

Literacy practitioners' perspectives on adult learning needs and technology approaches in Indigenous communities

Michelle Eady
University of Wollongong

Anthony Herrington
Curtin University of Technology

Caroline Jones
University of Wollongong

Current reports of literacy rates in Australia indicate an ongoing gap in literacy skills between Indigenous and non-Indigenous Australian adults, at a time when the literacy demands of work and life are increasing. There are many perspectives on what are the literacy needs of Indigenous adults, from the perspectives of community members themselves to the relatively under-researched perspective of literacy practitioners. This paper provides the insights, experiences and recommendations from adult literacy practitioners who work with adult Indigenous learners in communities across Australia. Focus group interviews, using an

online synchronous platform, were used to elicit views about the literacy needs of Indigenous adults in communities and the successes in and barriers to meeting those needs. The practitioners also shared their views on the use of technology in literacy learning. Together, these views can inform future directions in curriculum design and teaching approaches for community-based Indigenous adult literacy education.

Introduction

In 2006, the Australian Census indicated that 19.4% of Indigenous adults had completed high school (Year 12) compared with 44.9% of non-Indigenous adults (Australian Bureau of Statistics 2006). For this statistic, adults are defined as people aged 15 years or over in 2006. Since Year 12 attainment is now considerably more common among young Australian adults than a decade or two ago, and since Australia's non-Indigenous population is aging much faster than the Indigenous population, data on younger adults are also relevant. The results of recent rounds of the Program for International Student Assessment (PISA) highlight the continuing over-representation of Indigenous 15 year olds among Australian 15 year olds with the lowest literacy levels. The PISA data also point to the importance of taking into account socio-economic status and home location in understanding educational attainment among young Indigenous adults in Australia. As noted by Masters (2007) in his analysis of the 2006 PISA results, 'approximately 40 per cent of Indigenous students, 26 per cent of students living in remote parts of Australia and 23 per cent of students from the lowest socio-economic quartile are considered by the OECD to be "at risk"'.

Disparities between educational outcomes for Indigenous compared with non-Indigenous people are not confined to Australia. In international data, there is a greater disparity in educational

attainment between Indigenous and non-Indigenous people than between males and females, or between locations of residence (UNESCO-OREALC 2007, cited in UNESCO 2008: 62). To sharpen awareness of the need for increased adult literacy, UNESCO called in 2000 at the World Education Forum in Dakar for a 50% increase in adult literacy levels by 2015, particularly to improve the position of women and to allow access to basic and continuing education for adults. This goal may now not be met following the impacts of the current global recession on developing countries (UNESCO 2010).

The gap between Indigenous and non-Indigenous adults in Australia, in educational attainment and in literacy, is lived out within contexts that lack appropriate employment and training opportunities for many Indigenous people. This employment and training issue has been discussed by Kral and Schwab (2003), Eady (2004) and Greenall (2005), and has prompted government officials and agencies to seek solutions or improvements. In the literature, however, the views of a key partner in the literacy movement, the literacy practitioner, have not generally been a focus of research.

Indigenous literacy

The view of many Indigenous groups is that they should be included at the onset of any discussions around literacy concerns and should be asked what literacy means to their community and what aspects of literacy are important to their language group. Indigenous communities tend to place an intrinsic and collective value on education which is woven into the present and future needs of their people. Battiste (2008: 176) writes:

Aboriginal scholars and writers have recognized that education is the key matrix of all disciplinary and professional knowledge and central to alleviating poverty in Aboriginal communities.

Congruent with Indigenous learning perspectives, literacy in Indigenous communities tends to be viewed as a process and not as

a final outcome. Incorporating various learning styles, Indigenous literacy is viewed as a multi-faceted progression which develops throughout an individual's lifespan (Antone *et al.* 2002, Donovan 2007, George 1997, McMullen & Rohrbach 2003, NADC 2002). In Indigenous communities, increasing one's literacy skills tends to be recognised as more than a means to increasing one's education and obtaining viable employment. Indigenous perspectives on literacy encompass a broader perspective which includes the objective of striving to maintain cultural identity, preserving language and achieving self-determination (Antone *et al.* 2002, Battiste 2008, Kral & Schawb 2004, NADC 2002, Paulsen 2003). For many Indigenous people, 'your embodiment in time and place, and your language—your stories, place names and species names, songs, designs, dances, gestures etc.—together produce your identity' (Christie 2005: 2). All these aspects referred to by Christie (2005) reflect a wholistic interpretation of literacy.

