Part III
Practice, Programs and Future Directions

Chapter 6
You've Got to Put Your Stamp on Things: A Rippling Story of Success

Robyn Ober and Jack Frawley

Introduction

In a recent report into the transition of Aboriginal and Torres Strait Islander students into higher education, it was stated that 'success exists on a spectrum defined by individual and collective terms, as well as a range of measures utilised by universities and government departments'. Success was viewed not so much as measured outcomes but more as a 'ripple effect of many small successes' (Kinnane et al. 2014, p. 10). In addition, the report identified that successful transition into higher education through targeted pathway programs critically depended upon supportive family and community relationships, dispelled myths and raised expectations. Throughout Australia there have been many 'small successes' of Indigenous individuals who have completed higher education, but these stories are largely absent from the literature. There has, instead, been a strong focus on the barriers and challenges to Indigenous participation (e.g. see Andersen et al. 2008; Ellender et al. 2008; Oliver et al. 2015; Thomas et al. 2014).

Policy concerns about addressing equity in higher education have been debated and refined for a number of decades. While increased support for equity groups is both necessary and highly valued, it is becoming increasingly evident that targeted programs and activities, which are tailored to the needs of each separate equity group, are also required. Arguably the most disadvantaged equity group is that of Indigenous higher education students. Indigenous people face multiple disadvantages in education and employment where race, disability, gender, location and economic status all contribute. Higher education has a critical role to play in improving

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the socio-economic position of Indigenous people, their families and their communities. However, pathways into higher education are often complex to navigate, and the systemic and practical challenges and restraints faced by Indigenous students can ultimately hinder their participation in higher education. They often involve concerns relating to equity and social inclusion. Inherent to pathways is the issue of student transition defined as the capacity to navigate and engage with change without having full control over and/or knowledge about what the change involves. Research shows that the transition to university represents a period of disequilibrium as students move from a familiar environment into an unfamiliar one, resulting in significant life changes.

To cope with these life changes and to attain a sense of success requires a high level of self-efficacy. Social cognitive theory (Bandura 1977) proposes that learning occurs in a social context with a dynamic and reciprocal interaction of the person, environment and behaviour. Self-efficacy, as a key element of social cognitive theory, is a significant variable in student learning because it affects students' motivation and learning. Bandura (1977) defined self-efficacy as beliefs about one's own ability to be successful in the performance of a task. The four sources of self-efficacy are mastery experience, vicarious experience, social persuasion and emotional arousal (Bandura 1977). Self-efficacy is not created by easy success; it requires experience in overcoming obstacles and difficult situations through continued effort and persistence. Academic persistence can refer to students continuing with their studies despite facing obstacles, setbacks and challenges. Self-efficacy requires authentic successes in dealing with a particular situation. This provides students with authentic evidence that they have the capability to succeed at the task. Resilient learners are willing to give it a go and persist with their learning (Deakin-Crick et al. 2004). Students obtain information about their own capabilities by observing others, especially peers who offer suitable possibilities for comparison. Students often receive information that affirms and persuades them that they are able to perform a task and this is most effective when people who provide this information are viewed by students as knowledgeable and reliable, and the information is realistic. West et al. (2014, p. 14) suggest, 'relationships, connections, and partnerships are critical elements of creating a welcoming and supportive environment'. Also, a positive outlook drawing on positive emotions strengthens students' self-efficacy. Research shows that confidence in one's relevant abilities can play a major role in an individual's successful negotiation of challenging situations, and that students who hold high expectations for themselves do so in part because 'they trust in their capabilities and in part because they see the world, and their ability to respond to it, as less threatening' (Chemers et al. 2001, p. 62).

Approach

Carlson (1991) states that the narrative mood of social science research allows researchers 'to illustrate not just events but individuals' perspectives on the nature and meaning of the experiences in question' (p. 257). LeCompte (1993) agrees, stating that the promotion of the narrative is 'a postmodern remedy to the positivistic canon of conventional science', in that it overturns 'old dichotomies between the research/practice, author/text, subject/object, knower/known, method/procedure, and theory/practice' (pp. 13–14). Narrative inquiry is the study of story, interpretation and discourse, and an investigation of what happened, the significance or meaning of that and how it is told or shared (Thomas 2012). Narrative inquiry describes human action through stories which may be oral or written, may be accessed formally through interview or informally through naturally occurring conversation, and may cover an entire life or a specific aspect of a life (Thomas 2012).

