Social Networking</b>      | 80          | 47% | 22         | 50% | 36         | 50% | 6          | 35% | 16        | 43% |
| <b>Photo/video Publishing</b> | 62          | 36% | 18         | 41% | 28         | 39% | 2          | 12% | 14        | 38% |
| <b>Research or Hobby</b>      | 84          | 49% | 21         | 48% | 34         | 47% | 8          | 47% | 21        | 57% |
| <b>Research school/study</b>  | 141         | 83% | 39         | 89% | 62         | 86% | 9          | 53% | 31        | 84% |
| <b>Online Games</b>           | 57          | 34% | 10         | 23% | 26         | 36% | 3          | 18% | 18        | 49% |
| <b>Shopping</b>               | 14          | 8%  | 3          | 7%  | 8          | 11% | 1          | 6%  | 2         | 5%  |
| <b>Banking</b>                | 11          | 6%  | 1          | 2%  | 7          | 10% | 1          | 6%  | 2         | 5%  |
| <b>Government Services</b>    | 31          | 18% | 6          | 14% | 19         | 26% | 2          | 12% | 4         | 11% |
| <b>Looking for Work</b>       | 45          | 26% | 8          | 18% | 26         | 36% | 4          | 24% | 7         | 19% |
| <b>Other</b>                  | 2           | 1%  | 1          | 2%  | 0          | 0%  | 0          | 0%  | 1         | 3%  |

When computer use is categorised into either leisure (Figure 21) or being work related (Figure 22) some variations in use appear.

**Figure 21: Self-interest Internet applications**



For many of the children involved in the Tech Packs Project clearly the most popular use of the Internet is for searching and researching sites for education purposes and/or for self interest. Communication sites and applications are also highly regarded and popular uses. The Internet provides children with an opportunity to become involved in applications and activities that they feel are relevant to their school life and social world. The most frequent uses are for school research or study purposes with 83% of the total Australian children cohort listing this as one of their primary uses. In Queensland the number is even greater at 86%, while in Tasmania the number drops to 53%.

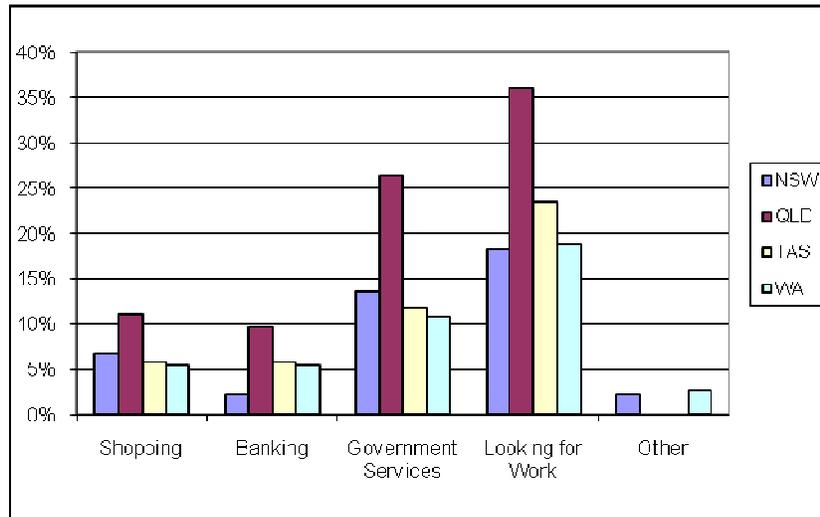
The computer as a social resource is also clearly evident from the responses. For email (55% use by Australian students), chats (39%), and Social Networking (47%) which are all well used communication applications except in Tasmania where the numbers are much lower (see Figure 21). This however, could be partly due to the small number of child respondents in this survey.

Online games for children are also very popular with 34% of the total cohort using Internet games for entertainment. This would equate to one in every 3 children participating in gaming, which may initially be concerning for some parents and community members. However, there is evidence to show that the use of games and simulations can enhance pupils' reasoning and decision-making (Romeo, 2010). Therefore, the issues may be more about how the online gaming and social networking are controlled and monitored in the home environment.

## 10.2 Using the computer for work

In addition to the computer being an educational resource, many older children used the computer for work or business reasons as shown in Figure 22.

**Figure 22: Work-related Internet uses**



It must be noted that there were a number of children/young adults at an age where they were either in the workforce or trying to enter it. Hence the reason for the high percentage of children/young adults using job seeking applications and accessing government services. This is particularly evident in Queensland where 36% of the children/young adults are using the Internet to seek work and 26% are accessing government services for information about work related issues.

## 10.3 Educational benefits

As the evidence from Table 11 suggests, the home computer for children has become a valuable tool in their social world. But it is also well regarded by children as an education resource and the survey contains many comments from parents who justify its value as a useful and important education tool. There also is evidence about the children using the computer to improve their digital literacies:

*He's saved documents into this computer so that for school work if he needs to go back and find something, he's got his own little folder, that he knows he can go into that folder, get out information. It's just things like that, it's so many little things that you take for granted when you don't have one. (Airds, 2009)*

There is evidence of the children using the computer for mathematics, and in particular, using a program called Mathletics that *they're constantly on. It's one of the online school games (Logan, 2009)* designed to encourage individual students to challenge themselves and demonstrate their own improved levels of competence. One parent believes the computer provides the *opportunity as she feels that her son just needs repetitiveness, so him coming home and doing it there as well as school is good and (Seven Hills, 2010)*, will enhance his mathematics learning.

