



Improving educational outcomes and opportunities for Indigenous students begins at the cultural interface in the classroom

Final Report 2015

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Support for the production of this report has been provided by the Australian Government Office for Learning and Teaching. The views expressed in this report do not necessarily reflect the views of the Australian Government Office for Learning and Teaching.



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2015

ISBN PRINT 978-1-76028-556-2
ISBN PDF 978-1-76028-557-9
ISBN DOCX 978-1-76028-558-6

Acknowledgements

Acknowledgements are extended to the three schools participating in this project, along with the teachers, principals, community education officers, students, and community Elders without whose contributions this project would have been unable to be completed.

List of acronyms used

ARTIE – Achieving Results Through Indigenous Education

CRS – Culturally responsive teaching

EAL – English as another language

EFL – English as a foreign language

FOGS – Former Origin Greats

MCEEDYA – Ministerial Council of Education, Early Childhood Development and Youth Affairs

NAP – National Assessment Program

OLT – Office for Teaching and Learning

QUT – Queensland University of Technology

SCRGSP – Steering Committee for the Review of Government Service Provision

UQ – The University Of Queensland

Executive summary

Across the range of educational outcomes, Indigenous students are performing more poorly than non-Indigenous students. Despite some progress in recent years, these gains are patchy and have not substantially redressed the overall educational disparity. The effects of this educational disadvantage are far-reaching and if unaddressed will continue to have a substantial impact on Indigenous students' access and participation in further and higher education, along with negative impacts on their future life chances.

The research evidence suggests that teacher and classroom related factors contribute substantially to student achievement. Teacher attrition rates in metropolitan, regional and remote schools with high numbers of Indigenous students remain disproportionately high. In examining this trend, a strong link is evident between the perception of a high level of "Indigenity" in a school and an increase in the undesirability to teach in that school. Further, researchers have noted that many graduating teachers feel underprepared to teach Indigenous students. Dispelling myths and reforming attitudes and biases cannot be achieved quickly; however, the use of authentic voices can assist in promoting changes in perceptions. In view of these factors, the key outcome of this project is that pre-service teachers will be able to hear the perspectives of those best placed to provide advice about working in schools with high Indigenous student populations.

Using an 'Indigenising research' framework, community Elders, Indigenous students, teachers, pre-service teachers working as mentors to Indigenous students and community education counsellors were recruited to provide insights into what works when teaching Indigenous students. Participant views were video-recorded and a pilot DVD was developed from the recordings. Emphasis was given to ensuring that participants' perspectives were gathered through a narrative approach that privileged the views of the speakers. Further, the perspectives of the participants were included in the DVD in their entirety, again privileging the lived experiences and perspectives of the participants.

Two segments of the pilot DVD were shown to a group of pre-service teachers as part of their teaching program. These students evaluated the DVD's effectiveness in terms of their learning about teaching Indigenous students. The outcomes of this evaluation demonstrated a small gain in knowledge about teaching Indigenous students after viewing the DVD. It is emphasised, however, that to maximise effectiveness the DVD needs to be integrated within a blended teaching approach.

The audio data from the recordings were transcribed and analysed in conjunction with relevant concepts and findings from the research and theoretical literature. Key themes arising in participant perspectives focussed on connectedness of relationships; the learning environment and teacher capability. Guiding principles were distilled from the literature and data to generate key teaching principles to assist in the preparation of pre-service teachers. The overarching principle is a relational approach to learning and teaching. This relational approach is enacted in the classroom through a culturally responsive learning environment that is cognisant of the concept of cultural safety.

The finalised DVD and guiding principles are in the early stages of development and will be employed and further developed in the context of an associated project over the next two years. It is envisioned, however, that the resource will be integrated into preparation for practicum courses in the future to complement and extend the theoretical knowledge and skills base of pre-service teachers.

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Section 1: Introduction

1.1 Background to the project

The attainment of learning outcomes that provide pathways to further education should be possible for all school students. Yet Indigenous¹ students are less likely to complete Year 12 compared to non-Indigenous students (SCRGSP 2011, p.4.49) and consequently are less likely to gain entrance to universities (Behrendt, Larkin, Griew & Kelly, 2012). Previous national assessments of literacy and numeracy show that there have been no significant improvements in literacy or numeracy outcomes for Indigenous students across the years 2008 to 2012 (NAP, 2012).

The flow-on effects of addressing this educational achievement gap will have a significant impact on Indigenous students' access and participation in further and higher education. Indeed, the *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report* (RHEAOATSI) (Behrendt et al., 2012) stated that it is impossible to examine issues of higher education without considering how these connect with schools. It is in schools that basic literacy and numeracy skills are taught and these skills are essential in order for students, not only to aspire to, but to have realistic opportunities to advance to higher education (Behrendt et al., 2012). This argument is supported by the *Closing the Gap on Indigenous Disadvantage* initiative (FaHCSIA, 2009).

Research has consistently documented the importance of teachers in the provision of quality learning (Hayes, Mills, Christie & Lingard, 2006; Jorgensen (Zevenbergen), Grootenboer, Niesche & Lerman, 2010). Further, the RHEAOATSI highlights the key role that teachers play in enabling Indigenous students to access higher education. Thus, capacity building of teachers to better meet Indigenous students' needs is an area that must be urgently addressed as part of a holistic program to address Indigenous educational disadvantage. Capacity building begins with ensuring newly graduating teachers are equipped with the knowledge and skills to work at the "cultural interface" (Nakata, 2007).

Despite the proactive nature of the Closing the Gap policy and similar initiatives, teacher attrition rates in metropolitan, regional and remote schools with high numbers of Indigenous students remain unacceptably high. Research by Michaelson (2006) provides evidence of a strong link between the perception of high levels of "Indigeneity" in a school and an increase in a lack of desire to teach in that school. Michaelson reports that young and inexperienced teachers in particular, are "overwhelmingly" worried that Indigenous children are "troublesome and difficult and might negatively reflect on the advancement of their careers" (p. 58). This perception is borne out of a lack of understanding and lack of experience in teaching in schools with high Indigenous student populations. Acknowledging the importance of the teacher as enabler, it is important that negative perceptions of teaching Indigenous students do not carry into the classroom. It is further argued that failure to engage students in education is largely attributable to significant cultural differences that emerge through unexamined teaching practices and curriculum choices (Jorgensen, et al., 2010). Sarra (2012) states that, "embracing and developing cultural identities are part of the process of delivering quality literacy and numeracy outcomes, not instead of it" (p. 62). Therefore, knowledge of Indigenous cultures so that they can be valued and not feared becomes essential in the preparation of beginning teachers.

Throughout 2011, 2012, 2013 and 2014, the Project Leader, a lecturer from the School of Education at The University of Queensland (UQ), has been working with the Former Origin

¹ Note that the terms 'Indigenous students' and 'Indigenous peoples' has been used throughout this report. The terms are inclusive of the diverse populations of Aboriginal and Torres Strait Islander peoples across Australia.

Greats (FOGs) through the *Achieving Results Through Indigenous Education (ARTIE)* Academy in their initiative to improve learning outcomes for Indigenous high school students in grades 8 to 10. 2014 saw this work extend into primary schools. As part of the ARTIE initiative, the project leader of the current project has coordinated the placement of pre-service teachers (teacher preparation students) who have volunteered to travel to schools involved in the FOGs program to tutor Indigenous students in their school studies one day per week for a full school semester. To complement the volunteer work, the tutoring program has been extended to become a compulsory component of one course in each of the secondary, middle years and primary education programs in second semester at UQ. To date, UQ education students have provided approximately 30,000 plus hours of voluntary tutoring to Indigenous students in the lower secondary classes, not only supporting the completion of assignment work but also actively improving literacy and numeracy. As a result of this program, school attendance of approximately 400 Indigenous students involved in the tutoring program increased to 90% for the final semester of 2012 and approximately 600 students had achieved 90% or better attendance at the end of 2013. Achievement in assessment has resulted in positive movements, such as from non-submission to achieving good passing grades. Indigenous students have stated that they have actively ignored peer pressure to truant and that they look forward to seeing 'their' tutors at school.

Interview data collected from pre-service teachers across the two years of this initiative supports reported findings in the literature relating to the reluctance and trepidation felt by the pre-service teachers at the prospect of teaching Indigenous students (Dole, McCluskey, O'Brien, MacKinlay & Montes, 2012). Fear of making a cultural error was the biggest issue reported (McCluskey, Dole, O'Brien, MacKinlay & Montes, 2012). Balancing this, a developing identity of self as a teacher who has the capacity to make a difference in a student's education was also found (O'Brien, McCluskey, Dole, MacKinlay, & Montes, 2012). In project schools that have a close connection with community Elders², pre-service teachers found that discussions with the Elders about cultural issues helped them overcome their concerns. This knowledge and newfound confidence enabled pre-service teachers to develop greater rapport with 'their' students and work more effectively with them. It is therefore imperative that the voices of Elders, teaching staff and Indigenous students are captured and their stories and insights used to inform those pre-service teachers not able to participate in similar programs.

Improvement in the preparation of teachers to meet the needs of individual Indigenous Australian students in the classroom and bigger picture issues of appropriate pedagogy for Indigenous children is urgently required (Warren & deVries, 2009). Beginning teachers must graduate with the qualifications, training and cultural competence to promote excellence in Indigenous students' education that encourages and enables them to commit to and access further study (Behrendt et al., 2012). Thus universities can impact the classroom experiences of Indigenous students by enhancing pre-service teacher education and preparation. Going some way toward acknowledging this nexus, a mandatory inclusion in all current teacher education programs is the provision of a dedicated course on Indigenous education (MCEECDYA, 2010).

Kaomea (2005), however, describes the negative implications of well-intentioned Indigenous education courses that are poorly implemented and cautions against ill-considered approaches for both pre-service and in-service teacher education. Ideally, it would be best practice to involve Indigenous experts in education throughout teaching preparation courses to provide authentic knowledge and strategies in a culturally appropriate manner. However, as noted by Langton (cited in Nakata, 2004), there are insufficient numbers of Indigenous Elders and professionals to be able to extend this expertise across institutions and programs on an ongoing basis.

² In some schools similar discussions were held with community education officers (CECs).

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The DVDs and guiding principles developed through this project will *complement* and *extend* theoretical learning through research. It also brings the voices of Indigenous people into the classroom to provide pre-service teachers with a platform for facilitated discussion about the issues experienced by Indigenous students and provide concrete strategies aimed at enhancing learning outcomes.

1.2 Project aims

The principle aims of this OLT seed project are to develop, pilot and evaluate a DVD teaching resource and guiding practice principles that:

- builds the awareness of pre-service teachers of issues faced by Indigenous students in schools; and
- enables pre-service teachers and subsequently new graduates, to develop confidence to effectively cater for Indigenous school students to improve engagement and learning outcomes.

The purposes of the learning resources are to: develop teacher capacity through raising teacher preparation and educators' and students' awareness of issues that affect learning outcomes faced by Indigenous students; offer concrete strategies for effectively improving learning outcomes for Indigenous students; and identify and strategise for potential challenges to implementing these strategies.

