

**A submission of  
The Smith Family**  
to the  
Parliament of Victoria  
Education & Training Committee

Regarding the Inquiry into

*'The Effects of Television and Multimedia on  
Education in Victoria'*

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*everyone's family*



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## Preface

The Smith Family welcomes the opportunity to participate in The Parliament of Victoria Education & Training Committee's Inquiry into The Effects of Television and Multimedia on Education in Victoria.

The Smith Family is a national, independent, social enterprise established in 1922. Our mission is that, together with caring Australians, The Smith Family will unlock opportunities for disadvantaged families to participate more fully in society and in the contemporary context we have a particular focus on children and education. The Smith Family is working to achieve its mission of unlocking opportunities in two ways – by increasing the participation in society of those who have previously been marginalised on the one hand, and through the engagement of those who have the capacity to give of time, talent and dollars, on the other. Pursuing our vision of a more caring and cohesive Australian community, The Smith Family researches different forms of disadvantage to propose preventive responses to them, and to promote social change.

Over the last decade, The Smith Family has undergone significant transformation from a welfare-oriented model to a social enterprise organisation focused on children and education. Every step of this transition has been informed by the latest national and international research, not only in terms of evolving individual programs, but at a higher strategic level with regard to the range of outcomes we aim to achieve. The overarching purpose of our flagship *Learning for Life (Lfl)* suite of programs is to provide disadvantaged individuals and their families with support and development opportunities at key transition points throughout the life course. This may be financial support (as with our scholarship scheme providing assistance from early childhood through to tertiary education) or personal support in terms of mentoring, training and advice across significant life stages (e.g. ante-natal, early childhood and school-to-work transitions). These streams are further characterised by our short, medium and long-term outcomes.

Our **short-term outcomes** are directed towards facilitating the participation of greater numbers of disadvantaged children and young people and their families in education and learning (predominantly through the financial component of *Lfl*) in order to facilitate successful transitions from school to work and/or further education. In response to the evidence highlighting the importance of computer literacy in today's knowledge economy, multimedia has come to play a central role in many of our community programs designed to achieve these short-term outcomes. For example, our partnership with Microsoft Australia through the Unlimited Potential program has provided computer access and basic training to disadvantaged groups in over 85 communities nationwide, in the process helping individuals who have become marginalised from education for whatever reason to re-engage with lifelong learning. Internet technology also constitutes the core component of I-Track, our online mentoring program that enables disadvantaged students in Years 10 and 11 to receive career guidance and support from adult mentors already working in their chosen field. At the same time, through our VIEW Online Groups program, we are providing basic computer training to hundreds of VIEW club members in Victoria, ensuring that seniors and retirees overcome social isolation through the communicative benefits of email and the Internet.

Our **medium-term outcomes** move further along the life course and are concerned primarily with the home-to-school transition, and helping children acquire the skills to participate more fully in school life through programs such as Student2Student and the Homework Clubs. Research has shown that social skills and fundamental levels of literacy are critical to ongoing success in education and life, and the outcomes we aim to achieve at this level are therefore similarly intellectual and socio-emotional.

Finally, our **long-term outcomes** move even further along the change continuum to the prevention and early-intervention end, and focus on establishing the strongest possible foundations for the transition from ante-natal through to birth and school. Our *Let's Read* early literacy initiative, launched in 2005 in partnership with The Centre for Community Child Health,<sup>1</sup> incorporates a multimedia DVD demonstrating strategies for parents to develop emergent literacy skills, and includes some age appropriate books being read aloud for child. This encourages a supportive environment for children in the earliest weeks and months after their birth, which a significant body of research has shown to

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<sup>1</sup> The Centre for Community Child Health is a key centre of the Murdoch Children's Research Institute, and is based at the Royal Children's Hospital in Melbourne.



greatly increase their chances for optimal cognitive and non-cognitive development, as well as for better learning outcomes and more successful transitions from home to school and through other life transitions (Shonkoff & Phillips, 2000; Shonkoff & Meisels, 2000; Keating & Hertzman, 1999). This has also informed our involvement in The Australian Government's *Communities for Children* initiative, and our partnership with Good Beginnings Australia.

## Terms of Reference

Based on the research findings of ourselves and others, our Submission reflects on the issues arising from the following term of reference identified by the Education & Training Committee of The Parliament of Victoria:

1. *The effects of current applications and usage levels of multimedia by young people on learning styles and educational achievement within different age groups and curriculum areas.*

In responding to this term of reference, we draw upon the increasing body of national and international evidence around the impact of television, computers and multimedia platforms on educational achievement, with a particular focus on disadvantaged groups. The submission will also illustrate how The Smith Family views computer literacy in particular as both a tool for lifelong learning and an outcome in itself in unlocking opportunities for disadvantaged groups to participate more fully in society.