There is also evidence from parents that their children use the computer for research,

*When he had an assignment for um, visual arts and he had to research, he had to find a photo and he had to research the artist and he Googles the name of the artist and the painting and he used that information to do his assignment. He's used it to do English assignments and for books he's had to research, and he can just Google the information. That amazes me. He knows he's not allowed to just print it out and put his name on it and give it in (laughs) um but yeah basically he Googles information he needs to work on and then he takes that, prints that out. (Airds, 2009)*

And importantly, for many families, particularly those who have previously not had access to a home computer, it eases the pressure and makes things much easier around the house when managing school work and meeting commitments. For example,

*Yeah I got a daughter, she's in Year 11, so she does a lot of her assignments on it. That's mainly why I got it [the Tech Pack computer], for my kids. It's a lot easier than going to the library or whatever. It's convenient. (Wollongong, 2010)*

*I find my daughter doing HSE is not as stressed now. As soon as she comes home and she's got it, she doesn't have to worry about whether my mum's home [to take her to the library for computer access] she just does it and it's done. She's not just freaking out all the time. (Lithgow, 2009)*

According to many parents, the computer has become an effective and important educational tool that has helped to improve the digital literacies of their children. The following comments highlight the educational benefits respondents attributed to the Tech Packs project:

*On her report one of the main things she was lacking was computing skills. The teacher actually said she was one of the few peer leaders who didn't have a computer. Now she's just way up there and above. She's come a long way. (Gold Coast, 2009)*

A reliable computer can be a valuable resource for children with learning disabilities. Research indicates that children with special needs benefit from learning with new technologies at a number of levels. This includes improved sensory and physical access, improved opportunities for interaction and communication and more engaging learning experiences (Liu, Cornish and Clegg, 2007). There were a number of families from the disadvantaged communities that reported having a child in their home with particular learning needs or learning disabilities. For these families, the computer was highly regarded as it enabled the child to learn at their own pace, with their preferred applications, with the chance to take risks, and in a way that complements their own learning style.

*We've got a little granddaughter and she's got some disabilities. Um she's working 2 years behind her levelled age, and she works with a computer at school. So she's come home and she's teaching us how to use the computer, but she's very fast and she can't explain it, she can only show us. She's in grade six but she has a lot of problems with writing and things like that. She has an aide with her all the time, and she's quite bright in lots of things, she can read. Especially when she goes for the spelling, um and I don't know how she finds it but she does, there's missing letters in words and she's got to fill the letters in. and it's really, really helped her, and you can see her reading all the words. By the time I've finished reading them through she's flicked and gone somewhere else. (Collie, 2010)*

*I think it's helped my little ones behaviour, like he's got autism and of course ADHD and for him to be focused on something for a good period of time, for more than 30 seconds it's a good thing, you know cause he's very active. When he's on the computer he loves it, but he always wants my help and it frustrates me cause I've got so much I need to do (Seven Hills, 2010).*

#### **10.4 Increased confidence with different applications**

Similarly to the way in which the data was presented regarding the parents confidence levels with different applications, the following tables present how the 170 post-pack survey children responses compared to those in the pre-pack (n = 216). The children ranked their own confidence levels in relation to some of the different applications. The tables show a comparison between the Australian cohort as a whole, and each of the four states, and outlines the percentages of respondents specifying their level of confidence about each one. It is important to note that Tasmania has only 6 responses from children suggesting their data would be unreliable, and it is not representative of the State cohort.

Responses provided by child participants of the Tech Packs evaluation indicate that the so called 'digital natives' are much better at utilising digital tools for a number of purposes compared to their parents. This is consistent with trends in society in general regarding generational differences related to the use of new technologies.

##### ***Children and Email***

For children the use of email remains a relatively easy application for them to use. Table 17 shows how confident and competent children perceive themselves at using email. Forty two per cent of children feel highly confident in using email, compared with 37% of parents. In fact, nearly half (42-50%) of the children in each of the states reported high levels and very high levels of confidence using email. The lowest levels of confidence in communicating via email as reported by children were from WA (36%). The figures from New South Wales and Tasmania show a marked change over time with both States having large increases in their confidence levels since the initial survey results we obtained and tabulated.

**Table 17: Confidence levels with Email**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 35  | 15   | 50  | 15   | 27  | 11   | 67  | 17   | 3   | 25   |
| Low       | 12  | 11   | 10  | 13   | 16  | 8    | 11  | 0    | 11  | 18   |
| Average   | 20  | 13   | 13  | 13   | 14  | 16   | 11  | 0    | 30  | 7    |
| High      | 11  | 19   | 20  | 15   | 5   | 22   | 0   | 33   | 14  | 14   |
| Very High | 21  | 42   | 8   | 44   | 39  | 43   | 11  | 50   | 15  | 36   |

##### ***Children and the Internet***

When looking at children's use of the internet, results indicate that the Internet proves to be one of the most frequently used digital resource for a variety of purposes. As

figures 22 and 23 suggest, the most frequent uses of the internet are for work and study and related research/information seeking, with social networking and online gaming also being popular secondary activities. This is a significant finding and suggests that the Internet can be a social catalyst of vital importance that offers young generations of all backgrounds avenues for information seeking, knowledge construction and participation in society.

In Table 18, children responded to questions about their confidence and competence in using the Internet. Table 18 highlights children's level of confidence, on average, is higher than levels of competence reported by their parents (48% of children were highly confident compared to 39% of parents). It also demonstrates the large percentage of children who were confident Internet users and after 6 months with the Tech Packs computer which is a significant increase across each of the States.

**Table 18: Confidence levels with Internet**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 22  | 8    | 38  | 5    | 17  | 8    | 40  | 7    | 15  | 13   |
| Low       | 12  | 7    | 5   | 12   | 14  | 6    | 10  | 0    | 14  | 7    |
| Average   | 25  | 11   | 23  | 12   | 25  | 11   | 20  | 21   | 28  | 7    |
| High      | 14  | 26   | 23  | 22   | 6   | 33   | 10  | 21   | 16  | 17   |
| Very High | 28  | 48   | 13  | 49   | 39  | 42   | 20  | 50   | 27  | 57   |

***Children and word processing***

In Table 19, children responded to how confident and competent they perceive themselves at word processing. The highest levels of confidence and competence related to this software application were reported by children from Tasmania, with 56% reporting to have high level skills using a word processor. It is important to draw attention to the small sample size from this State, which may have an adverse effect on the reliability of this finding. When compared to Table 14, figures presented in Table 19 also indicate that the higher levels of competence in using word processing were reported by children than their parents (36% compared to 27%). This could be explained by frequent use of this application for school work and study purposes.