The narrative mood of this chapter was established by the two authors having a 'yarn' around the topic of 'success'. Yarning as a research method is flexible and adaptive and allows participants to 'become partners within the research process, not just individual contributors' (Dean 2010, p. 7). Robyn Ober is a Mamu/Djirribal woman from the rainforest region of North Queensland, and Jack Frawley is a non-Indigenous Australian with extensive experience of living and working in remote Aboriginal Australia. Robyn provides her story:

> Innisfail is my great grandmothers' traditional country, and we are of the Bagirgibara clan. I spent most of my early childhood years growing up in the beachside township of 'Flying Fish Point'. The 'Point', as we affectionately call it, sits on our beautiful homeland, where the rainforest meets the sea. Growing up in a large extended family in a small community meant you were never alone, your cousins were your best friends, we looked after each other, we understood about our responsibilities to look after younger ones, we knew how to share what little we had. These are the values that were instilled in us from an early age from our old people. Values of respect, reciprocity and relationship in all aspects of our life, personal or professional. Education was especially important to our old people, because many of them were denied a quality education, leaving school at an early age to work as cane cutters or domestics to help their families. They fought hard against racist government policies of the day to invest into the future for their children and grandchildren. This type of teaching, and way of life, set me up with a strong foundation to build on and move onto greater, more ambitious things. After I completed grade 10 at Innisfail High School, I enrolled at the local business college, and undertook the office and business administration course. However, with employment opportunities very scarce in a small town, I soon found myself unemployed for 12 months, before I finally won a position as a library aide at the local Catholic School. This was my first experience of working in the education profession which in fact actually prepared me for future positions as an Aboriginal Education Liaison Officer, primary school teacher, adult educator and academic researcher.

Robyn and Jack's personal and professional relationship spans some 25 years during which time they have collaborated on research projects and research publications. The topic of this chapter grew out of a national seminar in which Robyn was a member of an Indigenous higher education graduates panel that discussed a

number of questions around the concept of success. Questions to the panel, and later to Robyn in a recorded telephone interview, were:

1. What constitutes success for you?
2. What motivated you to be successful?
3. What does success look like in higher education?
4. What were some of the challenges you faced in your higher education journey?
5. What measures provided by your family, friends and community assisted you in your successful higher education journey?
6. What measures provided by the university assisted you in your successful higher education journey?
7. What would your advice be to universities to facilitate success for Indigenous students?
8. What would your advice be to potential Indigenous higher education students to facilitate success in their study?

The interview was transcribed, and line numbers were added to allow for coding and reference. The two authors then conducted a thematic analysis of the interview and then discussed the emerging themes. Braun and Clarke (2006, p. 79) state that 'thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data'. The thematic analysis followed these steps:

1. Familiarising ourselves with the data: transcribing the interview, reading and rereading the interview, noting down initial ideas
2. Generating initial codes: coding interesting features of the interview in a systematic fashion across the entire data set and collating data relevant to each code
3. Searching for themes: collating codes into potential themes and gathering all data relevant to each potential theme
4. Reviewing themes: checking if the themes work in relation to the coded interview extracts and the entire interview, and generating a thematic 'map' of the analysis
5. Defining and naming themes: ongoing analysis to refine the specifics of each theme and the overall story the analysis tells, generating clear definitions and names for each theme with reference to the self-efficacy literature
6. Producing the chapter: selecting compelling interview extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, and collaboratively producing a paper (Braun and Clarke 2006, p. 87)

Results and Discussion

The focus of the narrative is initially on pathway experiences leading to a decision to undertake higher education studies, the experiences of transition and reflections on success. Robyn's story is woven through the discussion.