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## 1. Executive Summary

Television and multimedia have become omnipresent in the 21st century, and exert an incredibly powerful influence over the way in which children develop, both physically and mentally, from the moment they are born through their adult lives. According to the Australian Bureau of Statistics, watching TV or videos out of school hours remains the most common recreational activity of children aged 5 to 14 years in Australia (98% of children),<sup>2</sup> while the OECD confirms in a recent report that

Information and communication technology (ICT) is playing a central role in the development of modern economies and societies. This has profound implications for education, both because ICT can facilitate new forms of learning and because it has become important for young people to master ICT in preparation for adult life.<sup>3</sup>

Today, it makes little sense to continue to think and talk about reading and writing literacy skills without acknowledging the fundamental importance of ICT literacy within the contemporary knowledge economy. At The Smith Family, a key theme underlying the development of our *Learning for Life* suite of programs is social capability, understood as the capacity of communities and individuals to draw from their own strengths and social capital to move beyond the limitations of disadvantage. Within our framework of lifelong learning focusing on children and education, ICT literacy has for some time played a driving role in The Smith Family's strategic priorities alongside reading literacy and financial literacy, so that we may fulfil our mission of unlocking opportunities for disadvantaged families to participate more fully in society.

This submission provides an overview of how The Smith Family has engaged with multimedia as a tool to promote and enhance education. It begins by summarising some of the most recent research into the impact of television on the academic prowess of children, including the emerging links between viewing hours and the current spread of childhood obesity nationwide. The particular vulnerability of disadvantaged groups to the negative impacts of TV is raised as a concern, not simply in terms of detrimentally affecting their education, but also their broader developmental health and social skills. Worrying trends revealed in the research include correlations between extended television viewing hours and increased likelihood of early school leaving, attentional deficits and lower levels of academic achievement in general. In summary, we find that TV has the potential to negatively impact educational ability and attainment in four main ways: (1) by displacing homework time directly related to school achievement; (2) by displacing time that could have been spent in more generally educational pursuits such as reading; (3) by negatively impacting children's concentration and attention capacities, or (4) by negatively impacting on their health through problems such as obesity. All of these factors are likely to affect their classroom performance.

Next, we examine the impact of ICT and computer and Internet usage in particular. The evidence referred to here is more promising in suggesting that ICT can positively affect learning and social outcomes, with disadvantaged individuals arguably having the most to gain. However, we also note that these benefits are still not accessible to all elements of society, and the section begins with an examination of some of the barriers that continue to sustain Australia's 'digital divide', and the importance of providing Access, Basic Training and Community Connectedness in bridging this divide.

The Submission then takes a closer look at how ICT impacts educational performance, and explores some of the evidence behind the varied benefits of computer use at home and at school. We then provide an overview of how The Smith Family is currently working to bridge the digital divide through our award-winning partnership with Microsoft Australia and the 'Unlimited Potential' program. In particular, we discuss how the focus of this program in providing non-formal ICT access and training opportunities in Community Technology Learning Centres has successfully reengaged thousands of disadvantaged Australians in lifelong learning who had previously become marginalised from the formal education sector for whatever reason.

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<sup>2</sup> ABS (2003) *Children's Participation in Cultural and Leisure Activities, Australia 2003*. Australian Bureau of Statistics, Canberra.

<sup>3</sup> OECD (2005) *Are Students ready for a Technology-Rich World? What PISA Studies tell us*. Organisation for Economic Cooperation and Development, Paris, p8.



Finally, we look at the role of ICT in improving school-to-work transitions for students through The Smith Family's 'iTrack' online mentoring program. Through this initiative, students are provided with the opportunity to interact with supportive adults (other than a teacher or parent) who can offer them career guidance and support to enhance the smoothness of this difficult transition from school to work or further study. In particular, we extol the unique advantages of internet-based mentoring in (a) providing at-risk students with increased confidentiality and anonymity; (b) reducing the potential for prejudicial issues associated with class, gender, background, accent etc. to negatively impact the mentoring relationship; and (c) significantly expanding the range and quality of mentors available for rural and remote students, now that distance is no longer a consideration.

The Submission then concludes by reaffirming The Smith Family's faith in digital inclusion as a means to increasing social inclusion, and supporting disadvantaged Australian children and their families to create a better future through education.

## 2. Response to Terms of Reference

*The effects of current applications and usage levels of multimedia by young people on learning styles and educational achievement within different age groups and curriculum areas*

### A. The Impact of Television

Approximately 99% of all Australian households have at least one working television set.<sup>4</sup> In fact, over 70% of these have two or more television sets, with children increasingly having access to their own set in their bedroom or a separate room in the house. Today, television is the most popular leisure activity for young people in Australia, who begin watching from an early age.<sup>5</sup> At just four months, infants are watching an average of 44 minutes a day, building to two and a half hours by four years.<sup>6</sup> In 2001, almost half of children aged 5 to 12 years watched more than two hours per day.<sup>7</sup> As contemporary research is increasingly revealing, television has therefore become a critical factor shaping children's lives, penetrating deeply into early childhood development with powerful educational and health-related implications for the future. Children from disadvantaged families appear to be particularly vulnerable in this respect, for as Dr Patricia Edgar of The Australian Children's Television Foundation remarks,

"People go to television in the absence of other things, and you find patterns where kids who don't have friends, who aren't doing well at school, who are not involved in a whole range of activities, who are often in conflict with their parents in the home. These kids watch television more than other kids."