**Table 19: Confidence levels with word processing**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 31  | 13   | 40  | 14   | 26  | 11   | 56  | 11   | 26  | 20   |
| Low       | 14  | 11   | 10  | 11   | 13  | 11   | 33  | 0    | 15  | 17   |
| Average   | 23  | 20   | 28  | 22   | 16  | 22   | 0   | 22   | 29  | 13   |
| High      | 13  | 19   | 13  | 16   | 13  | 22   | 11  | 11   | 15  | 20   |
| Very High | 19  | 36   | 10  | 38   | 31  | 35   | 0   | 56   | 16  | 30   |

***Children and spreadsheets***

Table 20 outlines children's self-reported confidence and competence when using spreadsheets. Similarly to their parents children reported limited competence in using spreadsheets. Only 23% of the children rated themselves as highly confident with

spreadsheets compared to only 18% of parents. More than one third of child participants perceived themselves having low levels of confidence when using this software application. The lowest levels of confidence using spreadsheets were reported by children from WA.

**Table 20: Confidence levels with spreadsheets**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 47  | 31   | 68  | 36   | 43  | 21   | 78  | 33   | 34  | 45   |
| Low       | 15  | 18   | 8   | 14   | 13  | 19   | 22  | 0    | 21  | 21   |
| Average   | 18  | 12   | 13  | 6    | 11  | 18   | 0   | 33   | 29  | 7    |
| High      | 8   | 16   | 10  | 14   | 6   | 19   | 0   | 0    | 8   | 14   |
| Very High | 13  | 23   | 3   | 31   | 27  | 23   | 0   | 33   | 8   | 14   |

### *Children and PowerPoint*

In Table 21, children responded to how confident and competent they perceive themselves at using PowerPoint. It was anticipated that the levels of confidence in using this software package would be somewhat higher to those of parents, given its frequent use in schools for study purposes. Only one third of surveyed children reported high levels of competence in using PowerPoint (compared to 21% of parents) with the exception of 67% of participating children from Tasmania. Once again it is important to mention that the low sample size could have affected this result.

**Table 21: Confidence levels with PowerPoint**

|           | All |      | NSW |      | QLD |      | TAS |      | WA  |      |
|-----------|-----|------|-----|------|-----|------|-----|------|-----|------|
|           | Pre | Post |
| Very Low  | 40  | 27   | 55  | 27   | 39  | 20   | 67  | 33   | 31  | 40   |
| Low       | 14  | 13   | 8   | 11   | 15  | 16   | 11  | 0    | 17  | 13   |
| Average   | 18  | 9    | 18  | 8    | 10  | 13   | 22  | 0    | 24  | 3    |
| High      | 9   | 17   | 18  | 19   | 0   | 19   | 0   | 0    | 13  | 13   |
| Very High | 18  | 34   | 3   | 35   | 36  | 33   | 0   | 67   | 15  | 30   |

## **10.5 Protecting children online**

For many parents, overseeing the behaviours and usage of computers by their children was a key component of ensuring the computer was properly managed and used appropriately. Many parents commented on the way the computer was organised in the family home to ensure it was used appropriately as an entertainment resource.

The most common practice that many of the parents used to monitor the use of the computer was to *have it in the lounge room and I can see everything that they do* (Wagga Wagga, 2009). There were very few reported cases where the computer was placed in a bedroom away from parental supervision except under extenuating circumstances. These included having no other available house space, because the child had a learning disability and the computer was devoted to her learning needs, and it was to be a shared computer arrangement just between the children.

The Tech Pack computers were preloaded with virus software such as Spybot, a program designed to scan and fix the computer hard drive for malicious software as a means to safeguard the computer and the users from unnecessary risks. The Tech Pack also included Adaware software to help protect children when they were online.

The training sessions also included sessions to inform parents about such programs and how to protect their children online. Topics in the training sessions included handouts from the Australian Communication and Media Authority to assist in informing parents about regulating online content.

What was evident from focus group discussions was that parents in general were very mindful of what their children were doing on the computer. In many cases the parents were so tentative and protective about their children and their computer usage, there was an agreed arrangement about checking on them. Whilst the first check system was recognised by the positioning of the computer, and the parent was able to check in an open and transparent way, sometimes the parents had to be more deceptive. Two examples included:

*When I went into her settings, it comes up with all the games she's been playing and there was this one particular thing and my friend looked at me and we went on and had a look, and we were like 'Oooh we're deleting that.' She accidentally went into something she shouldn't have so I've been keeping an eye on her with what's been going on with Facebook and everything. (Collie, 2010)*

*Cause I've got 13 and 16 year old girls I'll get on and have a look at what they're doing. I've got a 9year old son, who's friends with them so I go through his [Facebook]. The girls will just change their password, so I've kept my sons on so I get on his to check everyone else out [laughter]. (Wollongong, 2010).*

However, children are often more computer savvy than their parents and can have the capabilities to outsmart their parents and avoid being closely supervised such as in the example below:

*My sons going through puberty he's bound to know how to have two screens on the computer and flick one off when mum comes in. They showed us how to work that out at the training yeah and how to check history but my son actually deletes everything, so he's too smart when I'm not home (Lithgow, 2009)*