Well respected and recognised Indigenous Elders and teachers have attempted to define Indigenous literacy. Seen as more than acquiring skills to get a better job or to obtain higher education, literacy is recognised by some in Indigenous communities as a multi-faceted process, essential to maintaining culture and language (Antone *et al.* 2002). Priscilla George/Ningwakwe describes Indigenous literacy:

Indigenous literacy is a tool, which empowers the spirit of Indigenous people. Indigenous literacy services recognize and affirm the unique cultures of Indigenous Peoples and the interconnectedness of all aspects of creation. As part of a life-long path of learning, Indigenous literacy contributes to the development of self-knowledge and critical thinking. It is a continuum of skills that encompasses reading, writing, numeracy, speaking, good study habits and communication in other forms of language as needed. Based on the experience, abilities and goals of learners, Indigenous literacy fosters and promotes achievement and a sense of purpose, which are both central to self-determination (George 1997: 6).

Similarly, ways in which Indigenous literacy has been supported, reflect culturally influenced assumptions. For example, current models of distance education being implemented for Indigenous learners are largely representative of the technology, heritage and scholastic traditions of the developed Western nations, and lack culturally appropriate learning components which have been proven a factor to the success of adult learning (AISR 2006, Ramanujam 2002, Sawyer 2004, Young *et al.* 2005). Ramanujam (2002: 37) cautions against blindly copying Western models of distance education rather than recreating Indigenous models, which ‘will have greater relevance and strength than the copied or adopted models’. Prototypes based on Western middle-class ideals and standards where the curriculum and learning objectives emphasise the acquisition of workplace skills and appropriate literacy levels related to personal success and status in mainstream society are often rejected in Indigenous communities (Taylor 1997).

While community views of Indigenous literacy are in evidence in the research literature, representation of the views of adult literacy practitioners is scant (George 1997). As part of a wider study into the use of synchronous learning technologies to support literacy needs of adult Indigenous learners (Eady, Herrington & Jones 2009), the researchers sought to determine this perspective—that is, to answer the questions: What do literacy practitioners perceive to be the literacy needs in Indigenous communities? How might the use of computer and information technology assist in meeting these needs?

Methodology

In addressing the problem of the under-representation of the perspective of literacy practitioners who work with Indigenous communities, the researchers thought it important to consult with literacy practitioners who have a common thread of working with

Indigenous adult literacy learners and who work in various locations around Australia. The questions to participants were:

1. Questions related to your career:
 - a. What is your job title?
 - b. How many years have you been in this capacity?
 - c. What are your qualifications?
 - d. What are your main interests in working with Indigenous communities?
2. What do you perceive to be some of the literacy needs in Indigenous communities?
3. What are some of the ways that you have been able to work with community members to meet these needs?
4. Have you ever used computer technology to work with your learners?
 - a. If so, what technology, how successful was it and would you use it again?
5. How do you feel that computer technology can change the way we support Indigenous learners?

An online focus group methodology was selected for initial consultation as it suits the involvement of individuals from many different geographical areas (Anderson & Kanuka 2003). The internet also enables such research to be done in a cost-effective manner. Asynchronous and synchronous tools are available and because of the variability of the tools themselves, it is difficult to make generalisations about them (Anderson & Kanuka, 2003).

The predominant forms of focus groups have been text-based (Anderson & Kanuka 2003), meaning that discussion takes place by means of entering text. This happens over time, where one participant posts an entry and hours or days later other participants will respond (asynchronously) or in a forum where live time discussion through text-based means takes place with immediate feedback and real time exchange (synchronously).

However, now with the ever-growing internet and capacity for high speed broadband, there are increasing opportunities for natural forms of communication over the internet (Anderson & Kanuka 2003). Programs that can be used in these situations allow for audio-and video-based opportunities that can be accessed by the participant in the form of down-streamed past events that have been recorded and can be replayed (asynchronous), or interactive sessions, where participants can converse with one another, receive immediate feedback and also see each other in real time during the online sessions (synchronous).

For the purpose of the online collaboration with literacy practitioners, the researchers opted to use iVocalize. iVocalize was used as a synchronous platform tool, however, sessions can be recorded for asynchronous use as well. The online focus group lasted approximately 90 minutes. The participants were asked a variety of questions and took turns responding to each other's comments. These questions were presented on PowerPoint slides for the participants, within the online session. The online focus group was recorded and then transcribed. The transcriptions were then read through and a research journal created, using coding to identify common categories between and amongst the participant responses and observations (Marlow 2005, Ryan & Bernard 2000, Stake 2000). The relationships between the identified categories resulted in the formation of themes, which, when combined and placed in order of predominance, lead to categories. These categories were reflected upon in combination with the reviewed literature, and Indigenous community members' views (see Eady, in prep.), which together provided the guiding principles of the research.

