Creating optimal literacy learning environments using synchronous technologies to support Aboriginal adult learners effectively: a Narungga perspective

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STATEMENT OF ORIGINALITY

This thesis reports the original work of the author, except as stated.
It has not been previously submitted for a degree at this or any other university.

Michelle Eady
June 2010
PUBLICATIONS DERIVED FROM THIS RESEARCH

**Refereed Journal Articles**

**Refereed International Conference Publications**


**Refereed National Conference Publications**

**International Conference Presentations (refereed on abstract only)**

**National Conference Presentations (refereed on abstract only)**

**Online Interactive Presentations (refereed on abstract only)**

ACKNOWLEDGMENT OF COUNTRY

Acknowledgement of the Land

I would like to acknowledge the traditional custodians of this land and pay my respects to the Elders both past, present and future for they hold the memories, the traditions, the culture and hopes of Aboriginal people everywhere. I would like to acknowledge all of the Aboriginal literacy practitioners and learners who have opened their hearts and minds to the idea of learning together using technology. We must always remember that under the concrete and asphalt, this land is, was and always will be traditional Aboriginal land.

Paying respect to the first peoples on whose land we are, Acknowledging the loss of lands, cultures and treasures, Knowing the consequences for people, communities and nations, Believing we can walk together to a better future, This research is a step in that direction.
ACKNOWLEDGMENT OF COMMUNITY

Acknowledgement of the Community of Point Pearce

To my new found friends and family of Point Pearce. I feel very honoured and privileged to have been welcomed into your community and to have worked alongside you, in the process of this research. I know that this experience has been unique and very special, and what I have learned during my time at Point Pearce will never be forgotten. I would like to thank, in particular, the council members who, over the course of this research, endorsed and supported this project: Alec Wanganeen, George Walker, Lynette Newchurch, Marilyn Wanganeen, Ernest Wilson, Carlo Sansbury, Judy Walker, Barry Power, Raymond Wanganeen, Lindsay Sansbury, Paul Sansbury and Doreen Lawrie.

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Most importantly to the amazing community focus group members: Alice Rigney, Eileen Wanganeen, Judith Walker, Terri Smith, Kylie Velder, Elizabeth Newchurch, Paul Sansbury, Peggy Weetra, Kyle Power, Gwendoline Power, Tristan Power, Barry Power and Debra Borlace. This project is your project. My part, with your permission, was to share your actions, discussions, creativity, commitment, and most of all your community strength, through written words. Thank you for taking me on such an incredible journey. I sincerely look forward to continuing to work together with you to see some of the dreams that you have for your community come true. Nhagudja!
PERSONAL ACKNOWLEDGMENTS

I would like to extend my sincere thanks and deep appreciation to my supervisors, Dr. Irina Verenikina, Dr. Caroline Jones and Dr. Holly Tootell for their guidance, encouragement and support during the course of my research. The high priority, thorough review and prompt attention that you have given my work will never be forgotten. Thank you.

Most of all, I would like to thank my family, Don and Gabriel. This journey has been a long one and I could never have done it on my own. Thank you for believing in me, for moving across the world, and for everything that you have done to support me. Gabe, when you were five years old you emphatically stated, “We’re all gonna be doctors and it’s gonna be so great!” Well Gabe, we are all doctors now!

Many thanks to Dr. Anthony Herrington. Thank you for believing in my ability, helping me get here and being such a thorough and thoughtful critical friend to my research.

My special thanks to Dr. Stuart Woodcock. Thank you for your time, energy, support, encouragement and patience. I promise to pay it forward.

Thank you to my parents, family and friends in Canada, Australia and everywhere in between. Your constant support, encouragement and telephone bills were all amazing.

To Wendy Golder and the Digital Bridge Unit, Department of Further Education, Employment, Science and Technology in the Government of South Australia. Wendy, I will never forget our road trips, your belief in my project, funding contributions, ongoing support, encouragement and friendship. This project would have never happened without you. Thank you so much.

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To Brenda Dovick, thank you for being a gardener, a traveller, a listener, a researcher and most of all a friend. Love and light always.

I have been blessed to have met Auntie Alice Rigney. Alice is a Narunggan Elder from the community of Point Pearce. She also was the first Aboriginal school principal in Australia. Auntie Alice was involved in this research from the time the researcher arrived in Point Pearce, right through to a meticulous reading and approval of the thesis on the community’s behalf. Auntie Alice, words cannot express how important it was to me that you took part in this project and approved of this work.