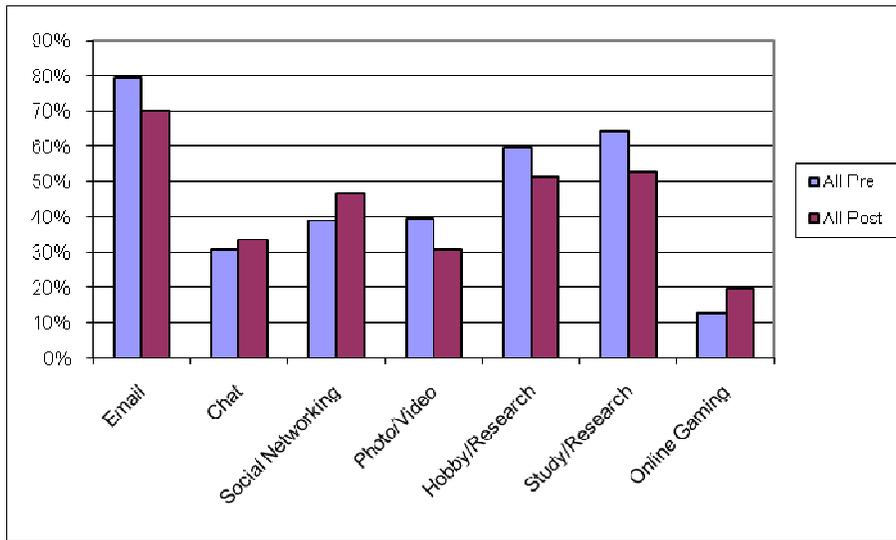
## 11. Predicted versus actual use of computers and the Internet

### 11.1 Parents

In this next section of the report, survey data from the prepack surveys is compared to the post-pack surveys that highlight a shift in how parents intended to use the home computer with how they eventually did use the computer. This comparison is taken from 320 prepack survey respondents (204 with no previous home computer and 116 with previous ownership) compared with 201 post-pack survey respondents.

Using the same approach as in previous sections of the report, where the results are categorised into leisure and work-related applications, Figures 23 and 24 highlight the shift from predicted intentions to actual computer usage.

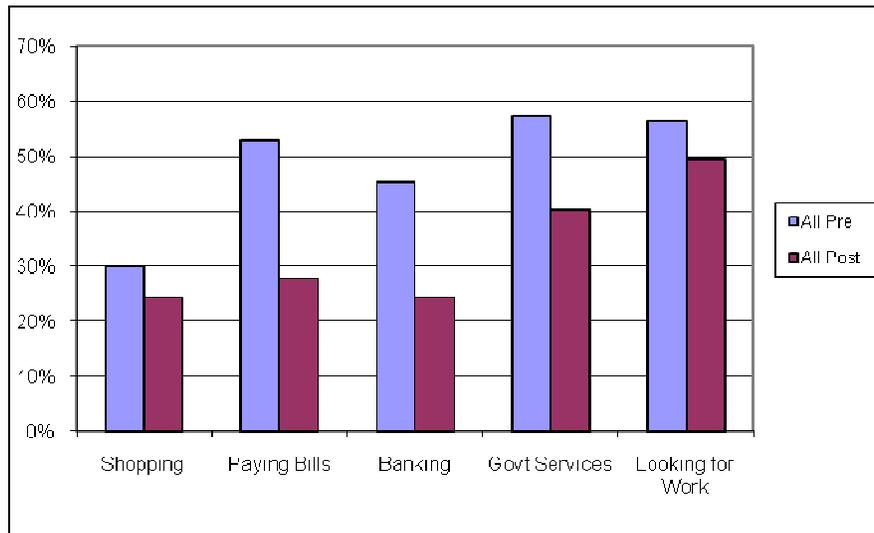
**Figure 23: Self-interest Internet applications**



For parents, the main predicted applications included email and the Internet for study/research and for hobbies/research. This remained relatively as predicted with approximately 10% of the respondents not requiring or using these applications as they initially intended.

Using chat facilities, social networking applications e.g. Facebook, and online gaming were determined to be slightly more popular than initially envisaged by the parents.

**Figure 24: Work-related Internet uses**



For parents, the Internet was considered a potentially valuable working resource to assist in daily chores such as paying bills, accessing government sites, looking for work and doing their banking. In reality, after 4-6 months of home access, it was not used as first envisaged. Instead of the predicted 3 out of every 5 parents using the Internet for accessing government services, only 2 out of every 5 parents did actually access and use these services on a regular basis.

Instead of 1 from every 2 parents using the Internet to pay bills, only about 1 in 4 parents opted to use this facility. Similar percentages exist for banking. This may be influenced by participants' lack of understanding and/or lack of familiarity with methods of secure monetary transactions via online banking methods.

The two activities that had the closest correlation between predicted computer use and actual use were looking for work and shopping. In the case of looking for work, about 1 in 2 parents predicted in the pre-survey that they would use the Internet for this purpose and post-surveys reveal that to be in the vicinity for parents' actual use.

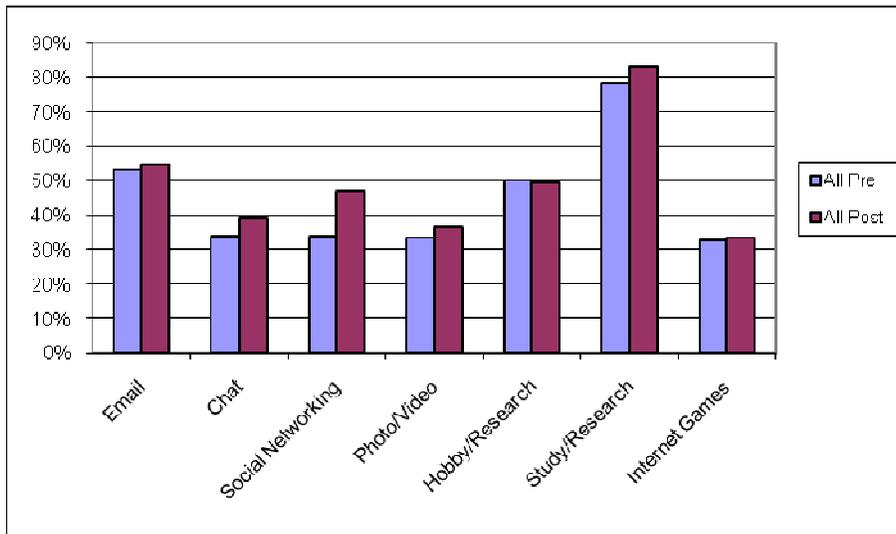
1 in 3 parents predicted they would use the Internet for shopping, that is, 30% of the respondents. From the post-survey data it was reported that 1 in 4 or 25% of the parents did in fact state they used the Internet for shopping as they intended.