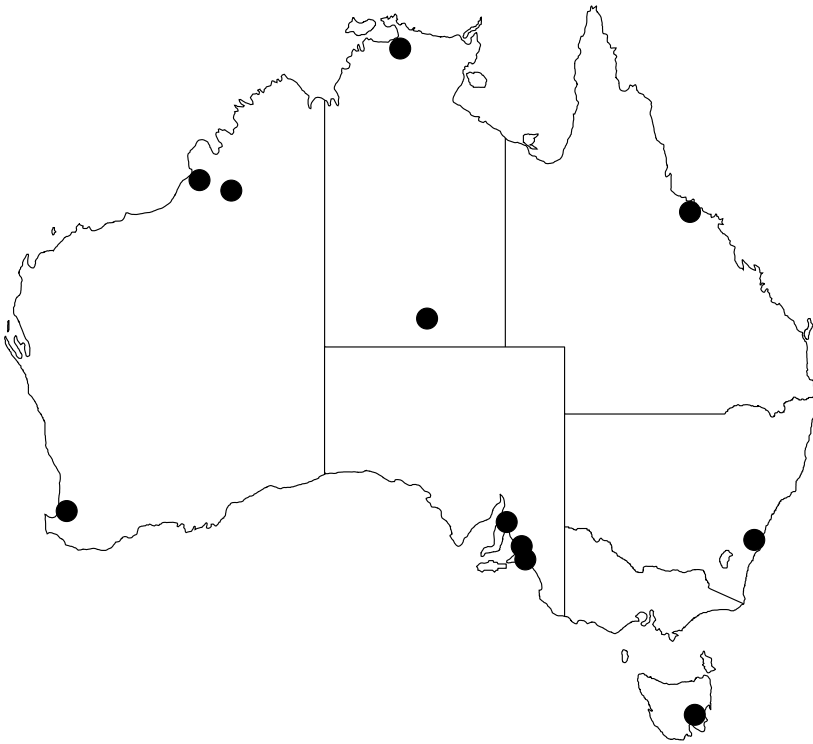
The primary goal in the analysis was to make sense of the data and find commonalities of meaning behind the data collected as a thorough and organized system of analysing the data is important to ensure validity of the study (Marlow 2005, Ryan & Bernard 2000, Stake 2000). The transcription of data collected was shared with participants to ensure accuracy, and reviews of the analysis ensured minimal researcher bias.

Results and discussion

The results for each focus group question are discussed below each question and transcribed interview data are provided where relevant to highlight particular aspects. The interview data have been coded. Each of the participants was given a pseudonym and the online group was coded OPFG (Online Practitioner Focus Group). The date was also recorded behind each entry in a day/month format.

1. Career-related questions (job title, years in this capacity, qualifications, and main interests in working with Indigenous communities?)

In discussing career-related issues, practitioners held various positions in literacy-based areas. The average number of years working in the field was 11 years and 6 months, varying from two years' experience to a 25-year veteran. The volunteer practitioner focus group was located across various areas of Australia as depicted on the map below:



The practitioners involved in the online focus group came with a variety of backgrounds and skill sets. As a group, the practitioners' qualifications included, among others:

- Advance Diploma in Fine Arts, Certificate IV in Training and Assessment, Master of Education
- Bachelor of Arts, Dip Ed Secondary, CELTA
- Bachelor of Science, Grad Dip Ed,, Adv Dip LLN in Vocational Education
- Grad Dip Adult Education, Grad Dip Aboriginal and Intercultural Studies
- Bachelor of Education

- Master of Professional Education and Training
- Ph D in Education, BEd, CGEd and Dip. Workplace Assessment and Training
- Social work degree, communication studies and post-graduate social work
- Diploma of Community Development

Participants' main interests in Indigenous communities varied. Some (like Amy, below) expressed a main interest in helping community members prepare for the future while keeping culture strong today. Others (like Ruby, below) expressed a main interest in improving vocational education and employment outcomes:

I love working with the community. I want to assist in self-dependence and empowerment for the next generation—whilst working with community members now to keep the Aboriginal culture healthy and strong for the next generation to inherit and have the skills to keep their country healthy.
(Amy_OPFG_24/09, pseudonyms used throughout)

My main interests are about developing and implementing better approaches in vocational education and linking them to workforce outcomes. My current interest is about enterprise development and approaches that engage Indigenous peoples in being trainers, leading Indigenous content and informing future developments of vocational training. (Ruby_OPFG_24/09)

These differences in main interests are perhaps not surprising, given the practitioners' varied backgrounds and skill-sets, and the geographical, economic and cultural diversity of the communities in which they work.

2. Literacy needs in Indigenous communities as perceived by the practitioners

The practitioners' perceived literacy needs in Indigenous communities centred on four main needs:

- (i) for a better understanding of the complexities of the Indigenous learner from both a language and a personal perspective
- (ii) for improvement of all literacy skills
- (iii) to help to better support the children in the community
- (iv) for literacy to provide a voice for the community.