A special acknowledgment to the staff at Contact North|Contact Nord for their support during the time of this research, I am very thankful for the privilege and permission to use the training slides that I collaborated on with the staff for the purpose of this study.

Thank you to Dr. Lyn Henderson of James Cook University for her support in using her work to inform my theoretical framework.

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To my colleagues at Sioux Hudson Literacy Council, words cannot express how much I appreciate your support, encouragement and faith in what I do. Thank you from the bottom of my heart.

Many thanks to the academic staff and fellow students in the Faculty of Education, University of Wollongong for your ongoing support, encouragement and professionalism.
COMMUNITY PERSPECTIVE

There are many ways of learning and this process is another futuristic method of getting people to gain knowledge. It seems that we go from what was in the past to what is possible in the future. However, we must retain those valued cultural aspects of our lives which strengthen us, like our family, culture, language and identity. Like everything, when we unite, there are those things which are outstanding and those that we need to build on because sometimes, we come at the subject from different eyes, and that’s okay too because overall, we want to make educational outcomes the best that we can make it for the most disadvantaged people on the planet, in all countries everywhere; those who have been dispossessed, deprived, disempowered but have survived. We have to make it right and sometimes using modern technology of the future is another method of this empowerment. This project helped us to see this and go in that direction.

~Alice Rigney, Narungga Elder
May 2010

“Sophistication is the ability to approach culture with the minimum amount of anxiety.”

~Northrop Frye (1912-1991)
Current reports of literacy rates in Australia indicate a persisting discrepancy in literacy skills between Aboriginal and non-Aboriginal Australian adults at a time when the literacy demands of work and life continue to intensify. There are many perspectives of the literacy needs of Aboriginal adults, including opinions from the literature, literacy practitioners, and Aboriginal community members themselves. These needs include adult basic education skills such as reading, writing and mathematics education, as well as employability training and the ever-increasing demand for technology competencies.

Current and active projects worldwide are attempting to alleviate literacy issues and lessen the glaring skills discrepancy in Aboriginal communities by providing opportunities for flexible learning contexts in online, live-time, and mobile environments. The goal of implementing these synchronous platforms is to provide flexible learning opportunities to suit learners’ busy schedules and needs, while enabling them to learn in “anytime, anywhere” environments.

The purpose of this research was to investigate how the literacy needs of adult learners in an Australian Aboriginal community could effectively be supported by the use of synchronous technology. The aim was to develop best practices to support adult literacy learners in Aboriginal communities within this context.

The research questions were three-fold. Firstly, the research identified the adult literacy needs in Aboriginal communities as derived from three sources; the literature reviewed, literacy practitioners interviewed, and from discussion with community members. Secondly, the types of supports and technology already in use by literacy practitioners in Aboriginal community settings were examined. Thirdly, and central to the research, was the creation of a set of principles and a model to be applied in similar teaching and learning contexts.
The theoretical framework for this research was a combination of three theoretical perspectives; Vygotsky’s (1978) sociocultural theory, Lave and Wenger’s (1991) situated learning model and Henderson’s (1996) multiple cultural model. The three perspectives, depicted as encompassing circles, became more refined and introspective of the learning landscape of Aboriginal communities as each layer of theory was added.

To investigate the creation of an environment that best supports adult Aboriginal literacy learners with the use of synchronous technologies, a research approach that could incorporate practitioner knowledge and community participation in the creation of a solution was desirable. A paradigm that could also provide opportunities to test the solution was needed. For these reasons, the design-based approach (Reeves, 2006) was employed.

The process of research when using a design-based approach was undertaken in four phases. Initially design-based research involved the identification of the problem of literacy skill acquisition, and support and technology currently implemented. In the second phase, a collaborative community engagement project was developed as a solution to the problem identified. This was based on the draft-guiding principles drawn from the literature, consultation with literacy practitioners, and the community. The third phase of the research involved three iterations of the project in which the guiding principles were refined and the project reflected and improved at each phase. Finally, in the fourth phase of the research, eleven design-based principles emerged that will guide future research in the areas of online learning and Aboriginal adult literacy learners. This phase also presented an original model that added a further dimension to the assembled theoretical framework. The proposed Community Strength Model offers a conceptual approach to systems of learning in Aboriginal communities, starting with community-based goals and directions, and building shared learning experiences through authentic voice and community strength.