## 11.2 Children

For the children, the comparison of predicted versus actual computer use is taken from 216 prepack survey respondents compared with 170 post-pack survey respondents.

Using the same approach as in previous sections of the report, where the results are categorised into leisure and work-related applications, Figures 25 and 26 highlight the shift from intended to actual computer usage.

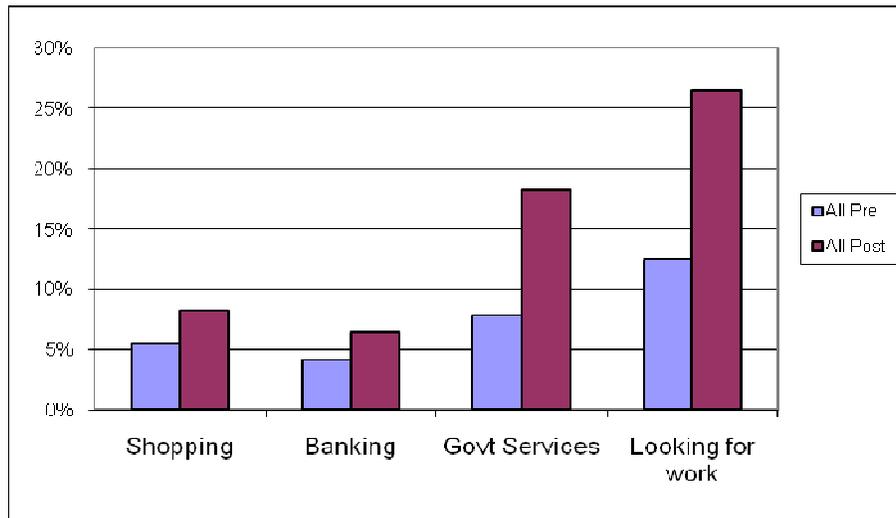
**Figure 25: Self-interest Internet applications**



For children, the main predicted application was based around study/research and this was confirmed in the post-survey as clearly the most desirable attribute of the home computer. In fact, approximately 80% of the children cohort valued this as a valuable resource.

While most applications remained relatively as predicted between intended computer use and actual use, the two activities that had much higher uptakes were the social networking and Chat opportunities. Social networking increased from 34% intended use to 47% actual use and Chat increased from 34% to 39%. Both of these communication sources appear consistent with what is known in society about the digital natives and their passion for these sorts of resources.

**Figure 26: Work-related Internet uses**



From Figure 26 it can be concluded that the computer has become a very valuable commodity for work-related activities although it must be noted that there would only be a relatively small percentage (not able to be determined from the surveys) of young adults in a position to respond to these applications.

Less than 6% of the children thought they would use the Internet for shopping, 8% actually reported shopping on the Internet as a valuable addition to them. This is quite an increase given the short time frame the children had access to the home computer,

Whilst banking remained low in use with only 6% reporting their actual use, this is still an increase from the 4.2% who predicted they would use the Internet for this purpose.

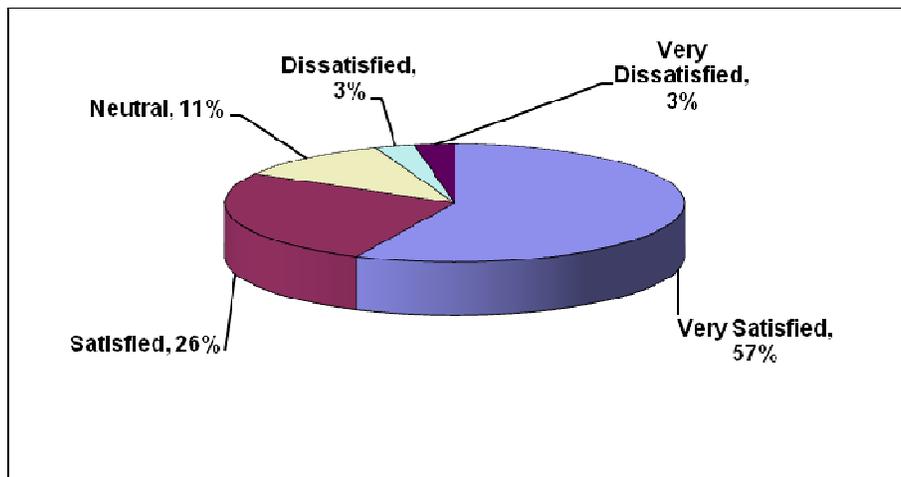
The biggest increases for the young adults occurred with accessing government services and using the computer to look for work. Only 8% of the respondents predicted they would use the computer to access government services e.g. Centrelink, but 18% indicated they found it a valuable resource.

Only 12.5% of young adults predicted they would use the computer for job seeking yet 26% found this to be a valuable resource.

## 12. Satisfaction with the Tech Packs Project

At the end of the surveys and during the focus group interviews, parents were asked about the value of the Technology Packs computer and its impact on their families. There was overwhelming support for the opportunity it provided and the benefits it has given their children, in particular benefits related to their schooling. This is clearly evident in Figure 27 from the 201 post-pack survey respondents.

**Figure 27: Satisfaction with the Technology Pack**



These figures are tabulated below, showing positive satisfaction levels in each of the States.

**Table 22: Satisfaction with the Technology Pack**

|                   | All | NSW | QLD | TAS | WA  |
|-------------------|-----|-----|-----|-----|-----|
| Very Satisfied    | 57% | 50% | 57% | 80% | 53% |
| Satisfied         | 26% | 36% | 29% | 10% | 18% |
| Neutral           | 11% | 9%  | 11% | 0%  | 20% |
| Dissatisfied      | 3%  | 0%  | 3%  | 5%  | 5%  |
| Very Dissatisfied | 3%  | 5%  | 0%  | 5%  | 5%  |

Those that expressed levels of dissatisfaction (6%) were generally those that experienced technological problems and/or found the dial-up connection unworkable. However, for the vast majority, the benefits were very well received and many positive comments were made about the computers helping the family; as an entertainment tool; and as a valuable resource for undertaking work or business tasks on a daily basis. Common themes reported by parents from the post-surveys highlighted that the computers:

- helped children with their school work,
- enabled them to do research,
- facilitated contact with family and friends,

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- were convenient e.g. for shopping, banking, looking for work
- brought the family into the world of technology
- created experiences that brought the family closer together
- allowed users to become more aware of the technological world we live.

