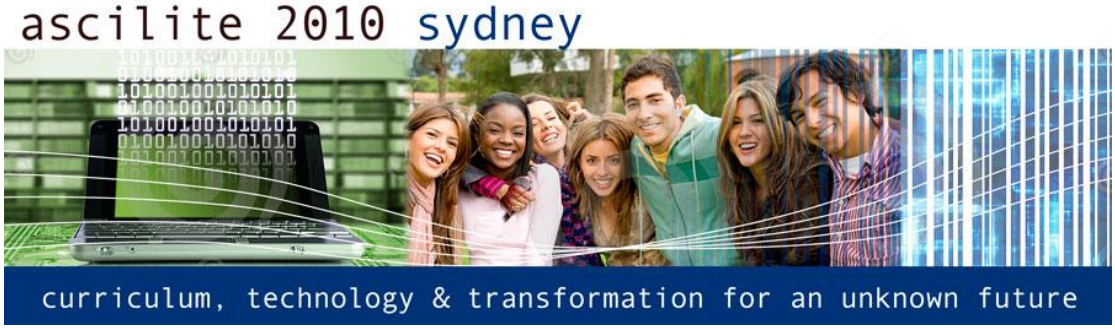

Positive Partnerships website: Addressing disability and educational disadvantage in rural Australia

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This paper addresses the question: *How can we create better access to quality educational practices for those who live and work with students with disabilities and who are also disadvantaged geographically?* To explore the notion of multiple disadvantage, a study was conducted to examine the experience of participants who were exposed to an Australian online learning package that has been developed to assist those living and working with students with autism. The government-funded package, called *Positive Partnerships*, is available nationwide, and includes interactive multi-media learning modules, information, links, discussions and feedback options. In view of the finding that rural and remote education was less available, less accessible, and less affordable than that provided to urban dwellers (Human Rights and Equal Opportunity Commission, 2000), this study examined feedback from an online survey, with particular attention to comments made by those with disabilities and /or living in isolated areas. Feedback about the site was extremely positive. Participants valued the features that embodied universal design and maximised time efficiencies and convenience. To exploit the benefits of this form of online learning, four challenges were identified: promotion of the site; balancing multimedia against computer capacity; addressing local issues through a national site; and maintaining the site beyond the funding period. The study concludes that improving access to education by augmenting face-to-face training with online learning for those in isolated areas will not eliminate their hidden disability costs, but it will go some way to meeting their educational needs in a more equitable way.

Keywords: autism; online learning; rural and remote; teacher professional development; evaluation.

Introduction

Educational opportunity is yet to be evenly distributed in the Australian population. Instead, it is linked to several factors including geography and socio-economic status. As revealed in an unsettling national inquiry (Human Rights and Equal Opportunity Commission [HREOC], 2000), rural and remote education is less available, less accessible, and less affordable than that provided to urban dwellers. Also disquieting is the amplified disadvantage that may be experienced by specific sectors. A case in point is the "social gradient of disability", indicating an interaction between disability and socio-economic status such that people with disabilities and their families and carers are likely to be in lower socio-economic bands than those without disabilities, often because the responsibilities of caring do not leave room for full time employment (Minkler, Fuller-Thomson, & Guralnik, 2006; Australian Institute of Health & Welfare, 2009).

This paper is concerned with the intersection of education with these two areas – disability and geographical isolation. The disability of interest is autism, a neuro-developmental disability that is estimated to affect about one in 160 school aged children in Australia (MacDermott, Williams, Ridley,

Glasson, & Wray, 2007). It is called a spectrum disorder because it consists of a constellation of features each of which can be expressed along a continuum from mild to severe. Autism influences the way a person processes information, and diagnosed individuals typically have difficulties in communicating with and relating to people, in addition to engaging in restrictive and repetitive behaviours which sets them apart from their peers (DSM-IV, 2000). Because there are large individual variations in how autism is expressed, many teachers and caregivers feel uncertain as to how they should respond. These uncertainties are magnified in rural and remote areas, because of the lack of proximity to support services. Arguably, families living with autism in rural areas are thrice disadvantaged – by the restrictions of the disability, by the negative socioeconomic relationship expressed in the social gradient of disability, and by the relative paucity of educational opportunities.