Moreover, research has shown that parents who have not had opportunities for higher education themselves are more likely to allow their children to watch what they want, and have the television on more during the day.<sup>8</sup>

### *Educational implications*

In its October 2000 report on Multimedia and Education, The Parliament of Victoria's Family and Community Development Committee conceded that while it has a role in promoting learning, television has been largely under-utilised as an educative tool.<sup>9</sup> The international research touched upon by the Committee regarding the potential educational benefits of TV viewing has shown that these tend to arise only when the child watches programs that are categorised as 'informative' or that have 'a positive social message'. Unfortunately, the Committee concluded in the same report and on the basis of widespread stakeholder consultation that this kind of quality programming for children was generally lacking in Australia.

In fact, the evidence suggests that television, far from enhancing educational outcomes, is actually having harmful consequences for children not just in Australia but worldwide. For example, a study of elementary school students in the US found that children who had television sets in their bedrooms

<sup>4</sup> Nielsen Media Research website, <http://www.nielsenmedia.com.au/industry.asp?industryID=15>

<sup>5</sup> Clark, A. (2005) 'Bedroom TV sets children up to fail'. *The Age*, 6 July 2005.

<sup>6</sup> Cupitt M, et al. (1998) *Infants and Television*. Sydney: Australian Broadcasting Authority.

<sup>7</sup> Centre for Epidemiology and Research, NSW Department of Health. New South Wales Child Health Survey 2001. NSW Public Health Bull 2002; 13(S-4).

<sup>8</sup> Bernard Bonnin AC et al. Television and the 3- to 10-year-old child. *Pediatrics* 1991; 88(1): 48-54

<sup>9</sup> Chapter 2, p33.

scored significantly lower on school achievement tests than children without TVs in their bedrooms – even when controlling for the parent's education level, the child's gender and the amount of viewing per week.<sup>10</sup> In New Zealand, a longitudinal study that followed a group of children into adulthood found that those who watched the most television during 5-15 years of age had earned fewer qualifications by the time they were age 26. The more TV the child had watched, the more likely they were to leave school without any qualifications – not simply those with little natural ability but children of all intelligence levels, regardless of socioeconomic background. Perhaps the most critical finding of the study was that although teenage viewing was strongly linked to leaving school without any qualifications, it was earlier childhood viewing that had the greatest impact on getting a degree.<sup>11</sup> Even background television had been noted to have a detrimental impact in infant and toddler age groups, where the length of toy play and duration of sustained attention span was reduced when the television was on compared with when it was off.<sup>12</sup>

### *Health and Developmental implications*

Australia now has one of the highest rates of childhood obesity in the world, with more than one in four Australian children aged 7-15 years either overweight or obese – a figure that has virtually doubled over the last decade.<sup>13</sup> Research increasingly suggests that television viewing has played an important part in this emerging health crisis. A longitudinal study published in *The Lancet* in 2004 showed that children spending more than two hours a day watching television had a much higher chance of becoming overweight, have a high cholesterol level and become addicted to cigarettes by their mid-twenties.<sup>14</sup> Viewing even a moderate amount may dramatically increase their risk of myopia, slow down their metabolic rate and may even trigger premature puberty.<sup>15</sup> Moreover, the evidence also suggests that early television exposure during early childhood disrupts critical periods of synaptic [brain cell] development, increasing the likelihood of children developing attentional problems that later negatively impact their academic ability and attainment.<sup>16</sup> While there is no single cause of obesity, the health and developmental concerns raised above affect low-income and minority groups more than any other,<sup>17</sup> and tend to increase the likelihood of children who are overweight suffering social isolation, poor self-esteem and depression, often to the detriment of their educational progress.<sup>18</sup>

In summary, it would appear that television may lead to poor educational achievement in four main ways: (1) by displacing homework time directly related to school achievement; (2) by displacing time that could have been spent in more generally educational pursuits such as reading; (3) by negatively impacting children's concentration and attention capacities, or (4) by negatively impacting on their health through problems such as obesity. All of these factors are likely to affect their classroom performance.

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<sup>10</sup> Borzekowski, D.L.G and T. Robinson (2005) 'The Remote, the Mouse and the No.2 Pencil'. *Archives of Pediatric and Adolescent Medicine*, July 4, 2005.

<sup>11</sup> Hancox, R. et al (2005) 'Association of Television Viewing during Childhood with Poor Educational Achievement'. *Archives of Pediatric and Adolescent Medicine*, July 4, 2005.

<sup>12</sup> Anderson D. (2003) 'The effects of background television on very young children's toy play'. Viewed at [www.umass.edu/psychology](http://www.umass.edu/psychology).

<sup>13</sup> Young Media Australia (2005) 'Keep you children out of the firing line: television food advertising and childhood obesity / overweight'. Factsheet No. 1 of 3.