Pathways: Stumbling in

Unlike the present day where career advisors are part of the Australian educational landscape and are a coordinated effort by Australian and the state and territory governments, vocational guidance in the mid-twentieth century varied from state to state and was 'concentrated in metropolitan areas rather than in rural and regional areas' (Wright, 2012, p. 333). Situations still occur where Indigenous students have 'a lack of appropriate careers advice in schools that prevent them from achieving their goals' (Shah and Widin 2010, p. 31). This often leads to students making either ill-informed career choices or none at all, and with very little formal direction. Robyn explains:

> I kind of stumbled into education without really trying after high school. You know, there was no work in the town I was living in and then a position came up as a Trainee Library Aide and so that got me into the education – it was a local Catholic school and so from a Library Assistant to a Teacher Assistant to a Liaison Officer. Even at 17 and 18 I kind of stumbled into the education field, if you like.

Often it was a case of circumstances, of being in the right place at the right time and making a decision to grasp the opportunity. Often supportive workplaces encouraged staff that showed promise. Robyn states that it

> was through circumstances … I was offered it. It was an Aboriginal identified position and I won it and then other opportunities happened in that school and so that – the funding for that closed and then they said, oh, but there's – we'd like to keep you on as a Teacher Assistant or a Liaison Officer, so it was the workplace that provided like a pathway for me within the school.

Changing circumstances can result in adjustments brought about by geographical relocation or introspection. Relocation can sometimes be a strategy 'to find employment or to just generally improve living conditions' (Arthur 1999, p. 19). This was the case for Robyn.

> We left Queensland and then I followed my family up to Western Australia and then eventually to B[1] after that, so it was a little bit of everything happened along the way.

Introspection suggests an awareness of the need for change and that during a period of change and uncertainty 'we naturally take comfort in our enduring connections with friends and family' (Ibara 2002, p. 43). Robyn's enduring connection was with her auntie.

> I wasn't happy in Kununurra, where I was living. I wasn't working and so my auntie M suggested B, so again, you know, these people just crossed my pathway and one thing happened after the other, but people like auntie M they were role models for me. She encouraged me to go into Teacher Education.

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[1] Personal names and institutional names have been anonymised throughout the chapter.

Transition: I Know What I Wanted to Say

Transitions into the academy require developing the capacity of students to change and students seeking support to enable that change. Students entering the academy require a sense of purpose and engagement with their peers and with university life (Naylor et al. 2013). Often this also happens through circumstance. Robyn explains:

> My family, they were really excited about me doing some sort of tertiary study from things like that, and then as I started in the course, I began to get really motivated because of the … just working with other people who were passionate about education. They were experienced people who came from school. Where for myself, although I worked in a school and had that experience, I didn't really have a classroom, but I was with people who actually were experienced teachers. I saw them as role models and just their passion working with older people like E and B and P, and people who were currently in the education field and I think that rubbed off on me. And so their passion about education, and about Aboriginal education, and seeing how our kids succeed, I suppose, I think again, it was just I'd get lots of involvement and it kind of happened. When you're around people like that, that rubs off on you and you begin to see things the way they see it.

Engagement with the multiple discourses of the disciplines requires 'communicative competencies' which are critical to persistence and success (Day et al. 2015). Students, like Robyn, face a range of challenges (Devlin 2009) when they enter the academy, and chief among them is the ability to develop a repertoire of academic literacy abilities, including reading and writing for academic purposes.

> Some of the challenges were around academic writing. I found that especially in the B course, they – not that it wasn't in the B course, but we were doing our Bachelor of Arts in Education and it was the same course that was being run in D University and I just felt there that there was – I couldn't – I just have problems with being able to write in an academic way. I didn't have the repertoire. The linguistic repertoire of the words, the vocab. I knew what I wanted to say, but I didn't quite know how to say it in an academic way, in an academic writing style and so that would frustrate me and I knew that I spent nearly hours with the lecturers, with J and R and people like that would just sit with me and we had quite a lot of discussion about, just extra – trying to get – getting there to express myself and try the words – what my position was or what my standing was on certain subject and then working with me to try and get that on paper, but at the same time helping me with words that might have been unfamiliar to me. Trying to expand my vocab in that whole way and that was challenging. Also reading academic text. I found that – I still find that quite challenging. Not as much now, but I found it hard to focus and concentrate on reading academic articles that I'd have to have a thesaurus or a dictionary with me to try and work out what these authors were saying, but that worked hand in hand, too because the more I found the more I read. The more academic texts that I read, the more I became confident in writing in an academic way.