Education is recognised as one of the gateways to social and economic prospects (Riccards, 2009). In the case of people with disabilities and their stakeholders, information may be required to help manage the disability, to provide access to support networks, to optimise quality of life and importantly, to effect attitude change in the non-disabled majority. Addressing the worrying findings about rural education is therefore a priority. Several strategies have been proposed, of which professional development for teachers and other school staff is an obvious choice. However face-to-face professional development needs to be rethought, in view of the documented difficulties – particularly around travel, time and expense - experienced by staff in rural and remote areas when attempting to access training opportunities (HREOC, 2000). These considerations all suggest that thoughtfully constructed online training could meet the needs of at least some of these educators and the families they serve. Accordingly, the Department of Education Employment and Workplace Relations funded the Australian Autism Education and Training Consortium (AAETC) to develop a web space that could be used by all Australians as one of several components of the Australian Government's *Helping Children with Autism* package, funded from 2008-2012 . The resulting *Positive Partnerships* website was established in 2008, and operates in concert with face-to face sessions for parents, carers, teachers and other school staff. This paper provides an overview of the site and analyses some of its advantages and disadvantages, as perceived by stakeholders, in order to address the question*: How can we create better access to quality educational practices for those who live and work with students with disabilities and who are also disadvantaged geographically?*

The Positive Partnerships web site: www.autismtraining.com.au

Overview
The purpose of the website is to provide a user-friendly, interactive, teaching and learning web-based resource for teachers, other school staff, parents and carers to support professional development and training workshops, provide access to all workshop materials, and facilitate professional and parent networks. In other words the key function of the online component is to foster a collaborative, online community of practice around a common interest. The site is available to be used by all Australians, and thus embraces those living in urban, rural and remote areas. An indication of quality is that documented participation in the professional development workshops and associated activities can be credited towards a Masters degree. The learning hub of the Positive Partnerships site is an Online Learning Portal through which various learning activities and resources can be accessed. The most important of these are: 13 Interactive online learning modules; Parent/carer and Professional Development workshop manuals; Fact Sheets; Planning tools; Useful links; Discussions; and Evaluation /feedback tools for continuous improvement (e.g. Public evaluation; e-learning feedback).

Method

With such a multifaceted site, it is imperative to employ a wide-ranging analysis to determine how well the website achieves its intended aims. Methods that have been employed to date include user statistics; think-aloud protocol; module review questions; quiz; public online feedback; discussion board analysis and an online survey. Length restrictions in the current paper entail that it is not feasible to cover all these methods in sufficient detail. Instead, an examination of selected results of the *online survey* will be presented, with a focus on rural issues, on the understanding that further triangulation with the other evaluation tools is essential for a comprehensive appreciation of the site.

Results

At the time of analysis, 9723 people had logged in to the Positive Partnerships site, and of these, 176 completed the optional online survey. Table 1 shows the distributions of responses by region. The percentages without parentheses in Table 1 depict the actual number of responses from each state and territory, and the percentages in parentheses indicate the expected number, given the population of each of these eight regions. With the possible exception of Victoria, there is a close concordance between the actual and expected responses which suggests the respondents form a representative geographical sample.

Table 1: Place of residence of respondents

ACT	NSW	NT	Qld	SA	Tas	Vic	WA	TOTAL
7	54	10	36	16	16	27	10	176
4% (2%)	31% (33%)	6% (1%)	20% (20%)	9% (7%)	9% (2%)	15% (25%)	6% (10%)	100% (100%)

In order to highlight the issues of rural Australians, and to compare and contrast them to their urban cousins, the data were categorised using the State Accessibility / Remoteness Index of Australia Plus (SARIA+) 2006. The SARIA+ tool defines remoteness in terms of the road distance that people have to travel in order to gain access to services. In this study, the two most remote categories (D and E) were designated "rural" to distinguish them from the remaining responses, which were classified as "urban" Table 2 shows the classification of participants on the 5 point SARIA+ scale.