<sup>14</sup> Hancox, R. et al. (2004) 'Association between child and adolescent television viewing and adult health: a longitudinal birth cohort study', *Lancet*, 17 July 2004: 364: 257-262.

<sup>15</sup> 'TV will stunt young brains: study', *The Sydney Morning Herald*, October 4, 2005.

<sup>16</sup> Sigman, A. (2006) *Remotely Controlled*. Random House: UK.

<sup>17</sup> RAND (2006) *Childhood Obesity: Weighing in on the Causes of an Epidemic*. RAND Child Policy Research Newsletter, April 2006.

<sup>18</sup> Young Media Australia (2005) 'Keep you children out of the firing line: television food advertising and childhood obesity / overweight'. Factsheet No. 1 of 3.

## **B. The Impact of Computer / Internet Use**

The educational, employment and economic benefits of using Information and Communication Technologies (ICT) became evident in the 1990s, along with the fact that not all individuals reap these benefits. While this 'digital divide' was initially thought to be a result of financial limitations, initiatives that solely provided access to the physical hardware and software revealed that the gap was not simply monetary. The ABCs of the digital divide, access, basic training and content, became the new catch cry, and local nets and CTLCs were established to address this divide. While the digital divide remains a populist term, it has begun to lose relevance. Technological inclusion is far more complex than the black and white descriptive term, 'digital divide'. Education levels, opportunities and motivations to learn are strongly tied to a person's ability to access and utilise technology to its fullest capacity; and the extent of access and usage exists on a continuous scale, not merely as a two way split.

Nonetheless, ICT can positively affect learning and social outcomes in certain circumstances and disadvantaged individuals arguably have the most to gain. Consequently, the term 'digital divide' has been replaced with 'technology for social inclusion'; redefining the focus from technology as the end, to technology as a means to the end. A key step towards social inclusion is engaging individuals in lifelong learning. ICT has the capacity, if used in the right environment and with sufficient support, to influence attitudes towards learning. This has significant implications for individuals who have become disengaged from learning – largely those with the lowest skill, education and employability levels. These individuals are usually those who could benefit most from training or education, but often lack the motivation and understanding of the benefits further education and/or training can render. Informal, community based education where learning can be self-directed and self-paced has been found to be successful in engaging these individuals.

### *ICT and the Digital Divide*

In 2004-05, 67% of Australian households had access to a computer at home and 56% had home Internet access.<sup>19</sup> This digital divide that persists throughout the developing and developed world is largely determined by socioeconomic status. A 2003 Australian study by The Smith Family found 59% of disadvantaged families in its *Learning for Life* program had a computer at home, compared to 74% of all Australian households with dependant children. Disadvantaged families were also less likely to be connected to the Internet (32% compared to 48% of all families).<sup>20</sup> Similarly, a study by the National Centre for Social and Economic Modelling (NATSEM) reported 70% of Australians with tertiary qualifications used a computer at home and 75% used the Internet, compared to 27% and 32.1% respectively of those who had completed up to Year 10 at school.<sup>21</sup>

Both in Australia and internationally, the initial community and governmental response to the digital divide was to provide access to ICT. But it soon became evident that 'digital inclusion' encompassed far more than 'access'. Those from low socioeconomic status backgrounds were not only found to be less likely to have access to technology, they were also discovered to be less likely to have the resources to use ICT to its full advantage.<sup>22</sup> The Smith Family thus shifted the response from simply providing access to computers to the 'ABCs of the digital divide – Access, Basic Training and Content'.<sup>23</sup>

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<sup>19</sup> ABS (2005) *Household use of Information Technology in Australia*. Australian Bureau of Statistics, Canberra.

<sup>20</sup> The Smith Family (2003) *Barriers to Participation: Financial, Educational and Technological: A Report into the barriers to societal participation among low-income Australians*. The Smith Family: Camperdown, 2003.

<sup>21</sup> NATSEM (2004) *Australia Online: How Australians are using Computers and the Internet 2001*. National Centre for Social and Economic Modelling / Australian Bureau of Statistics, Canberra.

<sup>22</sup> Warschauer, M. (2003) 'Demystifying the Digital Divide', *Scientific American*, 289:2, August 2003.

<sup>23</sup> The Smith Family (2003) *Barriers to Participation: Financial, Educational and Technological: A Report into the barriers to societal participation among low-income Australians*. The Smith Family: Camperdown, 2003.

## *ICT and Educational Performance*

Great faith has been placed on the ability of ICT to extend learning opportunities. The United Nations Educational, Scientific and Cultural Organization (UNESCO) is particularly optimistic about ICT encouraging lifelong learning, among other advantages:

not only can [ICT] stimulate new learning attitudes and strategies, it is also a powerful medium for developing formal and informal learning environments which empower, liberate, transform and create new roles, relationships and processes, particularly for those who encounter difficulties in traditional learning situations. When implemented effectively, IT can overcome learners' fears of being judged, heighten motivation and raise self-esteem – access to powerful technology conveys messages about being valued members of society, thereby opening up new opportunities for equality.<sup>24</sup>

This recognition of the power of technology to support a sense of community (and therefore contribute to social capital) led The Smith Family to reassign the ABCs of the digital divide to 'Access, Basic Training and Community Connectedness'. The new emphasis here is on using ICT to connect individuals with each other and to opportunities, thus using ICT to promote and increase lifelong learning.