Given that the Tech Packs ‘deal’ only lasts 12 months, there was also a survey question about its long term sustainability beyond the agreed time: *Do you plan to extend your Internet Connection beyond the first 12 months?* From the 201 post-pack respondents, 144 stated they intended to continue their Internet connection, 22 said they would not, 15 remained unsure and 20 failed to respond.

To this end, the home computer has become an important asset and seen by many of the family recipients as an essential resource for living in today’s society. To the organisation that enabled this opportunity, parents conveyed their thanks, and the following message was a typical response:

*Our family thanks The Smith Family very much as I could not have afforded a computer. We are all very fortunate to be with them (Collie, 2010).*

## 13. Key Findings and Conclusion

Findings of this report indicate the Tech Packs Project has provided a number of significant benefits to participating community members and has positively affected their personal lives. As previously stated, the Tech Pack Project aimed to:

- Connect families to technology
- Increase computer literacy skills
- Increase opportunities for society engagement,
- Increase school and educational benefits

A succinct summary of the key findings under these headings is provided below:

### *Demographics*

Of the 312 pre-project surveys which provided background details:

- 279 participants were females and 31 were males
- 61 of the respondents (18.7%) self-identified as Aboriginal and Torres Strait Islanders.
- 58% of the participants (176 in total) were from single parent families while nearly 8% had grandparents as the central parental figure/s in daily care of the children.
- 90.5% of respondents earned less than \$39,999 a year
- 87% of respondents spoke English as their first language, 13% of families identified other languages being used at home on a regular basis.
- 62% of respondents indicated secondary schooling as their highest level of education. 25% indicated TAFE and 7.2% of the cohort indicated higher education as their attained education level (University 5.8% and post-graduation 1.4%).
- A total of 962 children were involved, through their families, in the Tech Packs projects that were evaluated over the 2½ year period. The average number of children per family being 3.

### *Connect families to technology*

- For 64% of participants surveyed, the Tech Pack was their first home computer.
- Of the 201 post pack surveys returned, 83% of participants were either Satisfied or Very Satisfied with the TP project
- 69% of participants were Very satisfied or Satisfied with basic computer training provided
- Approximately three quarters of the survey respondents indicated 'cost' as the main reason for not owning a home computer, as shown in Figure 7. Another one fifth of the total participants indicated their own lack of computer knowledge as a factor in not previously purchasing a home computer.
- Four to six months after receiving the Tech Pack, 94% of the total respondents reported using the home computer at least once a week.

- The helpdesk was used by 77 families (from the 201 post pack survey respondents). 72% of respondents were very satisfied or satisfied with the support provided by the help desk.
- From the 201 post-pack respondents, 144 stated they intended to continue their Internet connection after the twelve month project period.

***Increase computer literacy skills***

- Responses provided by child participants indicate that the so called ‘digital natives’ are much more confident at utilising digital tools than their parents.
- 83% of child respondents reporting using their home computer for school research or study purposes, 34% for online gaming, 86% for social networking and chat and 36% for sharing photos and videos.
- After completing Tech Pack training and receiving their Tech Pack computer:
  - 80% of parents reported using their computer for social networking and chat
  - 70% of parents reported using their computer for email
  - 53% of parents reported using their computer for study/ school related purposes and
  - 51% of parents reported using their computer for research and hobbies
  - 49% of parents reported using their computer to look for and apply for work
  - 40% of parents reported using their computer to access government services
  - Confidence in their ability to use the various applications associated with the computer was reported by parents and children
  - Parent’s confidence in using the internet increased from 36% to 72% in high/ very high categories
  - In using email and word processing increased to 47% and 58% respectively
  - Parent’s reported that they were eager to find out about all the various applications available to them

***Increase opportunities for social engagement***

Included:

- Feelings of social inclusion and connectedness, “keeping up with the rest of the world”.
- Improved family relations and reduced stress - parents taking children to libraries/ centres to complete school assignments, banking and shopping online, improved communication with extended family and friends.
- Saving money – using the computer for financial management, shopping and selling online (ebay).
- Personal development - opportunity to pursue further study and apply for work online.

***Increase school and educational benefits***

Included:

- 80% of students recognized the most important use of the computer as being for study/ research.

- Reported improvements at school, ease of completing school assignments, opportunity to pursue further study, research
- 83% of respondents were very satisfied / satisfied with having the computer and most gave their reasons as being related to increased opportunities for their children to do their school work using a computer as the main reason for this.
- Confidence levels about using the internet rose from 42% to 74% in the high/ very high rating level

As both qualitative and quantitative findings suggest, The Smith Family's Tech Packs Project has made a significant impact in terms of closing the gap caused by the global digital divide and provided participants with a hope to emancipate themselves from poverty and social exclusion. This can be reflected in many comments but one parent in particular, who stated:

*We feel we have caught up with the rest of the world. It is good for our self-esteem to have a computer and an email address like 'everyone else'.*

The quantitative and qualitative data reveal that additional benefits of the Tech Packs Project pertain to enabling participants to feel more positive about connectivity and communication in the digital age. Their use of new technologies has meant that they feel less socially isolated and more involved in communities of practice that are relevant to their lives, both locally and globally. More than three quarters of the participants have indicated that they are satisfied that they were afforded the opportunity to participate and their confidence levels of using computers and the Internet have increased considerably. This feeling of increased confidence with technology is an important one since participation and use of computers and associated peripherals is integral to functioning effectively in society today.

Specifically, the project has enabled them to communicate with friends and family and for business purposes via email and through various web sites. Participants access social network sites and gather information that assists them to study and research as well as do things for pleasure. In this way, they use it for both study and leisure purposes.