Together, these design-based principles and Community Strength Model can inform future directions in curriculum design and teaching approaches for community-based synchronous learning for Aboriginal adult learners.
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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>ACAL</td>
<td>Australian Council of Adult Literacy</td>
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<tr>
<td>ACL</td>
<td>Alberta’s Commission on Learning</td>
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<td>AFLF</td>
<td>Australian Flexible Learning Framework</td>
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<tr>
<td>AISR</td>
<td>Australian Institute for Social Research</td>
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<tr>
<td>ANTA</td>
<td>Australian National Training Authority</td>
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<tr>
<td>ASPBAE</td>
<td>Asian South Pacific Association for Basic and Adult Education</td>
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<tr>
<td>BA</td>
<td>Bachelor of Arts</td>
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<tr>
<td>BEd</td>
<td>Bachelor of Education</td>
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<tr>
<td>CBNC</td>
<td>Crossing Boundaries National Council</td>
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<tr>
<td>CD-ROM</td>
<td>compact disc read-only memory</td>
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<tr>
<td>CDU</td>
<td>Charles Darwin University</td>
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<tr>
<td>CELTA</td>
<td>Certificate in English Language Teaching to Adults</td>
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<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
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<td>CFG</td>
<td>Community Focus Group</td>
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<td>CSM</td>
<td>Community Strength Model</td>
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<tr>
<td>DBP</td>
<td>Design-Based Principle</td>
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<tr>
<td>DBU</td>
<td>Digital Bridge Unit</td>
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<tr>
<td>DFEEST</td>
<td>Department of Further Education, Employment, Science and Technology</td>
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<tr>
<td>DGP</td>
<td>Draft-Guiding Principle</td>
</tr>
<tr>
<td>ESL</td>
<td>English as a Second Language</td>
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<tr>
<td>GLA</td>
<td>Good Learning Anywhere</td>
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<tr>
<td>GO</td>
<td>Getting Online</td>
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<tr>
<td>Grad Dip</td>
<td>Graduate Diploma</td>
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<tr>
<td>HSC</td>
<td>High School Certificate</td>
</tr>
<tr>
<td>IALLSS</td>
<td>International Adult Literacy and Life Skills Survey</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>ICQ</td>
<td>homophone for the phrase “I seek you”</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>K-Net</td>
<td>Kuhkenah Network</td>
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<tr>
<td>Kindy</td>
<td>Kindergarten</td>
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<tr>
<td>KO</td>
<td>Keewaytinook Okimakanak</td>
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<tr>
<td>LBS</td>
<td>Literacy and Basic Skills</td>
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<tr>
<td>LLC</td>
<td>Limited Liability Company</td>
</tr>
<tr>
<td>LLN</td>
<td>Language Literacy and Numeracy</td>
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<tr>
<td>m-learning</td>
<td>mobile learning</td>
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<tr>
<td>MoE</td>
<td>Ministry of Education</td>
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<tr>
<td>MTCU</td>
<td>Ministry of Training, Colleges and Universities</td>
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<td>NADC</td>
<td>National Aboriginal Design Committee</td>
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<td>NILA</td>
<td>National Indigenous Literacy Association</td>
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<td>NWOK</td>
<td>Native Ways of Knowing</td>
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<td>NRS</td>
<td>National Reporting System</td>
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<td>ONLC</td>
<td>Ontario Native Literacy Council</td>
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<tr>
<td>OPFG</td>
<td>Online Practitioner Focus Group</td>
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<tr>
<td>PC</td>
<td>Personal Computer</td>
</tr>
<tr>
<td>PEI</td>
<td>Yanomami Intercultural Education Program</td>
</tr>
<tr>
<td>PhD</td>
<td>Doctor of Philosophy</td>
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<tr>
<td>RA</td>
<td>Relationships Australia</td>
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<tr>
<td>RJ</td>
<td>Research Journal</td>
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<tr>
<td>RTO</td>
<td>Registered Training Organization</td>
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<tr>
<td>SHLC</td>
<td>Sioux Hudson Literacy Council</td>
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<tr>
<td>StatsCan</td>
<td>Statistics Canada</td>
</tr>
<tr>
<td>TACT</td>
<td>Teacher Assistant Career Training</td>
</tr>
<tr>
<td>TAFE</td>
<td>Training and Further Education</td>
</tr>
<tr>
<td>UAG</td>
<td>University Attendee Group</td>
</tr>
<tr>
<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>Web CT</td>
<td>Web Course Tools</td>
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<tr>
<td>ZPD</td>
<td>Zone of Proximal Development</td>
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DEFINITION OF TERMS

For the purpose of this research, the following definitions will be used:

1. Elder education

Elder education is a term used in the Narungga community. It defines the wealth of knowledge, wisdom and experience that an Elder possesses and passes on to others. To be imparted with Elder education means an Elder has shared his or her knowledge with you.