In many countries, schools play an important part in providing more equitable access to technology, yet research suggests that home computer access has a far greater positive correlation in improving student performance.<sup>25</sup> For example, a recent OECD study found that school students with home access tend to perform better in key school subjects than those without home computers or with only limited ICT experience – even when controlling for socio-economic status and other disadvantaging factors faced by the latter group.<sup>26</sup> The study also showed that students who had been using computers for one or more years also performed better than those who were just starting out, suggesting that the more familiar with computers children become, the greater the impact on their educational skills and attainment.

Evidence suggests that one of the possible reasons why school use of ICT may not be contributing so strongly to students' educational performance is because many teachers are today not as familiar or skilled with computer technologies as their students. In fact, the OECD study found that students in Australia were among the most confident on average in performing various ICT tasks, and are more 'cyber-savvy' than may have been expected. In contrast, data on the confidence of teachers with technology is less convincing. For example, a survey of 234 teachers and 2023 students from Sydney Catholic high schools found the following:

- Half the teachers had little or no idea how to create a database, and a third were unsure what to do with a spreadsheet. This is despite both being taught in the mandatory technology syllabus for Year 7 students introduced in 2005.
- By Year 10, three in four students use video and audio software on home computers, while the same ratio of teachers in the survey said they had never used or that they needed help with multimedia software.<sup>27</sup>

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<sup>24</sup> UNESCO, Information Technology, Adult Learning, Employment (ITALE)

<sup>25</sup> Ravitz, J., J. Mergendoller and W. Rush (2002), What's School Got to Do With It? Cautionary Tales about Correlations between Student Computer Use and Academic Achievement, AERA: New Orleans. Harrison, C., C. Comber, T. Fisher, K. Haw, C. Lewin, E. Lunzer, A. McFarlane, D. Mavers, P. Scrimshaw, B. Somekh and R. Watling (2003), *ImpaCT2: The Impact of Information and Communication Technologies on Pupil Learning and Attainment*, DfES: London.

<sup>26</sup> OECD (2005) *Are Students ready for a Technology-Rich World? What PISA Studies tell us*. Organisation for Economic Cooperation and Development, Paris.

<sup>27</sup> Survey conducted by The Catholic Education Office. Results quoted in Norrie, J. (2005) 'Kids click, but teachers don't compute', *The Sydney Morning Herald*, August 18, 2005.

These findings suggest that strategies to spend more and more on getting computers into classrooms without ensuring associated training of teachers fail to meet the potential of ICT in improving educational performance. Teachers need appropriate forms of support, not merely training in understanding the technologies available, but in how to use them to attract and engage the interests of their students. In other words, teachers – as well as students – require the full range of Access, Basic Training and Community Connectedness discussed earlier to ensure that the digital divide is minimised both within the classroom and across society as a whole.

### *Bridging the divide through Community Technology Learning Centres (CTLs)*

The evidence shows that while access is obviously an important part of bridging the digital divide, it remains redundant if people lack the skills or the interest to use computers and the internet. In other words, ICT is likely to effect the kinds of boost to academic performance discussed above only if disadvantaged groups have the motivation and opportunity to participate. In a broader sense therefore, digital inclusion is not about computers, the internet or even technology. It is about using technology as a channel to improve skills, to enhance quality of life, to drive education, and to promote economic well-being across all elements of society. As the Cabinet Office in the UK recognised:

Digital inclusion is really about *social* inclusion, and because of this, the potential for technology to radically improve society and the way we live our lives should not be underestimated.<sup>28</sup>

In 1999, The Smith Family (TSF) began working to ensure disadvantaged families were ready, willing and able to be digitally engaged by establishing Computer Clubs in two locations. Five years later, TSF became the lead partner in Microsoft Australia's 'Unlimited Potential' (UP) initiative and now works with 44 community organisations nationwide to deliver ICT skills training in 85 TSF-affiliated Community Technology Learning Centres. The target groups include low-SES families, seniors, youth at risk, culturally and linguistically diverse individuals, those with a disability, people living in rural and remote areas, and Indigenous Australians.

A key feature of UP in Australia is a focus on non-formal learning as a means to re-engaging disadvantaged Australians in lifelong learning. Many participants in UP have had negative experiences in formal education and do not see themselves as learners. Through the approach developed in partnership with RMIT University, participants are encouraged to re-engage in lifelong learning by focusing on topics of interest, or their 'fields of fascination'. These can cover any area, from gardening to cooking to V8 supercars. Participants learn ICT literacy skills as they explore their interests. These skills are largely incidental to the overriding aim of helping people believe they can learn (again) and see themselves as learners.