1.3 Project Team

The project team comprised:

Dr Kerryn McCluskey	Chief Investigator	The University of Queensland
Associate Professor Shelley Dole	Co-researcher	The University of Queensland
Dr Kathleen Felton	Project Coordinator	The University of Queensland

Section 2: Literature review

In view of the continuing educational disparity for Indigenous students and the apparent limited capability of new teacher graduates, the literature was examined across a number of key areas, including 'Indigenous learning styles' and diversity; relevant theoretical perspectives; curriculum and pedagogy. While the broader literature indicates that factors relevant to successful educational outcomes are located across multiple interconnected levels; the individual student, the teacher-classroom, the school environment and the informing policy context, the focus of this review will be on individual teachers and how they can be better prepared to engage with and support Indigenous students in their learning.

2.1 A colonial legacy

It is important to recognise the unique historical legacy of the last two hundred years and the continuing impacts that this has had in the Australian education sector. In summary, the colonial and post-colonial history of Indigenous peoples has been one of oppression and marginalisation but also one of resistance. As First Peoples, Aboriginal and Torres Strait Islander cultures include a deep sense of belonging and identity, and involve a spiritual and emotional relationship to the land that is uniquely beyond any relationships that other cultural groups migrating to Australia might experience (Perso, 2012).

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Sarra (2008) and others (HREOC, 1997; Perso, 2012) point out that until the last few decades, the education provided to the majority of Indigenous students was substantially inferior. This second-rate education was explicitly stated by some policy makers to ensure that Indigenous people were provided with sufficient education to equip them for work as domestic or rural labour, but not enough to facilitate higher order learning. Many Elders also recount poor relationships with teaching staff and administrators, as well as poor schooling conditions, for example, the poor quality of buildings, over-crowding and understaffing (Sarra, 2008). As a result of this recent historical legacy, many Elders and parents are skeptical about the relevance of schooling and the content of what is taught. This skepticism can contribute to a lack of parental/carer involvement in their children's education (Sarra, 2008). Teachers also need to be acutely aware of the lived reality of many Indigenous students, including socio-economic disadvantage and experiences of racism, as these realities beyond the classroom impact inside the classroom (Osborne, 2003).

2.2 Learning styles and diversity

There is a considerable body of literature around the concept of learning styles/preferences. Learning style theories came to the fore in the 1980s with a number of preferred 'styles' outlined (see Fleming & Mills, 1992; Kolb, 1984). Learning style refers to an individual's preferred method for learning and acquiring knowledge. It is argued in this body of literature that if students are taught in a way that is consistent with their preferred learning style, then they are more likely to attain better educational outcomes.

There is a broadly accepted link between culture, cognitive behaviour, perception, communication and learning preferences (Barnes, 2000; Stewart, 2002). Following from this understanding and insights from learning style theories, it has been suggested that 'Indigenous learning styles' can be identified and that these learning styles are divergent from non-Indigenous preferences in fundamental ways. Specifically, Indigenous learning styles more broadly favour learning that is cooperative, holistic, contextual, person-orientated, kinaesthetic and spontaneous or imaginative (Barnes, 2000).

Some researchers have observed, however, that such typologies have a tendency to be used in an essentialising manner in the sense that *all* Indigenous students learn in this way (Stewart, 2002). Researchers, such as Laurillard (2002), add that learning is both situated and interactional. If this is indeed the case, then students may learn to use a range of strategies to engage with the subject at hand. Thus, it is argued by Stewart (2002) and others, that it is timely to move forward from a learning styles model to consider inclusive approaches to learning and teaching through positive engagement with cultural diversity. While these concerns are valid, there is some value in being mindful of the possible impact of cultural background on ways of learning (Fogarty & White, cited in Barnes 2000) and in ensuring connectedness between familiar ways of learning beyond the classroom and the school environment (The University of Qld, School of Education, 2001).

2.3 Relevant theoretical perspectives

The literature is quite clear on the importance of relationships to the teaching and learning of Indigenous children. Cross-cultural relationships cannot be built, without the development of cultural competence and subsequently the implementation of culturally responsive schooling.

2.3.1 Relational approach to learning and teaching

The relational aspects of learning and teaching are often cited as being critical to positive student outcomes across student cohorts, but are noted to be especially relevant for Indigenous students. This may be due in some part to the world view of Australian Indigenous cultures as focused on the interconnectedness of spirituality, the land, family,

the clan and the individual, in contrast to the dominant Western rationalist, Enlightenment model that focuses on discrete rather than holistic understanding and the privileging of the individual (Brown, 2010; Nakata, 2007). Another reason for the importance of a relational approach to learning and teaching with Indigenous students is likely to centre on the experience of the past colonial history of Australia and its enduring legacy as discussed previously (Nakata, 2004).

Fundamental to the relational model of learning is the idea that the quality of student learning is largely dependent on the relationship between the learner and the broad learning environment. The learning environment is inclusive of the learning tasks, teaching methods, assessment strategies, along with the built environment (Cust, 1996). Entwistle and Ramsden (1983) and others suggest that the way the learner perceives this environment influences the way and the extent to which he/she engages with it. This relationship, in turn, has a direct impact on learning outcomes.

The literature also suggests that trusting and respectful relationships need to be built across a number of dimensions, including between students and teachers; teachers and parents; teachers and community Elders; non-Indigenous teachers and Indigenous teaching staff (Higgins & Morley, 2014).

2.3.2 Cultural competence

There is extensive literature around the concept of cultural competence. This literature is largely located in the health sciences, particularly in the field of health professional education. The concept has been extended into teaching to a limited extent (see Ladson-Billings, 1995, 2001; Craig, Hull, Haggart, & Perez-Selles, 2000; Meaney, Bohler, Kopf, Hernandez & Scott, 2008).

The concept of cultural competence moves the perspectives of cultural awareness and diversity towards the development of a skills base to address equity issues in the provision of services. Although there is consensus in the literature that cultural competence is important, there is no consensus about its meaning. Despite this lack of clarity, Cross, Bazron, Dennis and Isaacs (1989, p. iv) offer the following definition: “[a] set of congruent behaviours, attitudes, and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations”.

Weaver (1997) writes that cultural competency consists of three overlapping and interacting components comprising knowledge, skills and values. Knowledge in Weaver’s model is comprised of knowledge of diversity within a cultural group; of the history of the cultural group; cultural knowledge pertinent to that group and contemporary realities experienced by the group. The heading of ‘skills’ is comprised by general skills, such as problem solving and containment skills, such as listening. The final category of ‘values’ is comprised by self-awareness, humility and willingness to learn; a respectful and non-judgmental attitude and the goal of social justice.

A number of substantive critiques have been raised about the concept of cultural competence, of which the goal of becoming culturally competent is unattainable and the idea that a person can become competent in another’s culture can be unhelpful (Dean, 2001). Further, some strategies, such as cross-cultural communication can promote othering and promote stereotypes (Bean, 2006). In adhering to prescriptive guidelines, we may obscure the uniqueness and complexity of individuals within cultural groups (Singh & Johnson, 1998). Thus, becoming a culturally competent teacher is better understood as a journey rather than an endpoint.

2.3.3 Culturally responsive schooling

The literature also incorporates a significant and growing body of research and theory around culturally responsive schooling³ (CRS). ‘Cultural competence’ and ‘cultural responsiveness’ are often used interchangeably but are conceptually different. Perso (2012) argues that CRS represents the enacted outcomes of cultural competence, that is, it is cultural competence *in action*.

CRS has been part of First Nations peoples’ calls for better schooling from the early part of the 20th century (cited in Castagno & McKinley Jones Brayboy, 2008). In the 1960s and 1970s these calls became more vocal and often went hand in hand with a human rights agenda. In the 1980s the educational anthropological perspective actively engaged with CRS. This work, in conjunction with work in the area of multicultural education, firmly established this body of knowledge. The key message from this research is that students from ethnically diverse backgrounds consistently underperform as a population when compared to mainstream peers when measured against traditional indicators. Further, this mismatch results in ‘achievement gaps’. To address these gaps, educators have sought to teach in ways that more closely align with students’ home cultures to achieve improved educational outcome (Castagno & McKinley Jones Brayboy, 2008).

CRS is defined by Gay (2002, p. 106) as:

Using the cultural characteristics, experiences, and perspectives of ethnically diverse students as conduits for teaching them more effectively. It is based on the assumption that when academic knowledge and skills are situated within the lived experiences and framework of reference of students, they are more personally meaningful, have higher interest appeal, and are learned more easily and thoroughly.

Thus, implementation of CRS enables ethnically diverse students to engage with learning from a position of strength rather than disadvantage. Gay (2002) outlines five factors that need to be incorporated into preparing teachers to teach in a culturally responsive manner. First, there should be a development of a cultural diversity knowledge base which should include an understanding of the relevant cultural ‘characteristics’ and contributions. Second, pre-service teachers need to learn to identify or check for cultural assumptions embedded in the formal curriculum and also in the symbolic and societal curricula. The third concept is that of creating classroom environments that are conducive to learning for diverse students. Cross-cultural communication is named as the fourth pillar and refers to how the knowledge of different ethnic groups is culturally encoded and that the forms and substance of this expression are strongly impacted by socialisation within the dominant culture. Finally, she notes that teaching in culturally diverse contexts has to be ‘multiculturalised’. She suggests that in order to operationalise this, continuity between the ways of being of diverse ethnic groups and classroom cultures needs to be established.

There is also degree of consensus across the literature that cultural responsiveness goes beyond knowledge *about* specific cultures to “a willingness to engage with heart as well as mind” (Sims cited in Perso, 2012, p. 19) implying that CRS requires a specific attitude and value-base as per Weaver’s (1997) model above.

2.3.4 Cultural safety

Another body of relevant theory and research is that of cultural safety (Ramsden, 1990). The concept of cultural safety emerged in the nursing field in New Zealand. The bulk of literature in the area of cultural safety has been published in the Australian and New Zealand

³ Often known by a variety of names, such as culturally appropriate education, multicultural education, multiculturalist teaching.

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contexts. It has remained largely within the nursing and health care sector but has seen some limited application in education (see Koptie, 2009). Importantly, the Assembly of First Nations (AFN, n.d.) developed a position paper with regard to cultural safety in higher education.

The concept of cultural safety goes beyond the idea of 'cultural competence' and cultural responsiveness to include critical reflection on the professional's cultural identity and recognition of the impact of this on professional practice (Bin-Sallik, 2003). Cultural safety promotes that while we all have cultural affiliations, unequal power relations exist both within and between different cultural groups. A lack of cultural safety therefore equates with "any actions which diminish, demean or disempower the cultural identity and wellbeing of an individual" (Nursing Council of New Zealand, 2005, p. 4). Thus, cultural inequalities need to be recognised and addressed in a culturally 'safe' way within a safe and affirming learning environment.