Table 2: SARIA+ classification of respondents

SARIA+ Scale	A (major cities)	B (inner regional)	C (outer regional)	D (remote)	E (very remote)	Unclassifiable (state only, indicated)	TOTAL
# participants	66	23	18	14	12	43	176
% participants	38%	13%	10%	8%	7%	24%	100%

The urban and rural data were then interrogated along several dimensions, as represented in Tables 3 and 4. Access to technology was measured in three ways as depicted in Table 3. For the accessibility measures, the participants were asked to rate whether they found it easy to register for online learning, whether they felt they possessed the requisite computer and internet skills, and whether their home or workplace had good (fast, reliable, affordable) or poor computer /internet availability. Participants were also invited to comment freely, and samples of their remarks are provided to complement the rating scales with more nuanced qualitative data.

Table 3 did not reveal great disparities between rural and urban respondents, judging by 88% (rural) and 90% (urban) ranking of "good" or "great" internet access. Nevertheless, other remarks suggested that computer access in rural areas remained problematic:

- I think it may have been my poor internet connection - isolated town doesn't help!! [#17].
- I liked how the information was concise informative and interactive (not boring). I would love to access more of the components in Q 8 but our access at school is limited due to dial up service, so I usually access the site from home [#158].

To gauge their overall satisfaction of the site, participants were also asked whether they would recommend the site to someone else. The participants' recommendations are revealed in Table 4, which shows 96% and 95% of rural and urban respondents respectively would recommend the site to someone else to a good or great extent. Forty five additional comments were made. A typical rural response was: "I already have [recommended the site] and they say, *Can I really access it?* Of course I reply, *Yes, go for it*!"(#158).

Table 3: Access to technology Q1

Region	Not at all	To a little extent	To some extent	To a fair extent	To a good extent	To great extent
				Ease of registration		
Rural	0%	0%	4%	12%	38%	46%
Urban	1%	2%	5%	5%	37%	51%
				Perceived computer and internet skills Q 16		
Rural	0%	0	8%	38%	35%	19%
Urban	0%	0%	5%	43%	38%	14%
				Ease of internet access Q 17		
Rural	0%	0%	0%	12%	42%	46%
Urban	0%	0%	2%	8%	45%	45%

Table 4: Likelihood of recommending the site to someone else

Region	Not at all	To a little extend	To some extent	To a fair extend	To a good extent	To a great extent
Rural	0%	0%	0%	4%	38%	58%
Urban	0%	0%	1%	3%	23%	72%

Respondents were also asked what they liked about the Positive Partnerships web site. This was an open ended question, so the answers were subdivided into categories. When respondents identified more than one reason for liking the site, both reasons were scored. In all, 20 reasons were identified. Each of these was coded according to their domain (technology, pedagogy, content, and /or Not Applicable [N/A]). Table 5 shows the results, arranged in order of frequency, and with rural and urban responses amalgamated due to their high concordance. The top three reasons for liking the site covered all three applicable domains. Informative content and easy-to-use technology were the most popular reasons (both 22%).

Table 5: Positive site features, coded by technology (T), pedagogy (P), content (C) and not applicable (N/A)

Reason	Frequency		Domain
	N	%	
Informative/Useful	57	22%	C
Easy to use/navigate/ customise/ multiple ways to enter	56	22%	T
Set out well/visually appealing	22	8%	P
Interactive	15	6%	TP
Discussion/Networking	15	6%	TP
Easy to understand	13	5%	P
Convenient	13	5%	T
Online modules	12	5%	TP
Engaging/varied presentation	11	4%	P
Anyone can access it/accessible; free	10	4%	T
Everything	6	2%	TPC
Positive	6	2%	C
Layout/colours	5	2%	TP
1 stop shop	3	1%	TPC
Relevant	3	1%	C
Online learning aspect	2	1%	T
Support Materials	2	1%	C
Video	1	0%	T
Australian	1	0%	C