Each of these is discussed in more detail below:

Need for a better understanding of the complexities of the Indigenous learner from both a language and a personal perspective

Many of the practitioners agreed that, before literacy needs can even start to be addressed in Indigenous communities, one must understand the complex nature of the language and underlying layers of personal experiences and barriers that are faced by Indigenous learners in communities. In most cases, literacy practitioners are teaching literacy in a Western literacy framework, from a Eurocentric perspective, using the English language. For many Indigenous people in Australia, there are many different dialects of their first language to master (including traditional languages, creoles, mixed languages, and/or non-standard English) before standard English is even introduced:

For some of the communities, we need to recognize that English is their fifth language and to realize the sophistication of their knowledge for knowing and for being so bilingual speaks to many different Aboriginal languages, so I think that that's something that a lot of practitioners face.
(OPFG_Kelvin_24/09)

This is not to say, however, that Indigenous learners are not able to function in their own language. The practitioners agree that it is not a matter of learners not having the capabilities to embrace the expected literacy tasks and all they entail. For example, one respondent pointed out that it is still all too easy for Indigenous people whose

first language is not standard English to be misjudged and underestimated for their ideas and views:

There's no doubt that people can communicate and communicate successfully and they can negotiate and they can do all of those high-level thinking things in their own language and then, when it gets transferred to English, it makes people look like, you know ... they don't know what they're doing or that they're not intelligent, which I think is quite deceiving.
(OPFG_Amy_24/09)

A concern of the practitioners is that there is not a strong link between the Indigenous literacies, with second language issues and standard Australian English coupled with Western literacy expectations. Another component of this category was an understanding of personal experiences and barriers that Indigenous learners have faced that have impeded and will continue to impact their literacy skills. Many of these learners have started out with negative early schooling experiences which have led them to leave school without graduating or completing their education. For some Indigenous learners, there seems to be a lack of motivation and a lack of confidence when resuming their education. One practitioner explained:

It's a lot to do with inter-cultural confidence for understanding how to relate to the mainstream white system.
(OPFG_Jette_24/09)

Many practitioners also agree that Indigenous learners do not see enough reason for continuing with their education through literacy upgrading or employment up-skilling. Acknowledging the linguistic complexities and incorporating a level of empathy and understanding of a learner's personal history is not to be overlooked when working with Indigenous learners. The practitioners agreed that these factors combined should be carefully considered by a practitioner when proceeding with a literacy program in an Indigenous community.

Need for improvement of all literacy skills

The next category of results that emerged from the data was an overall need to improve literacy skills in Indigenous communities. The literacy skills of these learners are often very low and insufficient to be successful at current learning tasks such as completing Year 11 or a Year 12 certificate. These skills are required for success on everyday tasks such as learning how to fill out forms and negotiating with service providers or corporations from outside the community. There is also a need for digital literacies, that is, learning how to use computers and becoming proficient with the language of technology and the tasks associated with such technology.

For many of the learners that these practitioners work alongside, it is a combination of the linguistic complexities, personal schooling experiences and a lack of early literacy strategies that has resulted in these low literacy skills. These practitioners would like their learners to have the ability to access any learning program, any employment opportunity and fulfil any personal learning goals with confidence and strong literacy skills.

Need to help to better support the children in the community

The third category that emerged focused on the children of the learners in Indigenous communities. The practitioners have identified a direct connection between the adult's learning experiences and strengthening interactions with children in communities. For many of the adults who attend literacy classes and up-skilling programs, a large part of their participation directly relates to their desire to increase their parenting skills and help their children with schoolwork.

This emerging theme is linked to the data presented earlier that relate to adult learners' own past experiences and poor early literacy strategies. Perhaps strengthening the skills of adult learners in

Indigenous communities will have a flow-on effect, preventing the same deficit in skills for the children of these learners. As one practitioner stated: 'Many programs work in a positive way from adults to kids' (OPFG_Ruby_24/09).

Need for literacy to provide a voice for the community

In the final category, the literacy practitioners considered that a literacy need for Indigenous communities today was a need for literacy skills to be able to provide a voice for the community. The communities in question face a need for English language and Westernised terminology so that the community and its members are able to negotiate for their community and represent the community's stance on issues that they feel important to the well-being of their people and society:

It's about inter-cultural confidence for understanding how to relate to the mainstream white system for which you need language skills basically and an understanding of how that system functions, and that's what literacy is actually in that context. (OPFG_Jette_24/09)

3. Ways in which practitioners have worked with community members to meet their needs

While the previous question focused on the literacy needs in Indigenous communities and resulted in four categories of needs as seen by the literacy practitioners, the next question asked the practitioners to share some of the ways that they have been able to help learners meet these identified needs. The practitioners identified three categories of approaches that they have taken:

- Using culturally relevant approaches and materials
- Community/learner ownership and community development focus
- Facilitating a mentorship program.

Using culturally relevant approaches and materials

The practitioners suggested that the best approach to take when working with Indigenous learners is to use culturally relevant approaches and culturally relevant materials when facilitating literacy programs for Indigenous communities. Some of these approaches include: oral language, talking, read-alouds and storytelling, music and song, learning through nature, using visual language and seeking Elders' advice.