Writing in the Maori context, McFarlane, Glynn, Cavanagh and Bateman. (2007) suggest that cultural safety can be equated with a 'culture of care'. At a school systems level, this would require schools to support teachers to learn more about all things Maori and to infuse this knowledge into their practice. At the classroom level, teachers would need to focus on classroom culture and practice and decide in conjunction with students how a culture of care can be developed. Importantly, within the cultural safety framework, it is the students undertaking the learning who define what is culturally safe for them.

Despite the importance of culture as outlined in the sections above, teachers need to guard against adopting a culturally determined view of students. Rather, identities should be recognised as complex and fluid, and teachers should get to know their students as individuals (Singh & Johnson, 1998). Culture should thus be reserved as a sensitising concept that teachers should keep in mind as a *possible explanation* of what they may be experiencing/observing (Keddie, Gowlett, Mills, Monk, & Renshaw, 2013). Others suggest that attention to cultural considerations should be considered to be part of all 'good teaching' practice not as a distinct approach (Ladson-Billings, 1995; Barnes, 2000).

2.4 Curriculum

In Australia and other Anglophone countries, the curriculum has traditionally been Eurocentric, reflecting the history and culture of the dominant populations. This Eurocentric focus has been extensively critiqued and research, evaluation and policy studies indicate that the academic performance of Indigenous students is improved when local language and culture is integrated into curricula (Demmert cited, in Castagno & McKinley Jones Brayboy, 2008) (see also Hickling-Hudson and Ahlquist [2004]). Possibly more damaging to Indigenous students' overall wellbeing and identity are unexamined stereotypes that may be embedded in curricula (Swisher & Tippeconnic, cited in Castagno & McKinley Jones Brayboy, 2008). Often these stereotypes trivialise Indigenous culture and contributions to knowledge (Castagno & McKinley Jones Brayboy, 2008). Therefore teachers need to consciously examine the curriculum for negative stereotypes, inaccuracies and omissions.

The common theme emerging from the literature about 'Indigenising the curriculum' (Williamson & Dalal, 2007) is that, "curricula must be connected to students' lives, represent their cultural and linguistic backgrounds, and present accurate images of both the past and present" (Castagno & McKinley Jones Brayboy, 2008, p. 965). Importantly, Indigenous perspectives should be integrated throughout the curriculum rather than presented in an ad hoc or as 'Indigenous topics'. The Alaska Native Knowledge Network (1998) has outlined a number of key principles for developing a culturally relevant curriculum. Importantly, they argue that the curriculum is strengthened through this process rather than 'watered down'.

A key point requiring attention within the Indigenising the curriculum discourse is that of literacy. Many Indigenous students may not speak Australian Standard English, instead

speaking a variety of 'Englishes', including Kriol, Aboriginal English and a range of dialects. Since colonial times, Aboriginal languages have been classified as 'inferior' and have in many cases been banned (Zeegers, Muir & Zheng, 2003). Teachers need to appreciate the range of Englishes that students may bring to the learning environment and ensure that Indigenous languages are understood from a position of strength for individual students (Zeegers, Muir & Zheng 2003)

Since the 1990s the area of mathematics teaching and learning for Indigenous Australian students has been of increasing importance. Despite this, the literature is less well developed than the area of literacy. Importantly, Warren and deVries (2009, p. 171) write that "young Indigenous Australian students do not commence school with the same understanding of number concepts as either mainstream Australian students or students from other cultures". To engage Indigenous students, mathematical concepts need to be taught in a form that relates to their world, taking account of Indigenous language about numeracy and including aspects of culture that are based in number (Graham cited in Warren & deVries, 2009). The authors also highlight the important role of Indigenous teacher aides/assistants in "relating mathematics to the world of the student" (p. 38).

2.5 Pedagogy

2.5.1 Teacher attitudes and attributes

There is a need to go beyond skills, knowledge and strategy to understand the philosophical and ideological characteristics of teaching practice. Researchers who have considered the personal attributes of culturally responsive teachers, argue that, "[t]eachers must possess a particular set of dispositions, attitudes, values, and knowledges to be successful with Indigenous students" (Castagno & McKinley Jones Brayboy, 2008, p. 969). Ladson-Billings (1995), for instance, notes the importance of teachers being warm and approachable, thus developing a culture of caring. She also notes their insistence on creating a community of learners by encouraging students to learn collaboratively and to be responsible for each other's learning, that is, teachers are "warm demanders" (p. 163). Other characteristics noted by Ladson-Billings (1995) in her study were that teachers exhibited a passion for what they were teaching and identified strongly with teaching as a vocation. The teachers saw themselves as a part of the community in which they taught and sought to develop relationships across the community. Their relationships with students were "fluid and equitable" (p. 163) and they attempted to create authentic bonds with each student. Mulford (2011) finds that improving teacher quality and sustainability represents a developmental journey that is supported by targeted interventions at key stages along the continuum. Mulford uses the concept of social capital as outlined by Bourdieu (1986) to frame his arguments, suggesting that there is a need for teachers to have an increased focus on the development of social capital, including the developments of networks, trust and resources.

Reflective practice as outlined by Schön (1995) is argued to be of particular importance for facilitating culturally responsive teaching practice. The challenges for pre-service teachers include the need to deal with issues related to their existing notions of culture, social, curricular and relational justice, while trying to complete their studies. Thus a key component of their program requires not just learning but 'unlearning' many of their existing understandings (Osborne, 2003). There are multiple challenges to undertaking this task, including incorporating a more positive knowledge and perceptions about cultural diversity; a thorough understanding of their own culture and how this affects learning and teaching with students from other groups. There are further difficulties around a lack of clarity about critical self-reflection and how to engage in this, as well as a traditional belief that teaching is a craft requiring mastery of technical skills. To address these obstacles, pre-service teachers require regular exposure and practice of engaging with critical cultural consciousness. It is suggested that this practice should include authentic experiences, guided assistance and specific catalysts (Gay & Kirkland, 2003).

2.5.2 Knowing students as individuals

As noted in the preceding sections, there is a balance between being aware of the history and culture of specific cultural groups, while acknowledging and responding to individuality. A significant amount of research supports the notion that an evident belief in a student's capacity to achieve can positively impact on engagement achievement outcomes (Ladson-Billings, 1995; Martin, 2006). This is necessarily linked to research that a negative academic self-perception by school students commonly results in a loss of motivation and underachievement (Munns, Martin & Craven, 2008). Positive and motivating messages are particularly powerful when they come from a trusted and respected teacher. Munns, et al. (2008) state that for students to be engaged they need to feel supported as an individual learners and as part of an inclusive group. Indigenous students need to feel valued supported and catered for across the domains of emotional, cognitive and social involvement. The authors suggest a number of strategies that appear to be effective, however, they warn that "the relationships that Indigenous students have with education, schools and classrooms are complex and context dependent. As such they require considerable time, informed effort and community partnerships that will bring about specific strategies for particular school communities" (p. 106). Perso (2012, p. 49) states that there is an important difference between "knowing about the student and knowing the student".

2.5.3 High expectations

An implicit form of racism in the classroom is that of lower expectations of achievement for Indigenous students or a 'dumbed down' curriculum (Yunkaporta & McGinty, 2009). The literature is largely consistent that high but realistic expectations must be held by teachers for Indigenous students' academic outcomes. This point is highlighted in the *Melbourne Declaration* (MCEEDYA, 2008). Despite this acknowledgement, empirical research indicates that while teachers may voice the opinion that Indigenous students are equally capable of achievement, the enacted outcomes are often ones of reduced achievement (see Yunkaporta & McGinty, 2009; The University of Qld, 2001; Sarra, 2011). Sarra (2011) argues that teachers need to understand the psychosocial dynamic that underpins the apparent 'failure' of Indigenous students in mainstream education. He is of the opinion that many teachers lay the blame for this 'failure' with the students, their carers and communities rather than the pervasive culture of low expectations by teachers themselves. To counter this, Sarra's vision for Cherbourg State Primary School was "to associate Aboriginality with intelligence, to have high expectations and challenge students" (Matthews, Watego, Cooper, & Baturo, 2005, p. 6).

2.5.4 A partnership approach to teaching

In most state schools across Australia where there are high proportions of Indigenous students, various Indigenous specialist and support staff are employed. In many remote communities the majority of the teaching staff is characterised by new graduates from the dominant society. Most of these inexperienced staff are ill-prepared both for living and working in remote areas, as well as being ill-prepared for working with Indigenous students. A large proportion of these staff tend to stay for only a short period. On the other hand many teaching assistants are older, more experienced Indigenous people with a strong commitment and connection to the local community (Hickling-Hudson & Ahlquist, 2004).

Warren and deVries (2004, p. 44) found that, "Indigenous teacher aides were an under-utilised resource" due to a number of reasons. This finding has also been supported by the observations of Clarke (2000) and others, including Funnell (2013). Graham (cited in Clarke, 2000) points out that individual non-Indigenous teachers need to remind themselves that they do not have to do it alone. Clarke argues for a genuine team teaching approach. Such

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an approach requires the non-Indigenous teacher to be both a learner and teacher. Further, Clarke suggests that Indigenous teachers should have substantial input into planning to deepen relationships over time. Ultimately, the message is that non-Indigenous and Indigenous teaching staff need to learn from each other in a climate of trust and safety.

2.5.5 School environment

Schools are acknowledged to be foreign and unfamiliar environments for many Indigenous students and their families. Despite this, there is little written in the literature about the issue of creating culturally safe built environments. Schools are communities: Perso (2012) outlines anecdotal evidence that many schools have recognised the need for Indigenous students, families and communities to feel a sense of belonging within the school. Examples to affect this belonging include a 'welcome area', an Indigenous hub, unit or centre. Schools and teachers also need to audit the school and classroom environments to ascertain whether the artefacts and symbols around the school are inclusive and convey positive and affirming messages about Indigeneity. Montgomery (cited in Perso, 2012) advises that schools need to develop a classroom 'atmosphere' that respects individuals and their cultures. Clarke (2000) also suggests that attention needs to be paid to the physical learning environment to make it as familiar as possible, ensuring a degree of continuity across home and school.

2.6 Summary

This literature review considered the relevant literature around Indigenous learning and teaching in the Australian context. The initial discussion noted the ongoing effects of a history of dispossession and oppression in the educational context. A number of factors were found to contribute to quality schooling but as this research study focuses on better preparation of pre-service teachers to teach Indigenous students, factors within the remit of the classroom teacher only were examined. This included learning styles, teacher attitudes, skills and knowledge; as well as issues with regard to the curriculum and pedagogy.

Key points emerging from this examination were that caution needs to be employed with any notions of an 'Indigenous learning style' and it may be more useful to consider how best to teach diverse learners. A number of theoretical perspectives were explored. These perspectives were a relationship-based teaching approach, which stresses the importance of the quality of the relationship between learner and teacher, as well as the relationship between different areas of curriculum to form connected learning relationships. Cultural competence and cultural safety were also considered to be of particular relevance and were argued to be enacted through CRS practice.