Other/Don't know	7	3%	N/A
Total	260	100%	

Typically, comments from rural dwellers expressed appreciation of the opportunity to share ideas:

- I have really appreciated the opportunity to discuss and share ideas because I live in an isolated area. I also really enjoyed completing the online modules [#146].
- Long overdue, keep up the good work. Especially for those of us in regional areas who often feel forgotten about! [#8]

However online networking is not a universal panacea for lack of material possessions, as one heartfelt rural comment revealed:

- I need help. Where can I get support? Where can I get funding? Where's my village helping me raise this child? [24]

The site was received positively by people with disabilities, including those with AS (Asperger Syndrome, one of the autism spectrum disorders in which affected individuals have at least average ability):

- I prefer it to face to face meetings as I am also disabled (physically) [#73].
- I have been diagnosed AS as an adult and doing these modules has reminded me of many childhood incidents that I now see were manifestations of my AS [#33].

The social gradient of disability was evident in some comments:

- I quit my job to research and find out as much as I can to help my son, it's no good having wonderful info and told how it should be when in reality it will never happen! [#1].
- If I had realised I could get Assistance for Isolated Children allowance of nearly $10 a day and distance education lessons. I would not have struggled and worked for hours every school day to get my child to school [#27].

For all participants, time-saving features such as automatic text, and the capacity for participants to return by default to the point in a learning module where they had left off, were highly appreciated. For example:

- I am really enjoying the online module and I never thought that I would be able to learn this way. I love the way you can log on and log off and your status is remembered and the variety of ways the information is presented. [#134].

Discussion

Advantages of online training are many, and generally the data reflected this reality for both rural and urban Australians. Nevertheless it has to be remembered that the data were collected via an online survey and were therefore liable to underestimate the numbers of people with limited access, because this is precisely the group that would be least likely to be able to log in to the survey anyway.

Overall, participants appreciated the site's universal design features of the site – that is, it was constructed to meet the needs of all people at the outset, rather than having to be "retrofitted" at a later date. As indicated in Table 5, these features include multiple pathways to site pages; a choice of connection speeds (fast, medium, slow) for video screening; and a choice of viewing options (such as text or voice). Commendations about the site being free to all users (once basic infrastructure costs were met) showed that economic considerations were also significant. Time and convenience also featured in responses. Packaging the information into manageable "bites" helped those who were time-poor; and the ability to fit the online activities around participants' busy schedules was appreciated. Those with disabilities including Asperger Syndrome also found the activities and information helpful.

Comparisons between rural and urban dwellers produced mixed results. The quantitative ratings tended to show only minor differences in terms of satisfaction (Table 4). Access to technology remains an

issue however, with more than 12% of rural participants stating that they had only fair internet access (Table 3). This was supported by the qualitative comments which indicated that rural dwellers still experienced disadvantages. This has pedagogical ramifications because interactive multimedia learning comes at a cost of longer download times, so existing choices of multimedia speeds (fast vs. slow) will have to be maintained. Until there is sufficient infrastructure in place, some of the inequities in professional development will remain, even when delivery is online.

Given the positive reception of the site, several questions remain regarding how its benefits can be maximised. In the first place, promotion remains an issue. Feedback (e.g. #27) indicated that even the online participants were unaware that the site is open to all Australians. Secondly, local issues (such as the isolated children's allowance) need to be addressed, but whether a national online site is the best place to do this is a moot point. The best strategy (which has been adopted by Positive Partnerships) seems to be to link participants to key local resources who can provide further information and support, customised to participants' needs.

There is no easy resolution to these issues. However guidance can be provided by the principle of equal opportunity and the Disability Standards for Education (2005). Rather than treating everyone the same (equality), it means making reasonable adjustments targeting resources and tailoring an approach to fit the individual's circumstances (equity). This research supports that improving access to education by augmenting face-to-face training with free online learning for those in isolated areas will not eliminate their hidden disability costs, but it will go some way to meeting their educational needs in a more equitable way.

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Disclaimer

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