The Behrendt Report (Behrendt et al. 2012) emphasised the important and essential role of providing student support to ensure that Indigenous students succeed in their studies. Robyn drew on this support. The support takes a variety of methods and modes, including face-to-face and one-to-one support within residential or online teaching and learning. The essential factor of the support is that it is holistic and meets both personal and academic needs.

> We had tutors. The higher education student tutors would help us in the B courses, in the undergraduate Associate Diploma of Teaching in Aboriginal Schools. We had tutors who would come in and work with us and that was the D program, we had tutors who would come in and they would be people who would work with us when the lecturers went back to D University, so we had support people like Mr H and people like that used to work with us and just support us. Just like practical things like people to talk to if you just felt home-sick and missing your families and things like that. We had people in the student services, residential who you could just yack to….

The support most valued was that informed by meaningful relationships established through connecting with the Indigenous Education Units, other students and with the teaching staff. Robyn's relationships included lecturers, although Asmar (2015, p. 21) believes that 'a key aspect of the supportive learning environment is students' relationships with other students'. West et al. (2014, p. 14) suggest 'relationships, connections, and partnerships are critical elements of creating a welcoming and supportive environment'. Martin et al. (2015, p. 4) believe that effective teachers 'are able to connect with students in multiple ways including emotionally'. Similarly, West et al. (2014) state that culturally aware teachers are often the most effective in providing appropriate support.

> … the relationships, just to talk to some lecturers who were there just to support us, so they were approachable if we had problems and things like that we were able to talk about it and that. Part of my … when I did the D course too, that was quite challenging for me. I found that I was able to contact the lecturers at D University and have a chat with them. There's a few times when I wanted to pull out of the course. I just couldn't do it and they were able to come alongside me and encourage me and talk about, try doing it this way or think about this or things like that … I think it came back to people who you felt comfortable to talk to. Most of the time it would be the lecturers because you'd built up that relationship and that rapport over the years and it was – it actually became, you know, it was like a little family instead of the staff and student …

Discussion

In his seminal work on self-efficacy, Bandura (1977) asserted that self-efficacy is developed through four sources: mastery experiences, which are defined as overcoming obstacles through perseverance; vicarious experiences through social models influenced by perceived similarities; verbal persuasions to overcome self-doubt, including exhortations and self-suggestion; and physiological state, which consists of physical responses – including stress, arousal, depression and mood – to threatening environments and situations. The following discussion draws on the work of Bandura (1977) and is intertwined with Robyn's narrative.

Mastery Experiences: Overcoming Obstacles

Persistence and resilience can lead to a sense of achievement and satisfaction and a feeling of academic maturity. Academic maturity can refer to independent learning, self-regulated learning or self-management, and objectives than can be attained by using these modes of learning as steps in the learning process (Engelbrecht and Harding 2002). For Robyn:

> It's probably about achieving short- or long-term goals for yourself that you set for yourself. I think success is kind of around that. How you achieve your goals and tasks whether it's small tasks or large long-term goals, but I think success also is about your feeling – there's some sort of satisfaction that you've done something and that there's some sort – you're happy about where you are in life and what sort of things you've done to.

Vicarious Experiences: Mentors and Models

In researching teaching and learning practices that work effectively with Indigenous students, relationships are viewed as being key (Nobin et al. 2013). According to Tolbert (2015), relationship pedagogy requires teachers to be authentically respectful and caring for their students, both academically and socially. Tolbert (2015, p. 1328) states that 'a culturally responsive pedagogy of relations also entails that teachers position minoritised students as agents who construct knowledge in the classroom'. Establishing equal learning relationships with others is part of this, and for Robyn this included relationships with lecturers and other students.