Culturally responsive teachers were those with an open disposition and attitude, who warmly demanded excellence from their students. These teachers also got to know their students as individuals, while maintaining an informing understanding of the relevant local context and culture. In terms of curriculum, it is argued that the curriculum needs to be Indigenised, that is, made relevant to the local context and aspirations of the students and communities. In doing so, however, high expectations of students and their learning outcomes need to be maintained. Furthermore, CRS needs to occur within a relational and partnership approach that values Indigenous knowledge and ways of knowing.

Section 3: Project approach

3.1 Methodology: informing principles

"Indigenous Australians, like First Nations Peoples around the globe, are arguably the most

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studied people of the world” (Rigney, 1999, p. 109). This statement highlights the positioning of Indigenous people as objects of study rather than subjects who are empowered to speak about their lived experiences. The researchers are acutely aware that they are not members of the Indigenous community. They take some comfort however, from Marcia Langton’s recognition of the part that non-Indigenous researchers play in Indigenous research at this point due to the small numbers of Indigenous people situated in academia (cited in Nakata, 2004). Langton also comments on the importance of the two sets of knowledge holders being the diverse Indigenous communities across Australia and the non-Indigenous academics, or as Nakata (2004) writes, working at the ‘cultural interface’.

Hence, in undertaking this project and honouring the perspectives and voices of Indigenous Australians, an emancipatory research framework was required. Thus, this research project drew on principles of an ‘Indigenising research’ approach as outlined by Rigney (1999). These principles are: resistance, political integrity and privileging Indigenous voices in research. These principles were adapted in this research to uncover and acknowledge continuing stereotypes and forms of oppression confronting Indigenous students within the educational environment. The second principle is honoured though employing a critical and transformative agenda, and in making the project responsible to the Indigenous communities themselves. Further, this research has been acknowledged as an initiative that is supported by key Indigenous groups and individuals as integral to improving outcomes for Indigenous school students and as supporting the culturally respected FOGS initiative. The final principle is about focussing “on the lived, historical experiences, ideas, traditions, dreams, interests, aspirations, and struggles of Indigenous Australians. Indigenous Australians are the primary subjects of Indigenist research. Indigenist research gives voice to Indigenous people” (Rigney, 1999, p. 117). This principle is enacted in this research through the inclusion of diverse Indigenous voices and perspectives, including that of Indigenous students, school-based staff and community Elders. It is also enacted through the interview method used in data collection and in the strategy for editing the video material.

3.2 Method

3.2.1 Project overview

The current OLT seed project supports the ARTIE Academy project that is already running in several Queensland schools (Commonwealth Department of Education and Training⁴ funded). The ARTIE Academy operates under the umbrella of FOGs. The DVD and teaching guidelines fit within this broader project as resources aimed at improving the capability of pre-service teachers participating in the program as student mentors.

A current initiative in pre-service teacher education is connecting Indigenous students in secondary schools with pre-service teachers as in-school tutors who simultaneously develop their teaching skills while working at the cultural interface. However, not all pre-service teachers have opportunity to gain this valuable knowledge and experience. Capturing the voices and wisdom of Indigenous school students, pre-service teachers, Indigenous community Elders and teachers, is a way of more broadly sharing this valuable experience. Thus, a DVD describing strategies, approaches, personal stories, was recorded. Guiding principles, along with some supporting strategies were distilled from the data. These principles and strategies will be used in conjunction with the DVD for use in future teacher preparation programs at UQ.

A detailed breakdown of the integration between the broader ARTIE Academy project and the current project is provided at Appendix A.

⁴ Formerly the Commonwealth Department of Education, Employment and Workplace Relations (DEEWR).
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3.2.2 Recruitment

Three key participant groups were included in this research project:

Participant group A - Teachers in schools, community education counsellors (CEC)⁵, and community Elders. The participant group of teachers comprised:

- teachers who have experience working with Indigenous school students in the Queensland state schooling system;
- graduate teachers working in Queensland Indigenous community schools.

Participant group B - Pre-service teachers from the teacher preparation programs delivered through the School of Education at UQ who volunteer as tutors of Indigenous school students through collaboration between the researcher and FOGS/ARTIE Academy.

Participant group C – Indigenous school students attending selected secondary and primary schools. Primary students ranged from 8-12 years of age and secondary students ranged from 13-17 years of age.

A number of schools with significant proportions of Indigenous student enrolments were approached to participate in this research project. These schools had a pre-existing connection through the ARTIE Academy/UQ tutoring initiative. The school students (Participant group C) were identified by school-based staff in conjunction with FOGs program staff. Parents of identified students were initially approached by school-based staff about participation in the project along with their child/ren. If they expressed an interest, they were contacted by the project leader for follow-up.

Graduate teachers were initially approached via school principals about their interest in the project prior to being referred to the project team. Likewise, CECs from relevant schools were asked about their interest in participating by their school principals. The Elders associated with relevant school sites were also asked to participate. Elders were contacted through existing FOGs networks, prior to being approached by the project leader.

Recruitment ceased when the point of data saturation as described by Glaser and Strauss (1967) was reached.

3.2.3 Participants

17 pre-service teachers at UQ participated in interviews about their experiences of what works and does not work with regard to mentoring Indigenous students through the FOGS program.

In total, four schools participated in the development of the DVD. Two schools (School 1 and School 2) were state schools located in south-east Queensland; one school (School 3) was a state school in central Queensland. School 4 represented a community school in Far North Queensland. There were 28 participants in total. These participants are broken down by school, gender and role in Table 1 below.

⁵ The CEC role is an identified role that provides counselling and support to Indigenous students and works to improve the cultural awareness of the broader school community (Department of Education and Training, 2011).

School 1	School 2	School 3	School 4
1 male non-Indigenous principal	1 male non-Indigenous teacher	1 male non-Indigenous teacher	1 male non-Indigenous teacher
1 male Indigenous unit coordinator	3 female non-Indigenous teachers	1 female non-Indigenous deputy principal	1 female non-Indigenous teacher
1 female Indigenous CEC/Elder	1 female Indigenous teacher	1 female non-Indigenous teacher	2 female community Elders
1 female non-Indigenous teacher	1 female community Elder	1 male Indigenous unit coordinator	1 female Indigenous student
2 female Indigenous students		1 female CEC	1 male Indigenous student
1 male Indigenous student		1 female pathways officer	
		1 Indigenous male teachers'aide	
		1 male Indigenous student	
		1 female Indigenous student	

Table 1: Breakdown of participants by school, gender and role.

3.2.4 Data collection

An *Interview/Focus Group Guide* was developed to guide interviews with teachers, CECs and Elders (Appendix B). A basic *Interview Guide* was also developed to guide discussions with school students (Appendix C). While these guides were developed to assist the interviewer with regard to clarity and purpose, a narrative approach was taken by the interviewer. This allowed participants the freedom to raise topics that they believed were relevant to the topic with minimal intrusion by the interviewer. The interviewer undertook a role of listening rather than questioning in keeping with culturally appropriate Indigenous protocols that also allowed for free-flowing narratives (Colman-Dimon, 2000). This approach acknowledged that participants must have the time to tell their story with 'time to listen and time to finish' (Burns, cited in Colman-Dimon, 2000, p. 41). Further, this approach acknowledged that senior people in the community expect that they will be listened to (Colman-Dimon, 2000).

The lead researcher conducted the interviews and discussions with participants. It was methodologically important that this person had established relationships with key people across the three research sites, including some of the Indigenous participants.

Each focus group or interview was video recorded by a professional camera-operator with the consent of the participants. The presence of the interviewer and camera-operator did not appear to unduly impact on the participants. Individual video clips were returned to participants for review and comment. Indigenous student participants and their parents were especially keen to receive this video material.

3.2.6 Data analysis

The audio data was transcribed by the project coordinator. The data was subsequently uploaded into the *NVivo 10* software program, which was used to store, retrieve and sort the interview/focus group material.

A grounded approach to data analysis as outlined by Glaser and Strauss (1967) was undertaken in an effort to better ‘hear’ the voices of participants. While the literature was used to generate sensitising concepts for analysis, initial coding was undertaken through broadly analysing individual interviews and focus groups for emerging themes. When codes were modified or a new code added, prior interviews/focus groups were re-examined and re-coded. The coding system was revised several times in order to ensure that all themes were able to be coded and that overlap was minimised.

To develop an overview of a theme, a summary of all of the components of text coded under a specific category, for example, ‘knowing students as individuals’ was developed. Under each category, a pool of participant quotes/perspectives was collated. These data pools were interrogated for coherence and dissonance. Emerging themes were analysed for consistency or otherwise with the existing literature⁶

Section 4: Project findings

4.1 Key themes

There were a number of key themes arising from the data. These themes were consistent with the literature as outlined in the literature review. The three major themes were: connectedness (relationships); a positive learning environment and teacher capability. Essentially, the importance of these themes was determined by their consistent recurrence across the data set. These themes will be discussed in detail below.

4.1.1 Connectedness (Relationships)

The central theme that emerged across all categories of participants was that of relationships. As the Indigenous participants themselves used the term ‘connectedness’, this term will be used in preference to relationships. It is noted that ‘connectedness’ has a specific meaning in education⁷, hence the word ‘relationships’ is bracketed against this to reduce confusion with regard to terminology. When this theme of connectedness was broken down further, it was evident that there were categories of people between whom connection was deemed essential; as well as key elements of what a connected relationship was based on.

Connectedness with people and place

Connectedness as a general concept was evident as a central organising principle for the Indigenous participants. By this they referred to making connections between people within their social environment. That is the importance of an individual’s need to be placed within a known universe. Making a ‘connection’ was viewed as being one of the first tasks a beginning teacher needed to develop on arrival in a school with Indigenous students.

I think a lot of us as Murri people as Indigenous people when we do meet each other we say ‘Where you from?’ We got to find that connectedness first and once you know that connectedness you can connect the lines back to different families different relatives or people that you come into when you travel around.... the first thing you got to do is to connect and you got to find something that you can connect to that Indigenous parent or family, yeah I think that is the main thing. (Elder 1)

In fact, some Indigenous Elders suggested that this connection needed to be initiated prior

⁶ It is noted that there is a tension with this Western method of analysing qualitative data and honouring the importance of story-telling in Indigenous cultures (Simonds & Christopher, 2013).

⁷ The term ‘connectedness’ refers to connected pedagogies in the educational literature (The University of Queensland, 2001)..

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to the commencement of teaching at the school, particularly if the school was in a community.

Students

Critical to engaging in culturally responsive teaching practice was developing a personalised relationship with individual students. This point was reinforced across all interviews and discussions in the study.

The second most important thing to me is to make that human connection is to actually connect with kids it's not about you know about getting stuck on what the curriculum is about going to connect with that kid every day, 'How are you going?' (Indigenous teacher 5)

An interested and accepting connection with the students was understood to lead to better engagement with schooling:

They're just like everybody else ... the biggest thing is connection on a personal basis. Oh that's how I was. That's how my kids were, especially my boys. They're really clever but they decided not to show their teachers because if they walked into the classroom and the teacher had already judged them and put them in the little pocket of oh you're Aboriginal, so I have these expectations in my head about you.. every kid is really good at picking up about how you are judging them it's like I'm closed off now. Like.. I'm not going to show you what I can do because you haven't connected with me and if they had connected with them and the teacher did connect with them, they bent over backwards because the most important thing was the connection (Indigenous teacher 5).