As successive evaluations have shown, participation in the UP program may not only have influenced individuals' desire to learn more about computers, but also reengaged many of them in education and broader learning. Not only did 96.9% of individuals surveyed 'enjoy learning' at the centre they attended, 85.7% agreed that the centre had made them 'more interested in learning other things in future', and 83.7% indicated that they were interested in participating in other community education courses.<sup>29</sup> A series of qualitative longitudinal case studies of UP participants also conducted by The Smith Family found that computers were particularly attractive to many who had become disengaged from education, because they were more 'visual learners' than 'pen and paper students'. In fact, their engagement with computers had had the following significant impacts on the capacity and interest to learn among all age groups:

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<sup>28</sup> Cabinet Office, United Kingdom (2004) *Enabling a digitally United Kingdom: A framework for action*. London.

<sup>29</sup> The Smith Family (2005) *It takes a Community to Bridge a Divide: Working towards digital and social inclusion with Community Technology Learning Centres*. The Smith Family: Sydney.

**1. The Unlimited Potential program provides a comfortable, informal learner-oriented environment not found in other computer courses:**

*"My wife pushed me into a TAFE computer course to try to get me back on track, but it didn't help. I was given a thick 1200 page manual on Microsoft Office and worked through chapters every week. It was too intense for me, and I felt bad asking questions."*

*"I tried a similar computer course at the public library, but I had many problems and the teacher didn't seem to have any time to help me. When she did, she would do everything so fast I had no idea how she solved the problems I was having!"*

*"Before UP, there was nowhere else to learn."*

**2. The Unlimited Potential clubs have helped many participants, including youth at-risk and early school leavers, re-engage with learning:**

*"Before I came, I was on the verge of quitting school. I didn't like it, and I was always in trouble. Lots of teachers thought I was dumb – in fact, the Principal's office was my second classroom! But I really enjoyed the centre and started to use the computers outside the club hours. It has helped a lot with my English homework and now my teachers can't believe it. I reckon I'd be failing at school without the centre, it gave me a lot of extra knowledge."*

**3. Participants on the Unlimited Potential program report improved educational outcomes in terms of being able to access greater information resources and new methods of presentation for their schoolwork:**

*"Using computers has improved my spelling, 'cause I search on Google and use Spell-Check on my homework. I even write short stories now – I didn't know I was any good at this till I tried!"*

*"Computer skills have definitely added to my kids' schoolwork. One of their Year 7 projects was actually put on display because the Principal said it was Year 9 standard!"*

These examples illustrate just some of the ways in which disadvantaged groups have benefited from digital inclusion, and are testimony to the potential of ICT to aid and enhance the learning and educational outcomes of all members of the community.<sup>30</sup>

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<sup>30</sup> For more case studies, analysis, or for copies of UP Evaluation Reports conducted by The Smith Family, please see our website, [www.smithfamily.com.au](http://www.smithfamily.com.au).

## The Role of ICT in Improving School-to-Work Transitions

As with the Unlimited Potential ICT literacy program described above, The Smith Family view computer access, basic training and content not merely as an end in itself, but as a tool to facilitate lifelong learning and enhance educational attainment. Our own comprehensive research in collaboration with the Australian Council for Educational Research has shown that a significant proportion of disadvantaged students fail to make successful school-to-work or school-to-further study transitions, not least because of their lack of appropriate and accurate career guidance and support.<sup>31</sup> Our flagship *Learning for Life* suite of programs include a number of mentoring initiatives designed to address this issue, with computers playing a central role in our 'iTrack' online mentoring program focusing on the school to work transition.

The iTrack program aims to provide students with opportunities to develop appropriate relationships with supportive adults other than a teacher or parent, and to provide information to students about workplace, study and career opportunities to enhance their school to work transition. Senior high school students are matched with professionals currently drawn from The Smith Family's corporate partners, and engage in a 19 week long relationship that takes place largely online. The program runs in school terms 2 & 3, with regular contact taking place in The Smith Family's IGNITE! website chat rooms and IBM's Mentor Place site. While projects and activities are provided to guide the development of the relationships, just as much value is gleaned from the social interaction between the partners. By the nature of the interaction, students become accustomed to online communication and improve their ICT (Information Communication Technology) skills.

The literature has shown that online mentoring initiatives such as iTrack have a range of advantages to more traditional face-to-face approaches, including:

### 1. Confidentiality and Anonymity

In small rural and remote towns, a negative perception and image of youth is relatively common, being perceived as lazy, disrespectful, loud, obnoxious and generally as 'problems, as having problems and as causing problems'. These stereotypes are maintained in the media, and in a small town, an individual's attitude, behaviour or misfortune can be exaggerated and generalised to the whole youth community. The relative anonymity that distance mentoring can afford may be a benefit in this light, avoiding 'everyone knowing everyone else's business'.<sup>32</sup>