One practitioner in particular noted that an important aspect of literacy learning in the communities is involving the respected Elders. The programs that are negotiated include the Elders who offer advice about how the programs should evolve and how those involved in the program; practitioner and learner, should work together. No matter what approach a practitioner decides to take, it was agreed that it is very important to use culturally relevant material with Indigenous learners. One practitioner described the process best in saying:

... the other thing is keeping the material really relevant to the culture so that you may be using English but about subject and content that is to do with caring for country things that are of great interest to those Aboriginal people. (OPFG_Kelvin_24/09)

Community/learner ownership and community development focus

The second category that arose was community/learner ownership and community development. One practitioner, who runs several different programs in many regions of Australia, described one starting point, an assessment tool for learners and communities:

We have developed a literacy assessment tool that gets people thinking about what they need and want and negotiate the program. This gets more buy-in and connection than just the idea that you will lose your dole (if you don't participate in the literacy lessons). (OPFG_Ruby_24/09)

Focusing on the topics that are relevant to the needs and interests of the learners and the community is important for the success of the learner. It is important to help a learner or a community figure out what they are trying to achieve with their literacy learning, and then help people go in the direction that they have identified. By embedding the literacy and numeracy skills into content that is of interest and relevance to the learner and or community, the results are more encouraging than when forcing material that has no relevance to the learners.

Literacy learning can also focus on community development and representation of community views. The practitioners offered several pertinent examples of how literacy learning can be designed to support community enterprise:

We have identified programs in the communities for literacy that are a local priority. For example, in a community there was a catering program, in another a shop, in another an elders' care program, and we get people to actually work in these programs and then all literacy support is about these activities and therefore is place and context specific/situated. (OPFG_Rowena_24/09)

The practitioners interviewed agreed that using curricula or programs that are learner focused, where there is a sense of ownership in a context in which the community benefits and develops as a result, is far superior to other learning approaches.

Facilitating a mentorship program

The third approach suggested was facilitating a mentorship program, not just for learners but for practitioners as well. For practitioners, it is important to be mentored when first arriving to work with Indigenous learners and equally important is a mentoring program for learners. A mentoring program enables a monitoring of learners as they go through their learning process:

Community members are in that program and they're getting mentored while they're in that so they're learning (course material) but they're also learning...to address kind of life issues really while they're doing that. So it is sort of employment, service delivery learning and what we call case work, you know, but in an integrated way. This provides platforms for people rather than feeling like they're a receiver of literacy teaching, they're actually part of a core service delivery and alongside that by the way they're getting literacy teaching, they're getting support with family relationship issues, they're getting whatever but they don't have to be seen as a client of a service. (OPFG_Jette_24/09)

4. Practitioners' previous use of computer technology with learners (what technology, how successful was it, and would they use it again?):

This question involved computer technology experiences with the communities and learners in those communities. Ten of the 11 practitioners reported using technology with learners in some form. Some practitioners brought their own computer to share with learners, explaining:

In my present job most of the communities I work with, the training rooms didn't have ability to put in any computers even if I had computers but I used to take my own computer. (OPFG_Robert_24/09)

Some other hardware accessories that were mentioned were data projectors and digital cameras. In the case of software applications, however, the practitioners have employed several different types of software for various purposes. For example, blogging, Facebook, email, Skype and Elluminate were used for social networking, Powerpoint and Publisher for presentations, Online pinball machine for playing games, and Photo Story and Movie Maker for digital storytelling.

The practitioners also reported that these computer applications incorporated literacy skill-building opportunities such as:

- language skills
- word processing
- driver's licence preparation
- reading
- researching
- writing
- oral presentation
- communication skills
- mentoring opportunities
- tax filing skills
- digital photography
- job searching
- banking
- opportunity for higher education courses

Some of the skills listed are very practically based, and when the technology was seen by the learner and community as 'useful', the learners readily became proficient in the use of that application. One practitioner described the women in one particular community learning online banking skills:

... I didn't teach them this, but it was so successful because they could pay their bills and all sorts of stuff and not have any cash in their hands. They are amongst the best internet bankers that I've seen anywhere. So I was really impressed with, when the technology is useful, how quickly it was grabbed on in the communities. (OPFG_Robert_24/09)

While there were clear indications that the learners enjoyed using the technology, the practitioners also shared some frustrations when using technology with learners in Indigenous communities. The recurring themes in the discussion included the lack of computers

and the absence of internet services in many of the communities where the practitioners work. Despite some of the barriers to using computer technology in Indigenous communities, there is much evidence to suggest that computers are being incorporated in many aspects of literacy learning in these communities.