2. Indigenous

The word *Indigenous* does not currently have an established, congruent global definition that is found in any dictionary. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) (2004) stresses:

> There is no universal and unambiguous definition of the concept of ‘Indigenous peoples,’ since no single accepted definition captures the diversity of Indigenous cultures, histories and current circumstances (p. 10).

Through its work in supporting the rights and status of Indigenous populations on a global level, the United Nations has established the following as a working definition of Indigenous peoples that will be the working definition of this research:

> Those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing in those territories, or parts of them. They form at present non dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal systems (Martinez Cobo, 1986, p. 44).

3. Literacy

There are many definitions for the term literacy. For the purpose of this research, literacy is not viewed solely as a set of skills limited to reading and writing, but as Bougie (2008) suggests:

> Literacy skills are seen as essential for individuals to realise their full personal, social and economic potential, and the foundation upon which
people may acquire additional knowledge and skills throughout adulthood (p. 3).

Literacy activities can be recognised in three ways, which when viewed together provides a wholistic view of literacy:

1. Functional; such as filling out forms or personal banking,
2. Home-based; for example, reading and managing recipe instructions or reading to children,
3. Work-related; for example reading reports, using a computer and completing tasks associated with employment (Kral & Falk, 2004).

When using the term literacy in the context of Indigenous peoples, this wholistic perception of adult literacy for Indigenous peoples broadens to include the preservation of cultural identity and attainment of community self-determination (Antone et al., 2002; George, 1997; Kral & Schwab, 2003; Zepke & Leach, 2002).

4. Literacy practitioner
   The term literacy practitioner refers to the individual who might act as an instructor, mentor and guide in teaching basic literacy skills to adults. This includes both trained instructors and community volunteers who may work with small groups consisting of one to 10 learners, or more (Community Literacy of Ontario, 2009). In the context of today’s learning environment, this also includes larger groups in an online setting. The writer of this thesis recognises that those who work in the field of adult literacy “have diverse and often multiple roles in the delivery of literacy programming – whether instructor, advocate, counsellor, administrator, coordinator, etc.” (Sault College, 2006).

5. Platform
   For the purpose of this research, the definition of platform will be adopted from Wenger, White and Smith (2009): Platform means a technology package that integrates a number of tools available on the marketplace (for purchase or for free) that one can acquire, install or rent. Platforms offer communities a simple entry into using a set of tools (p. 40).
6. Point Pearce Community (by request)

As mentioned in the first definition, the term Indigenous is used in much of the literature as a means to provide a working definition of ‘Indigenous peoples.’ There are many other terms that are used globally for this population, such as Aboriginal people, First Nations people, and Traditional Custodians. For certain groups, the language group is a preferred name; for instance, Narungga people or Cree Nation. For the purpose of this research, the community has requested that the term Aboriginal be used when discussing the community of Point Pearce and community members directly. Much of the literature in Chapter Two uses the term Indigenous that the research has left intact, however, the research questions and work described onwards will respect the communities’ wishes and use the term ‘Aboriginal.’

At the beginning of the research, the community signed consent forms that would assure their personal anonymity and the anonymity of their community. However, once the research was completed and the final presentation and document delivered to the community members, the community asked if their first and last names could be used in the acknowledgement section of this document, as well as identification of their community and their language group acknowledged. This research was done in cooperation with the community, and therefore, the researcher complied with their wishes.

7. Remote communities

Remote communities are considered geographically isolated locations that are generally limited to access by air, water or railway transportations. Depending on seasonal conditions, some road access can be used for human transport and hauling goods (McMullen & Rohrbach, 2003). Limited access to services in these communities necessitates residents to travel to larger urban centres for some personal needs, employment and amenities such as visits to hospital, high school attendance, and shopping.

8. Synchronous learning technologies

Synchronous learning refers to learners and instructors exchanging information and interacting simultaneously in an online learning community in real time. Synchronous learning technologies currently utilised in the area of adult literacy include Internet
conferencing, satellite broadcast, mobile or cellular phones, video teleconferencing and interactive chat rooms (Aderinoye, Ojokheta, & Olojede, 2007; Australian Flexible Learning Framework, 2009; Greenall & Loizides, 2001).
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