The Internet might also be particularly appealing to youth who are too shy or withdrawn to reach out to the people around them. Youth who are less socially at ease, and have grown up with computers and the Internet, might feel more comfortable obtaining emotional support from the privacy of their computer terminal than in face-to-face interactions.<sup>33</sup> An evaluation of *Digital Heroes Campaign* in the US revealed many youth actually preferred the semi-anonymous nature of e-mail, particularly in the beginning stages of the relationship.<sup>34</sup>

More general research has also shown that the Internet has a disinhibiting effect on users, leading to increased levels of honesty and self-disclosure. Furthermore, because the Internet is not a face-to-face environment, it is perceived by many users to be anonymous and non-

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<sup>31</sup> See for example, The Smith Family (2004) *Post-School Plans: Aspirations, Expectations and Implementations*. The Smith Family / ACER: Sydney; The Smith Family (2005) *What do students think of work? Are they on the right page?* The Smith Family / ACER: Sydney; The Smith Family (2005) *What do students know about work?* The Smith Family / ACER: Sydney; and The Smith Family (2006) *On Track? Students choosing a career*. The Smith Family / ACER: Sydney.

<sup>32</sup> Kenyon, P et al (2001) *Creating better educational and employment opportunities for rural young people*. A Report to the National Youth Affairs Research Scheme, 2001.

<sup>33</sup> Scealy, M., Phillips, J., & Stevenson, R. (2003). Shyness and anxiety as predictors of patterns of Internet usage. *Cyberpsychology & Behavior*, 5, 507-5156.

<sup>34</sup> Saito, R. N. & Sipe, C. L. (2003). *E-mentoring: The digital heroes campaign Year Two Evaluation Results*. Unpublished report prepared for MENTOR/National Mentoring Partnership and AOL Time Warner Foundation.

threatening. It may therefore be appealing to 'socially unskilled' individuals who may not otherwise seek help.<sup>35</sup>

## **2. Less prejudicial attitudes among mentors**

E-mentoring results in the attenuation of status differences by concealing social cues that otherwise hinder communication between higher and lower status individuals.<sup>36</sup> This may be important in overcoming prejudices associated with accents, class background etc. Because of the physical separation of the participants, the process of matching students with suitable mentors is less concerned with personal characteristics than might be expected in a more traditional mentoring scheme.

McKenna, Green and Gleason (2002) refer to these features inhibiting interaction (such as age, accent, income and status) as 'gating features', and suggest that purely online relationships may be formed more easily than those with face-to-face contact, precisely because of the lack of these gating features.<sup>37</sup>

## **3. The Bridging of Distance**

One of the biggest challenges of face-to-face mentoring is the physical distance that often separates mentor and student. Stretched to their limits by their jobs and families, many volunteers find it difficult to consistently navigate their way to their students' schools or homes. By mentoring online, mentors eliminate this commute and have more time to focus on communicating with their students. Students may also be reluctant to commit to face-to-face meetings. For example, some students involved in previous I-Track pilots reported that in their eyes, keeping up to date with their classes was more of a priority than attending face-to-face meetings and missing school. School facilitators on the program also referred to the strict 'excursion' guidelines now enforced by the Department of Education that made coordinating and organising venues and dates for face-to-face meetings frequently challenging. In their words, "The bureaucracy that has now developed even at the school level means approvals and variations to routines must go through a process."<sup>38</sup>

Lifting this constraint also enables mentors and students to connect with a much wider array of volunteers-freeing up mentoring coordinators to match mentors and students who share interests (a key factor in building relationships) as opposed to making matches by reason of physical proximity. Programs largely based on e-mail do make it possible to involve a wider array of mentors (e.g., corporate executives, busy parents, adults who travel a lot or are physically disabled) and students (incarcerated, in residential treatment facilities, rural) who would not otherwise participate.<sup>39</sup>

Finally, online communication also removes time constraints, enabling students and mentors to connect more spontaneously. A teen's willingness to disclose is unpredictable-they may have very little to say during a face-to-face meeting with their mentor (who just travelled across town to meet with them) yet feel compelled to make important disclosures late at night over e-mail.<sup>40</sup>

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<sup>35</sup> Miller, H. and M. Griffiths (2005) 'E-Mentoring', in DuBois, D.L. & M.J Karcher (eds.) Handbook of Youth Mentoring. Sage Publications: California, pp300-314.

<sup>36</sup> Sproull, L. and SB Kiesler (1992) Connections: New Ways of Working in the Networked Organization. Cambridge, Mass.: MIT Press.

<sup>37</sup> McKenna, K.Y.A, A.S. Green & M.E.J. Gleason (2002) Relationship formation on the Internet: What's the big attraction? Journal of Social Issues, 58(1), 9-31.

<sup>38</sup> Preliminary findings from the 2005 I-Track pilot.

<sup>39</sup> NMP (2003) 'Online mentoring: The promise and pitfalls of an emerging approach'. National Mentoring Partnership, November 2003. Accessed on 28 December 2005.

<sup>40</sup> NMP (2003) 'Online mentoring: The promise and pitfalls of an emerging approach'. National Mentoring Partnership, November 2003. Accessed on 28 December 2005.