5. How practitioners felt computer technologies could change the way they support Indigenous learners

Computer technologies have afforded flexible communication and learning applications. While many mainstream and urban city centres have enjoyed these privileges for many years, some more remote and isolated communities in Australia have yet to experience easy access to computers, the internet and other computer applications. The practitioners were asked how they felt that computer technology could change the way they support their Indigenous learners.

The most prominent answers revealed how practitioners felt that, through computer technologies, they could better meet the needs of their learners while implementing learning activities that build on both cultural and learner strengths. Computer technologies mean that visual literacies, oral memory and spatial relations can be brought to the forefront and used to advantage. In working with technology, people can also work in culturally appropriate and supportive transgenerational groups and focus on sharing their knowledge.

Computer technology could also help to provide literacy and learning services in a learner's own environment and lessen the isolation that many learners feel:

It would be great if they could access that sitting in their own, familiar, comfortable space where they feel confident and powerful, they can have their kids around their legs or whatever needs to happen but they can still be part of that. I would really, really love that to happen. I think that would be hugely beneficial. (OPFG_Kandy_24/09)

A second focus the practitioners identified was that computer technology can provide more accessibility to higher education opportunities and job/work readiness training programs for learners. The easy access that computers can provide to courses, lectures and workshops opens so many doors for isolated Indigenous learners. This does not take away from the face-to-face support and the physical community learning space; in fact, the technology can strengthen these programs by drawing in more learners but with less demand on the practitioner. Computer technology can also provide a platform for learners to receive individual support, perhaps one-to-one tutoring to assist with the literacy and numeracy aspects of their vocational training. A strength in this area is the availability of job/work readiness training programs. Using computers as a means to train for positions where there are jobs but under-skilled potential employees is another strong argument for better services and more access to computers for these communities.

The third benefit was the improved social networking and communication opportunities that will arise from using computer technology. A practitioner gave an example where family members who had moved away from close knit communities now would have a way of keeping in better touch with friends and family members and 'stay connected' to their home community.

A final topic of interest for the focus group around how computer technology could change the way we support learners was a discussion of the opportunities for professional development of practitioners who work in similar fields but are separated by distance. Professional development opportunities for remote practitioners are often few and far between, however, with computer technologies, the practitioners could have access to workshops, conferences and online sharing circles.

These four ways in which practitioners can potentially better support learners through technology are both promising and exciting.

Practitioners realise, however, the realities of working with computer technology and highlighted some concerns. A major consideration when attempting to use computers in Indigenous communities is access and, for the majority of these communities, there are logistic challenges in finding a workspace, purchasing equipment, connecting to the internet, and that is just the beginning. The cost factor is always an issue, especially when it comes to literacy projects, so access becomes a barrier to the computer technology. Second is the need for technical support once the problem of gaining access has been solved. The third potential barrier to using computers to effectively support learners that was identified by the practitioners was effective training opportunities. Training opportunities would be needed for the practitioners who would be using the technology with learners. Competent and confident online instructors lead to students with similar attributes. The topic of effective training also includes the training that would be provided to the learners:

The next thing we have to do is to make it effective training, so we have to find a way of making the training work in the communities. If we are giving training to six or seven different communities using online training at the same time, which is what one assumes that we'll be doing, we also have to make sure that what we're saying has relevance to each community. And I reckon that would take a whole lot of relevant research in that area. (OPFG_Robert_24/09)

Although the practitioners identified these three potential barriers, they also shared hope for future applications as well. Despite the obvious concerns of implementation, costs, maintenance and training, the positive implications for effectively supporting technology use by Indigenous learners was summarised beautifully by one respondent:

I feel as though the experience that you can have through computers is that there is incredible mediacy (active and

creative products of media) ... and that it's a little bit like drawing, that you have that sort of impact ... and even though it never ... it won't replace being in front of a person and hearing the vibrations and the sound of their voice and looking into someone's eyes, it enables to cut through a lot of layers that, you know... through books or through distance can isolate people. So using computers and technology can spark creativity and a sense of hope that starts a little kindling of fire within people that they want to go and meet those people, that they want to go to those places and actually move towards exposing themselves to something new. So I think, you know, this is what the technology can do. (OPFG_Kelvin_24/09)

Conclusion

There is a wealth of knowledge, expertise and opinions to be gained from providing a forum for literacy practitioners to come together and share their experiences. Fahy and Twiss (2010) accessed these valuable insights through a study which looked at how Canadian literacy practitioners view the use of online technology for their own professional development. The findings of their study suggest that many of these practitioners recognise the potential of using online technologies, particularly because it saved time and money and increased access to opportunities for training and interaction.