Likewise, Teacher 10 stated:

The most important thing I find working with the students, not just the Indigenous students, but all of the students, if you don't have that relationship with them you are going to get nothing from them.

Focusing on the teacher-student relationship from the student perspectives in the study, similarly affirmed the importance of the teacher-student connection:

So I think the best thing a teacher can do in the job is just go around and say hello to everyone. Ms [name] come here and she said hello to everyone went up to you said 'Hello what's your name, how you doing, where you from?' Ah ... the questions just continue from where you come from and the questions just come from where you left off from, so that's a good thing to support. (Indigenous student 1: community school)

Parents/carers

Connectedness with parents/carers and the broader community was also deemed to be essential to achieve the best learning and behavioural outcomes on behalf of Indigenous students.

I found that every community event that you go to you seem to meet new people. You start to make those connections. And I have got to the point started to hear, 'oh that's your last name, oh so you must be related to this person' and that's always a good way to start a new conversation with someone you don't know and once you do start to know all the families I really enjoy making all the connections between the kids and their parents and aunts and uncles and nieces and nephews. (Teacher 7: community school)

If you got a strong relationship with the parent and you can tell the parent what's wrong with the kid then the parent will straighten their kid straight out. Especially

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Indigenous parents, they would straighten their kid straight out cause yeah they want their kids to strive to be good you know everything good done for them they want good things to come out of their children and that's why they send them to school and the kids they don't really see they don't see the good opportunity they got. (Indigenous student 1: community school)

Community Elders

Building connections with community Elders was viewed as critical to enhancing student learning in a number of ways including, through developing a relevant and culturally inclusive curriculum; supporting school initiatives and teaching practice; and supporting individual teachers to connect with the local community according to local protocols.

If there is something - events happening at the school they [teachers] can invite the Elders you know and the Elders can come in and have a yarn with the teachers and tell them what you can and what you can't do and so that's how the program should be. (Elder 2)

An Elder she made that fantastic connection with us by providing that safety, and sharing with us her experiences in education, how we can make a difference by knowing that information. (Teacher 3)

We have actually employed an Elder. . . not only does he provide guidance to specific kids, he actually provides guidance to me at that different level he can come and talk to me about it to deepen my understanding, I think that is you use those mechanisms around the place. (Teacher 9)

Key elements of connected relationships

As well as discussing the importance of connecting with key people in the community, participants discussed the key elements that comprised a 'connected relationship'. Primarily these 'elements' were understanding and knowing Indigenous people as individuals; building connections based on trust which enabled Indigenous people to feel emotionally safe. Fundamental to a connected relationship were respect and listening.

Individuality

An important theme was that teachers needed to get to know Indigenous students as individuals rather than as representatives of Aboriginal or Torres Strait Islander cultures. For instance,

I work really hard to personalise the education as well. So a key to it is actually knowing each kid as an individual. So the fact that they are an Aboriginal or Torres Strait Islander is fundamental but understanding what that means and being grounded is important for these individuals you know. (Teacher 9)

Extending this, an individual relationship with the children outside of the school context was also noted by teachers to be important in forming an authentic individual relationship:

It is so good seeing the kids out of school. Is the best thing you can do and you can't get that if you are living out of community because you don't see them at the local shopping centre if you are working at a different school. And we have both done afterschool sports which we have both found a really good way to get to meet community members as well as the peer to 7 kids, so we know all the high school kids but now getting to know the primary school kids and you get to know your kids' siblings as well. It's really great and you can say to them 'I know your whole family now' which is a good thing. (Teacher7: community school)

One Indigenous student stated:

*The one thing I like in the school is that everybody gets treated equally most people
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think because we're Aboriginal we don't fit in the school sometimes, but our teachers are very helpful and nice and that's really fun too to get on with other students and teachers. (Indigenous Student 5)

Trust and safety

Fundamental to creating a connection was developing trust and a resulting sense of safety. The importance of trust can be argued to be important in schooling due to the past colonial practices, wherein Indigenous people's knowledge, language, culture and lived experiences were denigrated, dismissed or, in some cases, banned.

It's about that initial first meeting. It's a test I think, and I think that comes from a lot of us have been brought up under policies and everything so not depending too much on white fellas and everything and that generation is still going on and even though I was brought up on a mission and everything under the Act and went to a school in Brisbane and the racism there, I never felt I never knew what racism was till I actually went there and ... it was really hard for me to fit in there. (Elder 1)

We're no different than anybody else we all bleed or bruise the same. Yes we have a lot of stuff that happened to us and we've got to go along and if you want to come on our journey with us then not for us, then don't preach at us, stand beside us and walk beside us. (Elder 1)

We need to know the history. It's not something that happened a thousand years ago. It's actually living history. So the grandparents of these kids, they feel a certain way. So that's what I'm saying and kids pick up on all of that stuff a certain way. They interact with authority you know, school's a big institution so it's those things and opening up the trust and opening up safe spaces so the school makes people feel safe so people feel safe to come to school, which is not easy. (Teacher 5)

4.1.2 A positive learning environment

The learning environment needs to be culturally safe and responsive to appropriately support Indigenous students and to enable them to achieve their educational and personal potential. Key factors in the learning environment that were evident in the participants' narratives were: preferred learning style of the students; the cultural relevance of the curriculum; the style of pedagogy employed; and the physical environment in which this learning occurred.

Curriculum

As stated, the relevance of the curriculum was found to be critical to the engagement of students with the subject matter. Furthermore, the incorporation of relevant material presented in a culturally sensitive manner was argued to enhance Indigenous students' pride in their cultural identity.

[Teacher 6] and I were talking about making that connection to the real world and I think that is something program didn't have enough of and why are we learning this and that's what kids love. They love to know why we are doing this and that's we are constantly trying to tailor our curriculum to show we are doing this for a reason that is useful to you. [Teacher 7]

Getting the kids to realise what this education process is about its not something you do because you have to or it's not something that you just meet with your friends. There's a reason for education and that's so they can continue on and have the necessary skills to go to uni or get a career or do whatever they want to do but this is a part of that process and the things that we are teaching them are a part of that. [Teacher 6]

Specifically, Indigenous Student 2 advised when asked why she didn't like mathematics that,

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“as a subject I don’t get the point of it, I don’t get it, yeah that’s it”.

Pedagogy

The broad theme of pedagogy was inclusive of students’ learning styles; the way the material is delivered also refers to the relationship that the teacher has with the student. Consistent with the literature, there was some debate about the relevance of an ‘Indigenous learning style’. For instance, Teacher 5 who is of Indigenous descent advised:

Some think there's an Aboriginal way of learning, there's not. It's a fallacy there's not. They're like every other kid that has different ways of learning. I don't think every Aboriginal kid is great at running, is a great sports person or they're great at dancing. No they're not. Some people are and some people aren't and those people who are going to say, that's not me, that's not me, I'm not good at drawing. They're just like everybody else. . To me - the biggest thing is connection on a personal basis.

On the other hand, others including Indigenous students, spoke about making learning practical and hands-on; breaking concepts down and then scaffolding them back up.

It's easier to learn when they are showing it rather than reading it and everything. You don't know what to do. If they step by step, they just show you and you'll get it. That's why that's the easiest way for me to get it to understand it, if they're showing it, so yeah. [Indigenous student 2]

Mr [name] is a very good teacher because instead of telling the kids what to do he says what are you going to do this lesson ... gives you options like 'what do you want to do' he really listens to you and he takes some of your advice. [Indigenous student 1]

And if some students find it hard to communicate in the classroom maybe they could learn in a cultural way by going out in the bush and counting how many trees and multiplying that in that practical sense as well. [Elder 3]

Consistent with the students and Elders’ perspectives above is the view from some of the teachers that learning is now more student-focussed than it was in the past and that this suits all learners but especially Indigenous learners:

We are now a generation of teachers who are tuned into that: 'What's your story, tell me how do you connect with what I'm teaching, How's that affect you? What's your story? What's yours? What's yours?' And its kids listening to all those different stories and knowing there's not one way. There's not one way like how I was taught. [Teacher 5]

Other teachers noted that, “good practice for Indigenous students is good practice for everybody” [Teacher 5] and that all students wanted to see the relevance of what they were learning, rather than there being any particular Indigenous learning style and associated pedagogy.

High expectations

A recurring sub-theme expressed by the majority of participants was that teachers need to believe in the capacity of Indigenous students and to set realistic but high expectations for their behaviour and their academic achievement and to assist them to reach these expectations:

This is something we were told in preparation for coming here [community school] is just to show that you believe in the kids. And that is something that I really try to do is show the kids that they are valuable, show that they can achieve things and try and invest in them and to get them to believe that they can do the work, that they can achieve things, that they can if they work hard, that they'll be able to achieve the

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goals that they want in life and that they're worth it as well. (Teacher 6)

The majority noted that when high expectations were in place, Indigenous students often did all that they could to live up to this. For instance, Indigenous student 1 stated:

My manual arts teacher, he's the teacher that helped me get my job and put myself out there and getting me opportunities and putting me through all these leadership camps and that was because all these teachers looking at me and seeing something more than the normal Aboriginal student just could make it somewhere in life. Hopefully I don't let them down and I make it somewhere in life. Hopefully a carpenter or something like a football star maybe.

One Indigenous participant nuanced the message somewhat by advising that teachers need to have the same expectations of Indigenous students and hold them to equal account, while at the same time balancing this accountability with an awareness of the broader Australian Indigenous history, as well as each child's unique history.

if you enable them here in high school by the time they go into the real world the workforce or further education or study and that support is not there well that's where they fail we don't set our students up to fail that's just not on here that's not how we work so by enabling Indigenous kids because of past histories you're not doing them any favours so you need to treat them as you would any other student but also be aware of history as in not just our past history but as in their family history (CEC 2)

Indigenous staff as partners in teaching

A number of participants raised the importance of Indigenous staff within schools as mentors (as discussed below) but also as key members of teaching staff.

your role as Indigenous people is really critical ... I know that when you dance and perform with students, the whole school takes a step back and says, ah hang on he knows what he is talking about. (Teacher 9)

oh they definitely respond, I have you [Indigenous teacher] coming into my class with year 9 students and talking about Indigenous heritage and all the rest of it and it's not the quietest class even at the best of times and you could hear a pin drop 'cause they were absolutely enthralled with the information that they were given and I think the fact that you were giving it rather than me. (Teacher 10)

Classroom, built and symbolic environment

Related to the point of safety outlined under the theme of 'connectedness', is the point about creating safe pedagogical spaces, both in terms of the pedagogy and relationship with the teaching staff; and involvement of the Elders

it's about building those connections as you said can help you then understand how you can then make those safe spaces like even having a morning yarning circle having the children sitting around, any issues they might have or have an actual structural place like we have at the school. (Teacher 3)

The learning environment, itself including the whole school as well as individual classroom spaces was linked to enhancing a positive self-image and pride in students' cultural identity. This issue is outlined in the following focus group exchange:

Teacher 3: like I think our school environment here we are really lucky as well we had [name] and some artists come and do art around the school with the yarning circle and the environment, I'm hoping students feel welcomed here - at home that's what my hope would be

Teacher 5: yeah, that's a big thing. Like the community pick up that, you notice the physical resources. You're right. It's coming, it's a statement: you look at you come in

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here you see

Teacher 1: *we value it*

Teacher3: *yes exactly, you see the value the school puts on it when we do the welcome to country for every parade that's a big message of the importance of the Indigenous people at this school ...*

School's a big institution so it's those things and opening up the trust and opening up safe spaces so the school make people feel safe so people feel safe to come to school which is not easy. (Teacher 5)

4.1.3 Teacher capability

Teacher capability also stood out as a key theme outlined by the participants. Subsumed under this broad theme are the sub-themes of: knowledge and skills necessary for enabling culturally responsive practice; strategies to acquire the requisite knowledge; and teacher outlook and attitude. Critically, Elders and Indigenous teachers were adamant that all teachers need to have a strong understanding of Indigenous history and cultures. They stated that this learning should be undertaken at university as part of teacher preparation programs and it is not ideal if graduating teachers are only learning this after graduation. Teacher 5 stated:

I think the most important thing that should happen with any teacher is that they have to have a background, a background knowledge, 'cause if you are teaching in Australia, you are an Australian, you should know the history of this land and who the First Nation people are.