The Tech Packs initiative has had benefits across the age spectrum. Predominantly the focus has been on families with school aged children but the project also included participants who were retired and/or on a pension, those with physical disabilities and the longer term unemployed. It is important to note that for all the participants, the ownership and use of a computer and connection to the Internet enabled them to not only seek out new information for pleasure and employment potential but also to participate in communities of practice that were not available to them previously.

It would seem that the challenges associated with the project were dealt with effectively as the project evolved. The interim reports indicated that discussions with a view to changing contexts were needed in the following areas:

- The **quality** of the computer: some of the initial computers were extremely limited in their capacity to do basic tasks and it was recommended that a basic standard of operability be established

- **Connectivity** had to be broadband in order to accommodate functional contemporary uses of the computers
- Learning for life workers needed to be actively **following up** on the groups allocated computers so that they could obtain individual and constant feedback about issues and challenges
- The **training sessions** needed to be **community based** and sensitive to the needs of the groups that they were catering for. Further, the design of the training sessions should cater for the range of experience from novice to more experienced and should be ongoing as expertise levels increased.
- **Help lines** in a variety of **community languages** were beneficial to the project.

The attention to these challenges have improved the outcomes of the project. It seems, in fact, that the difference between dial up and broadband internet has become the boundary for the new digital divide. Dial up connectivity on slow paced machines is no longer adequate because the majority of internet applications and functions that are commonly used today cannot be carried out at dial up speed. Quality computers and Internet connections have become essential.

As the project moves to the conclusion of this phase, it is apparent that there is still work to be done to support low income families to access the higher levels of activity that characterise Internet use today. Today, the Internet is a participatory environment characterised by users creating content that is often shared locally and globally. The digital literacy skills and knowledge needed for this environment are widely regarded as necessary for functioning in the 21<sup>st</sup> century. Raising awareness about the importance of digital literacy is essential so that participants can recognise the relevance of these skills in their lives.

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## Appendix:

### Tech Pack Pre-Pack Survey

#### You and Your Family

##### Gender

Male  Female

##### Age

Are you an Indigenous Australian? Yes/no

##### Highest Education Level

Primary  secondary  university  TAFE/trade  post-graduate

##### Home Postcode

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

##### Family Type

Single parent  Couple family  Grandparent Family  Extended Family/Sibling Family  Other

##### Number of Children

0 1 2 3 4 5 6 (please circle)

##### Ages

|           |   |   |   |   |   |       |
|-----------|---|---|---|---|---|-------|
| Child     | 1 | 2 | 3 | 4 | 5 | other |
| Age (yrs) |   |   |   |   |   |       |

##### Main Languages Spoken at Home

English  Other \_\_\_\_\_

##### Parents'/Carers' Country of Birth

Australia  NZ  UK  Other \_\_\_\_\_

##### Family Income

0-\$39,999  \$40,000-79,999  \$80,000-119,999  \$120,000 or over

##### Home Computers

1) Do you already have a working computer or computers at home?

(already owning a computer will NOT exclude you from a tech packs offer)

No (go to 4.)  Yes (if yes, how many? \_ )  Laptop or  Desktop

2) Do you already have Internet access?

No  Yes (if yes,  dialup  broadband fixed  broadband wireless  broadband mobile)

3) Do you have any of the following technology?

Printer  scanner  Internet camera  headphones/microphone  speakers

4) What has prevented you owning a home computer?

Cost  No need  No interest  Lack of knowledge/Skill in Use  Other \_\_\_\_\_

5) Have you ever used a computer before?

No  Yes if yes, for what purposes:

Financial Management  Word Processing  Internet  Email  Home Business  other \_\_\_\_\_

6) Where have you used a computer before?

Home  Work  School/TAFE/Uni  Public Library  Internet Cafe

7) Do you think NOT having a home computer has been a disadvantage to you or your family?

Why/why not? \_\_\_\_\_

## Computer Skills & Confidence

| Parent   | Child/ren   |
|--|---|
| <b>How often do you use a computer each week?</b><br><input type="checkbox"/> Never <input type="checkbox"/> 2-3times <input type="checkbox"/> 3-6 times <input type="checkbox"/> daily  | <b>How often do you use a computer each week?</b><br><input type="checkbox"/> Never <input type="checkbox"/> 2-3times <input type="checkbox"/> 3-6 times <input type="checkbox"/> daily   |
| <b>What do you plan to use the computer for?</b><br><input type="checkbox"/> Financial Management<br><input type="checkbox"/> Word Processing<br><input type="checkbox"/> Internet<br><input type="checkbox"/> Email<br><input type="checkbox"/> Home Business<br><input type="checkbox"/> Photos<br><input type="checkbox"/> Music<br><input type="checkbox"/> Other_____ | <b>What do you plan to use the computer for?</b><br><input type="checkbox"/> Games<br><input type="checkbox"/> Word Processing<br><input type="checkbox"/> Internet<br><input type="checkbox"/> Email<br><input type="checkbox"/> School work / Assignments<br><input type="checkbox"/> Photos<br><input type="checkbox"/> Music<br><input type="checkbox"/> Other_____ |
| <b>How would you rate your confidence at setting up computers and associated items (printers, scanners etc)?</b><br>Low <span style="float:right">High</span><br>1      2      3      4      5   | <b>How would you rate your confidence at setting up computers and associated items(printers, scanners etc)?</b><br>Low <span style="float:right">High</span><br>1      2      3      4      5   |
| <b>How would you rate your confidence at downloading or adding new software?</b><br>Low <span style="float:right">High</span><br>1      2      3      4      5   | <b>How would you rate your confidence at downloading or adding new software?</b><br>Low <span style="float:right">High</span><br>1      2      3      4      5  |
| <b>How would you rate your skills at using? :</b><br>Email            1      2      3      4      5<br>Internet           1      2      3      4      5<br>Word processing 1      2      3      4      5<br>Spreadsheets 1      2      3      4      5<br>Powerpoint      1      2      3      4      5  | <b>How would you rate your skills at using? :</b><br>Email            1      2      3      4      5<br>Internet           1      2      3      4      5<br>Word processing 1      2      3      4      5<br>Spreadsheets 1      2      3      4      5<br>Powerpoint      1      2      3      4      5   |