While reflecting on the training issues for literacy practitioners is important, too often the adult literacy practitioner, the front-line worker, has been overlooked in research and policy designed to improve the generally low literacy levels among many Indigenous people in Australia. This study has shown that literacy practitioners develop, through their work experiences, very specific and strongly held views on the literacy needs of the Indigenous community in which they are employed. These views of practitioners are very likely shaped by their own backgrounds and the specific geographical, economic and cultural situation in the communities with which they are familiar. Practitioners' views are not necessarily 'correct'

in any sense, and may differ somewhat from community members' views (Eady, in prep.), but they tend to be held passionately, as seen here and in the study by Batell *et al.* (2004). It is practitioners' views about what the needs are that lead them to try out specific educational strategies. A number of such teaching approaches were described by practitioners in this study, including using culturally relevant approaches, working towards community development and developing mentoring arrangements. Computer technology had been used with Indigenous learners by all but one of the practitioners, often to support real-life literacy skills. Despite typical current inadequacies in hardware, software and technical support in communities, practitioners were generally optimistic and open-minded about the potential for computer technology, including synchronous technology, to improve literacy skills, access to training and social cohesion. It is worth remembering that this last finding may or may not be generally true of literacy practitioners working in Indigenous communities, since the focus group participants in this study were volunteers willing and interested to take part in an online focus group.

In this study, and in a recent Canadian project (Getting Online Project 2008), many literacy practitioners have identified a place for online learning in their future work in the literacy field. Literacy practitioners have a voice that needs to be heard in the negotiations and decision-making around curricula and approaches to literacy learning and technology in their own field. The shared knowledge of these practitioners has the influence to allow us to move towards lessening the literacy gap in positive, constructive and meaningful ways.

References

- Anderson, T. & Kanuka, H. (2003). *E-research: Methods, strategies, and issues*, Boston, MA: Allyn and Bacon.
- Antone, E., Gamlin, P., Sinclair, M., Turchetti, L., Robbins, J. & Paulsen, R. (2002). *What is Native literacy?*, http://www.oise.utoronto.ca/CASAE/cnf2002/2002_Papers/sym-antone&etal2002w.pdf [retrieved 1 March, 2008].
- Australian Bureau of Statistics (ABS) (2006), *Australia: Highest year of school completed by Indigenous status by sex*, <http://www.censusdata.abs.gov.au> [retrieved 16 April, 2009].
- Australian Institute for Social Research (AISR) (2006). *The digital divide—Barriers to e-learning*, <http://www.ala.asn.au/research/Barriers%20%20by%20Digital%20Bridge%20Unit%20and%20undertaken%20by%20Australian%20Institute%20of%20Social%20Research.pdf> [retrieved 10 March, 2008].
- Battell, E., Gesser, L., Rose, J., Sawyer, J. & Twiss, D. (2004). 'Hardwired for hope: Effective ABE/literacy instructors', Nanaimo, BC: Malaspina Univeristy-College, <http://www.nald.ca/ripal> [retrieved 17 April, 2010].
- Battiste, M. (2008). 'The decolonization of Aboriginal education: Dialogue, reflection, and action in Canada', in P.R. Dasen & A. Akkari (eds.), *Educational theories and practices from the majority world*, New Delhi: Sage Publications: 168–195.
- Christie, M. (2005). 'Aboriginal knowledge on the Internet', *Researching Our Practice Conference*, Batchelor Institute, <http://www.cdu.edu.au/centres/ik/pdf/AbKnowInternet.pdf> [retrieved 12 November, 2008].
- Donovan, M. (2007). 'Can information communication technological tools be used to suit Aboriginal learning pedagogies?', in L.E. Dyson, M. Hendricks & S. Grant (eds.), *Information technology and Indigenous people*, Hershey, PA: Information Science Publishing: 93–104.
- Eady, M. (2004). 'Building a solid framework: Online mentoring for adult literacy learners in Northwestern Ontario—An action research study and recommendations for implementation', unpublished research, Lakehead University, Thunder Bay, ON.
- Eady, M. (in prep.). 'Using synchronous technologies to support self-identified literacy needs of Indigenous communities', PhD thesis, University of Wollongong, Australia.