It is important to have an understanding of the impacts of past education policies and practices on the contemporary Indigenous community and current students and their carers:

You will find with the Indigenous kids with the history it's kind of all of the effects of what happened before, so it's about building the trust and ... it's not something that's taught to kids, don't trust, don't trust people, it's a feeling.

We need to know the history. It's not something that happened a thousand years ago is actually living history, so the grandparents of these kids they feel a certain way... (Teacher 5)

However, graduating teachers also need to learn about the local culture, language and history. This should ideally start prior to the teacher arriving at the school and should continue throughout their tenure. It cannot be taught in education programs at universities, however, pre-service teachers can be sensitised to the diversity of Indigenous cultures across Australia and the need seek out local understandings.

The most important thing is come prepared, do know whichever school they are going into, they know the community...I just spent a year out at Cunnamulla which is like 97% Indigenous population. So I'm an Indigenous person but that doesn't equip me, so there's all these processes and protocols that I have to follow. I've got my own experience but I don't assume that that's the same experience. So going in and being respectful and any community that you go into, whether it is Indigenous or non-Indigenous, they're going, 'Well how do I work here?' I need to go ask: 'How do I fit in? Who are the kids? Where do they come from? What's their background?' (Teacher 5)

Other knowledge deemed essential and is tied in with both categories of knowledge outlined above, was knowledge about the broader social and community issues and their impacts on students' engagement with schooling and academic outcomes. This includes the impacts of lower socio-economic status within urban areas and the resultant disadvantage.

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It can also be about the value placed on education more generally within the local community:

[It] also comes down to in community, the valuing of education in families, the kids, who their parents are supportive of them being here are the ones that are much more understanding of the process we have to go through, the attendance and the every lesson counting. Those kinds of things; it all comes down to outside factors usually, so and that's something that I've struggled with coming to terms with and something that. (Teacher 6)

A number of participants, including one of the students, talked about the level of complexity in Indigenous students' lives and how this complexity may impact on students in the classroom:

Sometimes the school is the only stable place that these kids ... you know they need to feel safe in a stable place where you know what is predictable. (Teacher 5)

Something that I have learnt more now that I have got to know the kids more last year I used to say these kids are so unreliable now that I know the kids when they are acting differently on a particular day, nearly every time something particular has happened and if you talk to them and ask them and say what's happened what's going on they will say this is this and I've been up all night with my little niece and something like that and I'm really tired ok so that's cool so today you can chill out, I understand please come back tomorrow and get a good night sleep. (Teacher 7)

Teacher attitude and outlook was also noted to be of critical importance. Indigenous students commonly advised that the best teachers needed to be “helpful” and to “help them out when they were struggling”. Also, Elder 1 advised that it was important that, “they got to come in with an open mind” and “coming in with no expectations about Indigenous people”. Teacher 7 also noted that teachers need to understand that they will be changed as part of their teaching experience. This participant also noted that teachers need to be “realistic” about what was within their capacity to change and what was not and that some matters were the responsibility of the community.

Some participants observed that many non-Indigenous pre-service and graduate teachers became very anxious about engaging with Indigenous people and addressing Indigenous history and culture. For instance, Pre-service teacher 9 advised:

I got one girl who the teacher pushed me out to do one-on-one literacy, comprehension, stuff like that and in my second week, she gave me a book about the convicts and the arrival of the first fleet and I just opened it up and I felt terribly unprepared to deal with that topic with her because she was Aboriginal and I didn't really appreciate that actually, I felt that I wasn't ready for that 'cause I remember when I was learning about that, I was feeling really guilty and everything.

If you are really fair dinkum about things, follow it through and don't be afraid. Like me as an indigenous person, I get growled at because I get it wrong when I go into different areas 'cause you just assume that 'cause it happened there it is going to happen her, and I get growlings and I take the growlings as learnings not as, you know .. I'm not going to go there 'cause it's too hard, I got growled at and that's why a lot of people don't like touching indigenous stuff cause they do get a growling. (Teacher 5)

A number of strategies were outlined by teachers and Elders for new teachers to learn about local communities. These strategies comprised: mentoring by Indigenous staff and Elders; professional development and personal research about the local community and school as noted above:

I think it's important for teachers just to remember, particularly from a non-Indigenous background, that you know Aboriginal cultural is a sharing culture, so if you don't have these supportive structures at your school or if you don't have Indigenous teachers or workers but if you can engage with the local community and local Elders and if you show you really care for the students, they will share anything that they can. (Teacher 8)

I went to a PD at [name] state school and I learnt about their Indigenous history there it's huge. They've got a Dreamtime story that is based on where the school is situated. Yeah, so even just communicating making that network, going to PD, is talking to 'What is your Indigenous culture? What do you do?' You know 'Is there any stories that you can tell me?' and do it that way. (Teacher 3)

4.2 Summary

The themes generated from the research findings above are highly consistent with the literature as outlined in the literature review above. The central theme arising from both the literature and findings was that of the importance of a relational approach to learning and teaching for Indigenous students. In the context of Indigenous students, this relational approach needs to extend outward to building connections with their parents/carers and broader community. These relational connections were also closely linked to place.

A relational approach to learning and teaching in this environment was seen to be enabled through a culturally responsive pedagogy and curriculum. Specifically, a culturally responsive curriculum was found to be one which is relevant to students' realities and connected to their home environments.

Pedagogy in this study was understood as relating to the enacted curriculum. Importantly, to undertake their pedagogical tasks in a culturally responsive manner, graduating teachers need to appreciate the concept of diversity and know their students as individuals rather than as representatives of Indigenous cultures. It was apparent that in order to challenge implicit racism, graduate teachers also needed to hold high expectations of students and to acknowledge their achievements, thus building a sense of pride and combatting the pervasive negative impacts of low expectations. A sense of cultural pride can also be enhanced through the symbols, rituals and attention to the use of space. Graduating non-Indigenous teachers also need to be able to appreciate what Indigenous teaching staff can offer both to them and to the students and to actively cultivate a partnership approach to teaching.

Consistent with the literature, there was no consensus across participants' narratives about the existence of an 'Indigenous learning style'. Note is taken of the literature that advises that there is a tendency for the concept of an Indigenous learning style to be employed in an essentialising manner and that teachers may be better served by an appreciation of diversity.

To be considered culturally 'capable' with respect to teaching Indigenous students, non-Indigenous graduate teachers need to have a number of personal qualities. Importantly, they need to have an open and non-judgmental approach, characterised by a willingness to learn and adapt. As well as the technical knowledge and skills about teaching and learning, graduates need to have a sound knowledge of the legacy of the colonial past and how this continues to impact on Indigenous students, their parents/carers and community. This knowledge needs to be imparted through university teaching programs so that teachers are adequately prepared. Ideally, this knowledge should be imparted prior to pre-service teachers going on extended practicums. The literature alerts us to the fact that pre-service teachers come to university with entrenched beliefs, attitudes and values about Indigenous people. Merely providing information within their programs of study is insufficient as these understandings need to be challenged through critical reflection. Graduating teachers need

to develop a good understanding of the local community, including the social and environmental issues that impact on individual students. A number of strategies were outlined by participants to assist graduating teachers learn about the local community, primary among which were to actively seek out community Elders. Pre-service teachers need to be made of these strategies during their programs.

While the perspective of cultural safety does not have wide acceptance in the teaching literature, the concept of safety was found to be of importance to the participants in this study. It is therefore argued that the issue of cultural safety should be explored further with a view to integrating it into teaching practice.

Section 5: Guiding principles at the cultural interface

Based on the literature and research findings outlined above, a number of ‘best practice’ principles can be distilled for preparing pre-service teachers to teach Indigenous students. The researchers were of the view that a small number of broad principles would be more accessible for student learning. These principles are as follows.

The overarching principle is the implementation of a *relational approach* to learning and teaching. Specifically:

- Relationships (connections) need to be developed and sustained with students and more broadly with their parents/carers and community Elders as partners in education.
- Relationships (connections) need to be authentic and built on a platform of respect, partnership, trust and safety.

The broad principle of a relational approach is enacted in the classroom through a culturally responsive learning environment that is cognisant of the concept of cultural safety. Thus:

- Curricular content is explicitly *relevant* to Indigenous students.
- There is an appreciation of diversity and understanding students as *individual* learners.
- *High expectations* of individual learners are maintained and students are supported to achieve these.
- A *partnership* approach to teaching is implemented.

These principles for teaching rest on the assumption that pre-service teachers will acquire the requisite knowledge about Indigenous history and cultures within their degree programs prior to learning how to teach at the cultural interface. To undertake this learning, students will be critically challenged about their cultural positioning and assumptions.

Section 6: The DVD teaching resource

6.1 Selection of DVD as a teaching resource

Pre-service teachers need to be adequately prepared prior to engaging in practicum as well as for later practice with Indigenous peoples. It is increasingly recognised in higher education that knowledge needs to be contextualised and that knowledge needs to be used in an authentic manner (Meyers & Nulty, 2009). Students in teacher preparation programs typically undertake courses to ready them for their practicum experiences. Educators in this area aim to make the learning experience as relevant as possible to the real life situations and issues that students are likely to encounter. Graphics, videos and other media are

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routinely utilised by teaching staff to better engage learners (Barford & Weston, 1997) as “one of multimedia’s strongest contributions to learning is increased visualization” (Daily, 1994, p. 193). Visual images have been found to affect retention. Daily’s findings suggest that multimedia may not be suitable for all material and may affect learning differently for different types of content. She suggests that multimedia may be more relevant in teaching more qualitative material.