### Internet Use

|  |   |
|--|---|
| <b>What do you plan to use the Internet for?</b><br><input type="checkbox"/> E-Mail<br><input type="checkbox"/> Chat (eg. MSN)<br><input type="checkbox"/> Social networking (Facebook, etc)<br><input type="checkbox"/> Photo/video publishing (Youtube etc)<br><input type="checkbox"/> Dating<br><input type="checkbox"/> Research or hobby personal<br><input type="checkbox"/> Research school/study<br><input type="checkbox"/> Shopping (eBay etc)<br><input type="checkbox"/> Paying Bills (gas, electricity, phone etc)<br><input type="checkbox"/> Banking<br><input type="checkbox"/> Online Gaming<br><input type="checkbox"/> Accessing government services<br><input type="checkbox"/> Looking for jobs<br><input type="checkbox"/> Other_____ | <b>What do you plan to use the Internet for?</b><br><input type="checkbox"/> E-Mail<br><input type="checkbox"/> Chat (eg. MSN)<br><input type="checkbox"/> Social networking (Facebook, etc)<br><input type="checkbox"/> Photo/video publishing (Youtube etc)<br><input type="checkbox"/> Research or hobby personal<br><input type="checkbox"/> Research school/study<br><input type="checkbox"/> Shopping (eBay etc)<br><input type="checkbox"/> Paying Bills (gas, electricity, phone etc)<br><input type="checkbox"/> Banking<br><input type="checkbox"/> Online Gaming<br><input type="checkbox"/> Accessing government services<br><input type="checkbox"/> Looking for jobs<br><input type="checkbox"/> Other_____ |
|--|---|

*Tech Pack Post-Pack Survey*

You and Your Family

Gender \_\_\_\_\_ Age \_\_\_\_\_ Home \_\_\_\_\_  
 Postcode \_\_\_\_\_

Male  Female \_\_\_\_\_

Are you an Indigenous Australian? Yes/no

**Highest Education Level**

Primary  secondary  university  TAFE/trade  post-graduate

**Family Type**

Single parent  Couple family  Grandparent Family  Extended Family/Sibling Family  Other

**Number of Children**

0 1 2 3 4 5 6 (please circle)

**Ages**

|   |   |   |   |   |       |
|---|---|---|---|---|-------|
| 1 | 2 | 3 | 4 | 5 | other |
|   |   |   |   |   |       |

**Main Languages Spoken at Home**

English  Other \_\_\_\_\_

**Parents'/Carers' Country of Birth**

Australia  NZ  UK  Other \_\_\_\_\_

**Family Income**

0-\$39,999  \$40,000-79,999  \$80,000-119,999  \$120,000 or over

**Home Computers**

1) **How did you find out about the Technology Packs?**

(already owning a computer will NOT exclude you from a tech packs offer)

No (go to 4.)  Yes (if yes, how many? \_ )  Laptop or  Desktop

2) **Do you already have Internet access?**

No  Yes (if yes,  dialup  broadband fixed  broadband wireless  broadband mobile)

3) **Do you have any of the following technology?**

Printer  scanner  Internet camera  headphones/microphone  speakers

4) **What has prevented you owning a home computer?**

Cost  No need  No interest  Lack of knowledge/Skill in Use

Other \_\_\_\_\_

5) **Have you ever used a computer before?**  No  Yes if yes, for what purposes:

Financial Management  Word Processing  Internet  Email  Home Business  other \_\_\_\_\_

6) **Where have you used a computer before?**

Home  Work  School/TAFE/Uni  Public Library  Internet Cafe

7) **Do you think NOT having a home computer has been a disadvantage to you or your family?**

Why/why not? \_\_\_\_\_



**Did you or anyone in your family attend the Computer Training provided as part of the program?**

- Yes, I/my partner attended
- Yes, one of my children attended
- No

*If no, please explain why (and then skip the next two questions)*

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**How satisfied were you with the Computer Training?**

*(please circle a number)*

1                      2                      3                      4                      5  
Very                      →                      Very  
Dissatisfied                      Satisfied

**How could the Computer Training be improved?**

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**Have you needed to call the telephone helpdesk for support?**

- Yes
- No

*If yes, please explain why:*

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**How satisfied were you with the service provided by the helpdesk?**

*(please circle)*

1                      2                      3                      4                      5  
Very                      →                      Very  
Dissatisfied                      Satisfied

**How has this experience/computer benefited your family?**

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**Do you plan to extend your Internet Connection beyond the first 12 months?**

- Yes
- No

**OVERALL, how satisfied are you with your Technology Pack?**

1                      2                      3                      4                      5  
Very                      →                      Very  
Dissatisfied                      Satisfied

*Any other comments?*

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**Focus group semi-structured interview protocol:**

**A The benefits of having computers at home**

1. What have been the main benefits of having a networked computer in your home?
2. Where is it located? How many people use the computer provided?
3. Are there any restrictions to its use in place for anyone?
4. Have you purchased any additional new technologies such as a digital camera, printer, games ... to accompany the computer that you have received?

**B Important changes to daily activities/lifestyle**

1. What range of different things do you use the computer for?
2. Do you use the computer to communicate with friends, relatives and colleagues?
3. Would you say that most of the use is work related or leisure?
4. How has having the computer changed the way you do things?

**C Tech Pack support services**

1. Did you experience any problems with the installation of the computer? What have they been related to?
2. Have you used the helpline facilities and what has been your experience?
3. Did you go to the training sessions – why or why not?
4. Did the training sessions help you understand how to use the computer and the software programs?
5. What other support was available to you (child care, language assistance)?
6. Why you did not use the Tech Packs support? (This question will be asked if participants provide negative answers to questions 2-4.)

**D Perceived benefits/Significance of the program**

1. What would you say has been the most significant thing that has happened as a result of being in this Tech Packs program?
2. What major challenges did you face?
3. Would you recommend the project to others – why or why not?