- Eady, M., Herrington, A. & Jones, C. (2009). 'Establishing design principles for online synchronous literacy learning for Indigenous learners', in *Proceedings of World Conference on Educational Multimedia, Hypermedia and Telecommunications 2009* Chesapeake, VA: AAC: 1049–1054, <http://www.editlib.org/p/31619> [retrieved 25 September, 2009].
- Fahy, P.J. & Twiss, D. (2010). 'Adult literacy practitioners' uses of and experiences with online technologies for professional development', *Journal of Applied Research on Learning*, 3: 1–18.
- George, P. (1997) *Vision: Guiding Indigenous literacy*. Owen Sound, ON: Ningwakwe Learning Press.
- Getting Online Project (2008). *Getting online: A research report on online learning for Canadian literacy practitioners*, www.nald.ca/gettingonline [retrieved 15 April, 2010].
- Greenall, D. (2005). *Formative evaluation of the Sunchild E-Learning Community*, Ottawa, ON: The Conference Board of Canada.
- Ivocalize web conference (2002). Seattle, WA: iVocalize LLC.
- Kral, I. & Schwab, R. (2003). 'The realities of Aboriginal adult literacy acquisition and practice: Implications for remote community capacity building', http://dspace.anu.edu.au/bitstream/1885/39964/2/2003_DP257.pdf [retrieved 18 March, 2008].
- Marlow, C. (2005). *Research methods for generalist social work*, Belmont, CA: Thomson, Brooks/Cole.
- Masters, G. (2007). 'A world class education system? Evidence from PISA 2006', *ACER eNews*. <http://www.acer.edu.au/enews/2007/12/a-world-class-education-system-evidence-from-pisa-2006> [retrieved 10 May, 2010].
- McMullen, B. & Rohrbach, A. (2003). *Distance education in remote aboriginal communities: Barriers, learning styles and best practices*, Prince George, BC: College of Caledonia Press.
- National Aboriginal Design Committee (NADC) (2002). 'Position paper on Aboriginal literacy', www.nald.ca/fulltext/position/position.pdf [retrieved 8 March, 2008].
- Paulsen, R. (2003). 'Native literacy: A living language', *Canadian Journal of Native Education*, 27(1): 23–28.
- Ramanujam, P. (2002). *Distance open learning: Challenges to developing countries*, Delhi: Shipra Publications.

- Ryan, G. & Bernard, H. (2000). 'Data management and analysis methods', in N. Denzin & Y. Lincoln (eds.), *Handbook of qualitative research*, 2nd ed., Thousand Oaks, CA: Sage Publications: 768–802.
- Sawyer, G. (2004). 'Closing the digital divide: Increasing education and training opportunities for Indigenous students in remote areas', http://pre2005.flexiblelearning.net.au/projects/media/digitaldivide_projectreport.pdf [retrieved 9 March, 2008].
- Stake, R. (2000). 'Case studies', in N. Denzin & Y. Lincoln (eds.), *Handbook of qualitative research*, Thousand Oaks, CA: Sage Publications: 435–454.
- Taylor, A. (1997). 'Literacy and the new workplace: The fit between employment-oriented literacy and Aboriginal language-use', *British Journal of Sociology of Education*, 18(1): 63–80.
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2008). *Education For All by 2015: Will We Make It?* <http://www.unesco.org/en/efareport/reports/2008-mid-term-review/> [retrieved 10 May 2010].
- United Nations Educational, Scientific and Cultural Organization (UNESCO) (2010). *Education For All—Global Monitoring Report: Reaching the Marginalized*, <http://www.unesco.org/en/efareport/reports/2010-marginalization/> [retrieved 10 May, 2010].
- Young, M., Robertson, P., Sawyer G. & Guenther, J. (2005). 'Desert disconnections: Desert learning and remote Indigenous peoples. Australia Flexible Learning Network', <http://www.icat.org.au/media/Research/telecommunications/desertdisconnections-elearning-and-remote-Indigenouspeoples-2005-AFLF.pdf> [retrieved 10 November, 2008].

Acknowledgements

This research is supported in part by a generous grant from the Digital Bridge Unit, Department of Further Education, Employment Science and Technology, Government of South Australia. The researchers would also like to acknowledge the Australian Council for Adult Learning, Debbie Soccio, Sioux Hudson Literacy Council, Contact North/*Contact Nord*, and practitioners and Indigenous community members involved in this project. Ethics number HE08/195.

About the authors

Michelle Eady is a lecturer in Professional Studies in the Faculty of Education at the University of Wollongong. Her research interests have brought her from the remote areas of Canada to similar regions in Australia to research how stakeholders in education can best support adult learning in Indigenous populations. Her interests include Indigenous adult learners, Indigenous knowledge, technology and education and learners with special needs.

Tony Herrington has been involved in higher education for over 25 years. Currently he is Head of the School for Regional, Remote and eLearning at Curtin University of Technology in WA. Tony has conducted extensive research and published widely in the area of adult learning with technology. Recent research has focused on mobile learning in higher education.

Caroline Jones is a Senior Lecturer in Special Education at the University of Wollongong. Caroline has research interests in children's language development, particularly in the development of phonological skills and word learning. She has worked with children and adults on research projects in a range of contexts, including Aboriginal communities in regional NSW and remote NT.

Contact details

Michelle Eady, 23.118 Faculty of Education, University of Wollongong, Northfields Avenue, Wollongong, NSW 2522

Tel: (02) 4221 3613

Email: meady@uow.edu.au

Anthony Herrington, 16 Ainslie Road, North Fremantle, WA 6195

Tel: (02) 9266 4821

Email: A.Herrington@curtin.edu.au

Caroline Jones, 67.315 Faculty of Education, University of Wollongong, Northfields Avenue, Wollongong, NSW 2522

Tel: (02) 4221 4905

Email: carjones@uow.edu.au