Constructivist models of learning “posit that learning occurs when a learner constructs internal representations for his or her unique version of knowledge” (Zhang, Zhou, Briggs & Nunamaker, 2006, p. 16). Further, in terms of applied method, constructivism suggests that when learners play an active role in the learning process, learning is enhanced overall. Simply including videos in learning environments may not enhance learning. Zhang et al.’s (2006) findings are consistent with other published findings, namely that the “use of linear instructional video in education does not always have positive effect [sic]. Video may lead to better learning outcome [sic], but results are contingent upon the way it is used” (p.24).

Barford and Weston (1997) investigated the use of video material in one UK university. Their findings indicated that many staff expressed difficulty finding relevant material in their subject, thus limiting its use. However, teaching staff in the higher education context indicated a number of reasons for using video in teaching, including “bringing the outside world into the learning space” (p. 44) and personification of real-life situations. A further issue identified by staff was a lack of quality or the inclusion of inappropriate material. Many suggested that many videos tend to be too long for teaching, identifying that shorter segments, such as 5-10 minute sound-bites, are more useful (see also Chan & Tsang [2014])

Importantly staff surveyed by Barford and Weston (1997) indicated that the use of video was insufficient on its own and that teaching methods needed to “incorporate an exercise (usually group based in my practice) to interpret/consolidate the video experience” (Respondent cited in Barford & Weston, 1997 p. 47). Laurillard (2002), an eminent researcher in the area of multimedia learning, advises that a blended approach to learning needs to be applied. Thus the use of a video or DVD as a resource needs to be complemented by other strategies for effective learning to occur.

The development of a DVD was decided upon as a way of allowing the voices of those who are at the cultural interface in the classrooms and schools. The DVD provided a means of presenting honesty and frankness in an effort to demystify the teaching of Indigenous children.

6.2 DVD format

Consistent with the methodological principles of Indigenist research as outlined in section 3.1, the formatting of the two DVDs developed out of this project was carefully considered. Participant voices were left largely unedited and in their entirety. This choice was made to honour the voices of the Indigenous and non-Indigenous participants and to ensure that they retained control over their narratives. The ‘stories’ have been allowed to unfold as presented during the filming.

Each group of participants has been allocated a separate chapter on the DVDs. There are six chapters on the DVD *Yarns from the schoolyard Volume 1*. Two chapters, ‘Advice from teachers’ and ‘More Advice from Teachers’, capture the perspectives of a group of teachers, including one Indigenous teacher, from School 2 – a state primary school. As the filming was being concluded, the group began to talk about working in Aboriginal community schools. As this topic was very relevant to the project, filming continued and a new chapter with the same group of teachers was recorded. These teachers discussed their experiences of working in a school with a high Indigenous population. They stressed the importance of working closely with the local Indigenous community and learning of its history. They drew on examples from their experiences to illustrate different aspects of their discussions. The

teacher who was Indigenous made it very clear that each Indigenous community is unique and therefore in order to help the students in the school it is important to understand the history of the local community. She also talked about the misconceptions non-Indigenous teachers may have about Indigenous students and illustrated with examples using her own children.

The third chapter uses the data from a group of secondary teachers. This group included both an Indigenous teacher and a CEC. These teachers talked about the ways in which they had learned to work with Indigenous students and the local community. They also described the support provided in their school context for teachers and Indigenous students.

A fourth chapter provides an Elder's perspective of education. She used examples of her own life to illustrate issues that have affected her in regards to her own education. These examples humanised topics such as, a fear of schools by parents who were not given the opportunity to go to school and how that fear impacted on the next generation. She also talked about her experience having had to deal with racism as a student.

Two teachers who work in an Aboriginal community school provided the input for the fifth chapter. These teachers talked about the importance of being a part of the community. They discussed pre-employment sessions provided by the employing authority on working in Indigenous communities, their own feelings on entering an Aboriginal community for the first time and what steps they each took to facilitate their acceptance as teachers into that community.

The sixth chapter comprises the voice of an Aboriginal student. This student is in his senior years of schooling at the community school. He provided insight into teachers and how he sees their ways of teaching and interacting with students as appropriate, or not, for Indigenous students. This interview was thought to be valuable as it provided the opportunity for a school student to present his viewpoint on teachers, teaching and education and the importance of teachers recognising and nurturing students' potential.

A second DVD was compiled using the same overall format as the first DVD. The second DVD comprises four chapters: community Elders; students; CECs and teachers. Chapter 1 includes the voices of one Torres Strait Islander male student and an Aboriginal female student from a state high school. These two students reinforced the need to develop a strong and caring relationship between students and teachers and the need for the provision of both learning and social support.

The second chapter comprises the perspectives of four support staff for Indigenous students in a state high school (two CECs, one guidance officer and one teacher), three of whom are Indigenous. The key issues addressed by this participant group were the importance of knowing each student as an individual, while appreciating their cultural and family histories; the importance of working as a cohesive team; maintaining high expectations for students while supporting them to achieve these; trusting students and having confidence in them and building connections with the broader communities.

The next chapter comprised the perspectives of three non-Indigenous teachers working with Indigenous students. The key points outlined by these teachers were to develop a strong sense of rapport with students and to make the effort to get to know them as individuals. They stressed that while they were referring to Indigenous students, this is really 'just good teaching practice' that is relevant to all students. The teachers also talked about showing that they value the Indigenous students in the school. A unique point raised by one participant was respecting and supporting the natural leadership dynamics within the Indigenous student body.

The final chapter captured the voices of two community Elders. This conversation was included as it provided a 'lived experience' of the education system during the era of the assimilation policy. The Aunties also provided exceptionally useful and practical strategies

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for engaging with Aboriginal communities which can be applied more broadly to regional and metropolitan centres. These strategies included telephoning the community leaders before arriving in the community to introduce themselves as a new teacher; meeting with community leaders on arrival; asking for advice about the community and utilising existing community resources.

Further interviews were conducted but to ensure that the quality of the recording was not compromised, however, these interviews were assessed not to have the impact of those selected for inclusion. While they were not included in the DVDs, the material provided by these participants was used to inform the analysis.

6.3 Recommended use

It is intended that these DVDs be used in the on-campus classes attached to the professional teaching experience component of the teaching program. The chapters are relatively short (no longer than 20 minutes) and provide many points that can be used to promote discussions around teaching and learning, in keeping with a blended learning approach. Chapters can be shown in their entirety or it may also be useful to focus on key segments of narrative to highlight key issue and to trigger discussion and reflection.

The DVDs are not intended as a 'catchall' that will address all issues around working with Indigenous school students. Other courses in the programs also provide foci on Indigenous education. This DVD is meant to provide authentic voices that point to ideas and realities that will assist in encouraging graduates to work in schools with high Indigenous populations and/or better cater for Indigenous students in their classrooms.

Section 7: Resource evaluation

7.1 Evaluation with pre-service teachers

The evaluation method undertaken was a proactive method which also sought to evaluate the impact of the learning resource (Owen, 2006). The evaluation strategy included a pre and pre-test evaluation of the first DVD. Prior to viewing the DVD, pre-service teachers were asked to complete a single item rating their overall knowledge about teaching Indigenous students using the on-line *Survey Monkey* program.

It should be noted that the pre-service teachers who were involved were a composite of those in the dual degree secondary or middle years of schooling programs, four year bachelor of education primary and middle years programs, and graduate diploma secondary program. Thus all students except those in the graduate diploma secondary program had studied a dedicated course on Indigenous education; some had also been involved in tutoring Indigenous students in schools through a partnership with the ARTIE Academy. The graduate diploma students had received some lectures in working with a diverse range of students in classrooms. Thus there was a mixed range of backgrounds across the students who evaluated the snapshots shown from the DVD.

7.1.1 Pre-test

292 pre-service teachers completed the on-line question rating their current level of knowledge about Indigenous students. The results of this pre-test indicate that the majority of students rate their knowledge as somewhere between 'average' to 'good' (see Table 2).

	No knowledge–	Some knowledge–	Average knowledge–	Good knowledge–	Very good knowledge–	Total–
Response distribution	0% 0	5.14% 15	38.70% 113	34.59% 101	19.18% 56	100% 292

Table 2: Breakdown of response distribution.

7.1.2 Post-test

After viewing two selected components of the resource, pre-service teachers were again asked to rate their overall knowledge about teaching Indigenous students on the same scale. Further questions were asked to break this overall concept, comprising relevant issues impacting on Indigenous students; ways of engaging with Indigenous people and practical things students could undertake as teachers. (The questionnaire as entered into *Survey Monkey* is attached as Appendix C.)

A post-test of the overall effectiveness of the two segments of the DVD was conducted with 256 completed responses. The response demonstrated a small positive overall impact on self-assessed learning; see Table 3 and Figure 1 below.

	Not effective	Somewhat effective –	Moderately effective –	Mostly effective –	Very effective –	Total –
Item1	2.75% 7	15.29% 39	35.29% 90	40.00% 102	6.67% 17	100% 255
Item2	4.69% 12	16.02% 41	40.23% 103	35.16% 90	3.91% 10	100% 256
Item3	6.64% 17	21.88% 56	44.92% 115	22.66% 58	3.91% 10	100% 256

Table 3: Results for items 1-3 in post-DVD evaluation

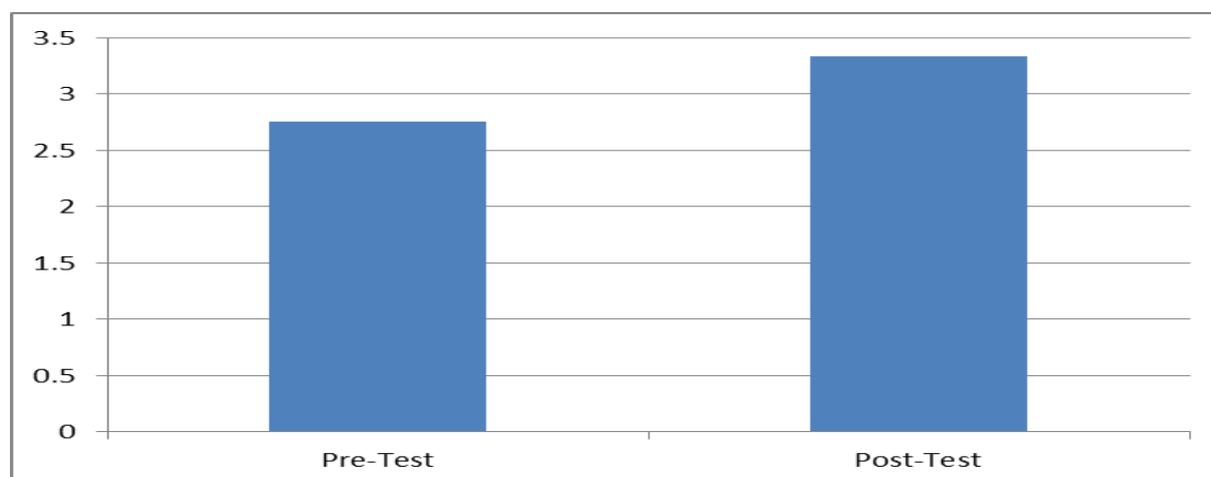


Figure 1: Comparison of pre and post-test data

7.2 Feedback from school and community participants

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Ethically responsible research with Indigenous people should include negotiation and oversight of the research (Colman-Dimon, 2000). An email was sent to all participants in the study inviting them to provide feedback about their individual component of the DVD. Participants were provided with a choice as to how they would like to do this, that is, in free text via email or through responding to a brief questionnaire on *Survey Monkey*.