To date, over 100 students have participated in the test pilots of the iTrack online mentoring program, with 93% of students in the latest iteration reporting that their knowledge of career and training options had benefited considerably as a result of the program.<sup>41</sup> As one student remarked, *“I learnt more about the career area of my interest, and that good friendships & communications can be useful with adults other than your parent / teacher”*. The program is now being rolled out more broadly within our *Learning for Life* suite of programs, and represents another facet of The Smith Family’s approach in utilising ICT to advance education among disadvantaged groups.

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<sup>41</sup> For more details / findings from iTrack evaluations, contact The Smith Family.

### 3. Conclusion & Recommendations

The Smith Family is ultimately concerned with societal change through children and education. At a program implementation level, The Smith Family aims to increase the personal and collective resources of individuals, families and communities to help them develop skills and capacities they need to respond to challenges and more fully participate in society. Given that multimedia tools such as television, computers and the Internet now play such a dominant role in children's lives, it is important to ensure that we are working to maximise the potential of these to enhance educational skills and outcomes, whilst being careful to minimise any potential negative impacts they may also effect.

Within the framework of our Guiding Principles<sup>42</sup>, The Smith Family has used the research referred to throughout this submission to inform our strategic transformation from a welfare-orientation to a social enterprise model over the last seven years. Today, we are increasingly focusing our efforts on the prevention and early intervention end of the change continuum, and on achieving our long-term outcomes of establishing the strongest possible foundations for the transition from ante-natal through to birth and school. Our decisions to refocus on disadvantaged children within the family context, and to adopt a 'place-management' approach in facilitating child-friendly communities as a response, were not only initially informed and guided by evidence, but continue to be reaffirmed and validated by subsequent waves of research as discussed in this submission. In this way, The Smith Family has been able to maintain its leadership role as a social enterprise in developing an effective population based response to maximise the socioeconomic participation of disadvantaged children and their families.

The Parliament of Victoria therefore has an important opportunity through its *Inquiry into The Effects of Television and Multimedia on Education in Victoria* to inform a strategy for education that is both effective and sustainable. Equitable access and participation need to be driving factors in goals and targets established through policy discussion and design, so that the supportive learning capacity of new technologies can be brought closer to their democratic potential in creating a society where disadvantaged groups may participate more fully.

The Smith Family also recognises that government initiatives such as this must be complemented and supported by the efforts of a larger society that involves individuals, families, communities, businesses, organisations and institutions. To this end, the following recommendations are for consideration in this context, recognising the desirability of all working usefully together towards mutually agreed outcomes.

#### *The Smith Family recommends:*

- That The Education and Training Committee of the Parliament of Victoria recognise the central role television, computers and the Internet now play in children's lives from a very early stage, and how disadvantaged groups are particularly susceptible to the negative impacts of over-interaction with these tools.

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<sup>42</sup> The Smith Family's eight Guiding Principles were first drawn up in 1999 to shape the evolution of the organisation into the 21<sup>st</sup> century, and were updated in 2006 in line with our continuing transformation. They are that we should, as a national, independent social enterprise (1) Be about societal change for the benefit of all Australians; (2) Be focused on disadvantaged children within the family context; (3) Concentrate on prevention and early intervention over the life course, with an emphasis on key transition points; (4) Be evidence-based using a multi-disciplinary approach; (5) Be embedded in the community; (6) Work with and through other organisations; (7) Significantly increase and diversify our sources of funding and resource base; (8) Enhance our internal capacity and in turn use our resources to build the community's capacity.



- That further research be conducted into the academic, developmental and social impacts of different television viewing patterns among children of all ages, particularly those from disadvantaged backgrounds.
- That the Committee take steps to encourage and facilitate a greater range of out-of-hours / after-school activities for students (e.g. sport) in an effort to maximise the chance of students maintaining a healthy mix and balance of leisure pursuits to complement their time in the classroom.
- That the Committee recognise and actively promote the importance of ICT literacy as a skill as fundamental to successful social and economic participation as those more traditional forms of literacy, such as reading and writing.
- That the Committee recognise and disseminate the capacity of ICT tools such as computers and the Internet in supporting and enhancing academic achievements, whilst taking steps to reduce the digital divide and ensure that such opportunities are accessible and appropriate to all elements of society.
- That the Committee ensures that all initiatives to increase the availability of computer and Internet facilities within schools and learning environments are accompanied by appropriate support to teachers, students, parents and other stakeholders in the areas of Access, Basic Training and Community Connectedness.
- That the Committee recognise the particular capacity and attraction of ICT with regard to re-engaging those learners who have become marginalised from the education stream for whatever reason, and support initiatives to provide them with free or low-cost non-formal learning opportunities that will help them back onto a trajectory of lifelong learning.
- That the Committee recognise and takes steps to further utilise the potential of ICT in bridging the geographical barriers to education that currently hinder many disadvantaged Australians (particularly rural, remote and Indigenous groups) from accessing and benefiting from learning opportunities.