Participants were asked:

- Do you believe that your key points are clear? (Please comment)
- Is there anything you would like to add to what you said in the video clip? (Please comment)
- Do you have any general feedback about the video clip? (Please comment)
- Do you have any feedback about the research process? (Please comment)

Two responses were received to this request. The feedback indicated that the two participants both believed that their material was clearly represented on the DVD. One participant suggested that the DVD could be improved by “Filming in a classroom with Indigenous children during literacy and or numeracy session. Filming the programs at the school for Indigenous students e.g.: ARTIE, Culture Club”. No further comment was made about their individual video clips. However, when asked about the research process itself, one participant stated, “I was well informed of the research and expectations before the interview. I was given feedback and I engaged in constructive discussion post interview. Thank you for allowing me to participate”.

Section 8: Further resource use, development and dissemination

The current project team is led by Dr Kerryn McCluskey, Director of Professional Experiences across all teacher preparation degrees at UQ. The initial resource will be further piloted at UQ across a range of courses in the teacher preparation programs. The use and evaluation of these learning resources will further inform the development of the training of graduate teachers and students in other professional programs as deemed appropriate.

The findings and deliverables from the current seed research project will be used in conjunction with further data obtained through the broader ARTIE Academy project over the next two years to prepare the ground for a future grant application (refer to Appendix A for more detail). The larger grant will build on the guiding principles distilled from the data gathered in this OLT seed project and facilitate further identification of specific strategies effective in teaching Indigenous students. Refer to Appendix A for the anticipated timeline.

8.1 Use and dissemination

This section briefly outlines how the DVD and guiding principles have been used during the project period, as well as outlining how it will be used and disseminated over the next two years.

2014

- The DVD and guiding principles were used in part in a UQ social work course to assist understanding the topic, ‘culturally responsive communication’.
- The DVD and guiding principles were employed as part of the pre-service teacher preparation program in UQ School of Education. Students included dual degree
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secondary or middle years of schooling programs, four year bachelor of education primary and middle years programs, and graduate diploma secondary program. It was incorporated both for the purposes of authentic evaluation as outlined in the previous section and as part of their learning experience.

- The findings from the research project, including the guiding principles, also provide the basis of a book chapter in a text, *Success in professional experience*, to be published for 2015 by Cambridge University Press.

2015

- The DVD was used in-house at UQ across 13 professional experience courses in education that cover primary, middle years and secondary pre-service teachers.
- The DVD was used at the Queensland University of Technology (QUT) in one course across the Social Work and Human Services programs. This course focuses on working in culturally responsive ways with Indigenous people and communities.
- The DVD was also be used at UQ in a teacher preparation course: Teaching and Diversity.
- A seminar based on the findings of the research and showing segments of the DVD was shown at UQ during the annual Teaching and Learning week program.
- The findings from the current research project will also be disseminated through publication in selected peer reviewed international journals and international conferences that have an explicit focus on Indigenous education and/or teacher preparation.
- The DVD was made available to ARTIE Academy for use in induction of tutors in Central and Northern Queensland.
- Further, pursuing a commitment to quality teaching and learning outcomes, the research team actively engaged in educational forums across Queensland to showcase this material.

8.2 Further development

The outcomes of this research project are limited in scope and are in the early stages of development due to being the result of a seed grant. They will continue to be developed across the duration of the broader ARTIE Academy project in which they are embedded. Further testing of the robustness of the guiding principles data needs to be done. Application will be made for a further competitive research grant. The purpose of the further grant will be to further develop the material from this seed grant. Specifically, it will aim to build an interactive, user-friendly website utilising the principles of blended learning. It will be targeted at pre-service teachers, their lecturers and early career teachers. It will incorporate the material that has been recorded on the current DVDs, along with additional material gathered during the life of the broader ARTIE Academy project; the guiding principles; realistic and culturally responsive teaching strategies; supported by learning activities and downloadable printable resources.

The purposes of the future website will be to: raise teacher preparation educators' and students' awareness of issues that affect learning outcomes faced by Indigenous students; demystify misconceptions about Indigenous teaching and learning; offer concrete strategies for effectively improving learning outcomes for Indigenous students; and identify and strategise for potential challenges to implementing these strategies. The future website will make this material more accessible to a wider audience; with the aim of encouraging graduates to apply for teaching positions in schools with high Indigenous school populations

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as a choice.

Section 9: Conclusion

The project set out to develop a resource for use in teacher preparation programs so as to better address the issues of learning apparent in contemporary Australian schools. It was noted that many graduate teachers do not chose to seek employment in schools with high levels of Indigenous student populations. This is primarily due to misunderstanding and concerns about not feeling competent. One of the most effective ways to dispel myths is to hear from the people who are affected or who have firsthand knowledge. These perspectives need to be presented in a non-blaming, accessible manner. Pre-service and graduate services need to know 'about' the issues related to learning and teaching Indigenous students but they also need to know what they can practically do to make a real and positive difference. Therefore, the deliverables stemming from this research project make a small contribution to building graduate student capacity in this regard.

The DVD resource was found through the evaluations to be helpful and informative. Discussions with the students who evaluated the DVD elicited the importance of showing and using the material as early as possible in their training and then on an ongoing basis throughout teacher preparation programs. Building on the importance of connectedness (relationships) was the key message for new graduates. Thus the overarching guiding principle for pre-service teacher learning is the implementation of a relational approach to learning and teaching. This principle is most appropriately delivered at the cultural interface through developing a culturally responsive learning environment that is cognisant of the concept of cultural safety.

There are many rich stories from those willing to share that can only benefit the educational outcomes of young Indigenous students by providing them with more open and culturally responsive teachers. In this way we hope that graduate teachers will, as Elder 1 said, *stand beside us and walk beside us.*

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Appendix A: Overview of integration of OLT and ARTIE Academy projects

The following provides a detailed breakdown of the integration between the broader ARTIE Academy project and the current OLT funded project over the three year period from 2013 – 2016. The OLT seed project represents one part of the work being conducted with the ARTIE Academy. Connections made through the ARTIE partnership allowed access to the participants. It is expected that the work with ARTIE and a future larger OLT grant will culminate in the website as discussed in Section 8 of this report. The role of the OLT seed grant is identified below in italics.

Stage 1 - year 1

- *Review of the national and international research in the area of Indigenous learning and teaching.*
- Collection of baseline data through the ARTIE project. This data is currently being collected as part of the program and comprises:
 - assessments of Indigenous students' performance and engagement as perceived by classroom teachers
 - retention rates
 - attendance records
 - literacy and numeracy/mathematics and English grades
- *Video-recorded individual interviews with school children and focus groups with pre-service teachers, community Elders, teachers and Community Education Counsellors (CECs) were conducted. This will be funded by the OLT Seed grant*
- *Data analysis of interview and focus group video material*
- *Development of DVD resource*
- *Review and feedback about the DVD and research process by participating students, teachers, CECs and Elders.*
- *Evaluation of DVD resource by university pre-service teachers*
- *Development of best practice guidelines*

Stage 2 - year 2

- The DVD, in conjunction with the best practice guidelines, will be implemented as teaching resources to prompt discussion about Indigenous children's learning needs and teaching strategies in the teaching programs at the UQ School of Education.
- Teacher preparation students who volunteer as tutors in the ARTIE project will view the DVD as part of their professional experience coursework and evaluate its efficacy as a learning resource.
- Data as per the ARTIE project in Stage 1 above will be again collected to track any changes in individual student performance after implementation.
- Data collection will also include interviews with the same cohort of school students. Focus groups will also be conducted with the same schools.
- Revisions will be made to the learning resources as necessary based on the data collected.

Stage 3 - year 3

- The revised resources will be again implemented and data as per Stage 1 above will be again collected to track any changes in individual student performance after implementation.
- Teacher preparation students volunteering in the ARTIE project will also evaluate the efficacy of the revised material as learning resources.
- Revision and finalisation of learning resources and project reporting.

Stage 4 – year 4

- Development of website

Appendix B: Focus Group Guide

Focus Group Guide – Participant Group A Teachers, community education counsellors & Elders.

Focus groups for teachers and CECs will be held on school premises while those for Elders will be held off-site

Focus groups may include all of types of participants or alternatively may be comprised by sub-groupings within this depending on local contexts.

Ideally participants in the focus groups will remain largely unchanged over the duration of the project.

Focus group questions (Year 1):

1. What do you think helps Aboriginal and Torres Strait Islander children to do well at school?
2. What issues/circumstances could affect the learning of Indigenous students?
 - What do you think could be done to address these issues?
3. Are there any things you have tried to help Aboriginal and Torres Strait Islander children learn?
 - Can you provide an example/s of what you have tried?
 - Do you think that this was effective?
 - In hindsight, is there anything you would do differently?
4. What advice would you give to student teachers who are going to be teaching Aboriginal and Torres Strait Islander children?

Appendix C: Interview Guide

Interview Guide – Participant Group C

School students

These questions will be adapted to meet each student's cognitive abilities.

Re-administer these questions each year for consistency and tracking.

1. What's the best thing about school?
2. What don't you like about school?
3. What are your favourite subjects?
4. What do you like best about these subjects?
5. What sorts of things do your teachers do that help you learn?
6. Is there anything that your teachers do that makes it harder for you to learn?
7. What would you say to a new teacher to help them teach other children?
8. When you leave school, what is your dream job?

Appendix D: DVD Evaluation

DVD Evaluation – Pre-Service Teacher Version

This questionnaire is part of a study about developing a DVD resource to assist pre-service teachers enhance their knowledge and skills for teaching Indigenous students. To complete the questionnaire, please **circle** the number that best fits your response.

PART 1: PRE-DVD

- 1) Please rate your level of knowledge about culturally responsive teaching practice with Indigenous students **BEFORE** viewing the DVD

None	A little	A moderate level	A good level	A high level
1	2	3	4	5

PART 2: POST-DVD

- 2) How effective was the DVD in highlighting issues that Aboriginal and Torres Strait Islander students may experience?

None	A little	A moderate level	A good level	A high level
1	2	3	4	5

- 3) How effective do you think the DVD was in outlining practical things you can do when working in schools with Aboriginal and Torres Strait Islander students?

None	A little	A moderate level	A good level	A high level
1	2	3	4	5

- 4) Please rate the DVD's effectiveness in increasing your knowledge about **things** you could do to help Indigenous students learn

None	A little	A moderate level	A good level	A high level
1	2	3	4	5

- 5) Please rate your level of knowledge about culturally responsive teaching practice with Indigenous students **after** viewing the DVD

None	A little	A moderate level	A good level	A high level
1	2	3	4	5