> I guess that space that was created for us where we felt comfortable to learn together. To share, to create knowledge together by discussing, debating and yarning. All of that thing in my undergraduate was really just learning together and helping each other and having that support around so when we did have to have that individual part, like writing an essay or write a report, we felt quite confident, if you like, to do those things on our own, so I think that whole thing of collaborative learning, collaborative work, relationship with staff and the students … There's also room for us to learn from others … I can come alongside and I can learn from this person and some of the things because I'm an Aboriginal woman I may say, well, that doesn't apply to me, but I would take on board and I would learn from other people what they have to offer and I've found that's the best way for people who want to succeed.

Verbal Persuasion: Putting Your Stamp on Things

There are a number of challenges faced by Indigenous students, including a lack of confidence in their own academic ability (Cairnduff 2015). Research shows that confidence in one's relevant abilities can play a major role in an individual's successful negotiation of challenging situations and that students who hold high expectations for themselves do so in part because 'they trust in their capabilities and in

part because they see the world, and their ability to respond to it, as less threatening' (Chemers et al. 2001, p. 62). Robyn explains:

> It's good to have that confidence and it's good to have that strength there … I set goals for myself like completing my Associate Diploma and completing the degree and things like that … I think once I knew I was interested and passionate about education then I began to set goals and tasks and that for myself … I don't feel uncomfortable or awkward or things like that, but I think it's all that part of me as someone who's come through the journey and I've learnt things along the way. I can call on people if I need their help. I would say to see yourself as a learner. That's what I had to learn. It's good that we come in with knowledge and we know – we bring in a rich cultural heritage and what we've learnt in our own lives and our life's experiences, that's good, but there's also room for more learning. We're learning all the time … but at the same time you know you've got to put your stamp on things.

Physiological State – Overcoming Shame

Indigenous student satisfaction matters (Shah and Widin 2010), and to achieve satisfaction often depends on a range of affective qualities, including persistence, resilience and confidence. Academic persistence can refer to students continuing with their studies despite facing obstacles, setbacks and impediments, as experienced by Robyn. According to Gale et al. (2010), two of the key barriers to higher education are low academic achievement and low motivations/aspirations. This can lead to a range of emotions.

> My heart wasn't really in it … you feel ashamed … sometimes I get a bit overwhelmed by everything and then you don't want to talk to – you feel ashamed to tell anybody that you're not up to date with your next chapter or the draft and then you go into a little hiding mode and you want to do the disappearing act.

Although support is available, often it comes down to a student's resilience. Resilience has been defined as 'the process of, capacity for, or outcome of successful adaptation despite challenging or threatening circumstances' (Masten et al. 1990, p. 426). Resilient learners are willing to give it a go and persist with their learning even though they may feel confused or ashamed (Deakin-Crick et al. 2004, p. 255). Robyn advises

> You've got to look at what your priorities are, but within reason I will take opportunities to say, you know, I'm scared, I'm nervous … but I'm going to have a go, I'm going to try and I'm going to do it to the best of my ability.

Conclusion

The academy has contributed to this story of success through responsive pedagogy. The concept of 'culturally sustaining pedagogy' describes pedagogy that supports students 'in sustaining the cultural and linguistic competence of their communities

while simultaneously offering access to dominant cultural competence' (Paris 2012, p. 95), and a pedagogy that requires teachers to 'attend to both marginalised and dominant cultural and linguistic practices that expand minoritised students' opportunities to learn' (Tolbert (2015), p. 1330). This approach, which was part of Robyn's experience, results in students and teachers 'repositioned in an assemblage of interlocking relations and practices that converge in often contingent and non-deterministic ways' (Martin et al. 2015, p. 10).

> The whole thing about work, work and shared learning, that was something radical for me because coming straight from the high school, coming straight from a mainstream workplace back home, it was really quite different … Even the curriculum at that time was very integrated … when I was a student, everything was integrated. It was one thing led on to the other, so our workshops were very community issues driven kind of workshops and they were, again like I said, quite radical for its time there.

White (2015, p. 14), in reflecting on a teacher education program, discusses an approach that 'nurtured the development of very important ideas' and was 'generative and foundational'. This approach informed the program that Robyn attended. The sharing of community aspirations as well as the 'rich possibilities of collaborative learning' was seen as fundamental to the development and design of the program.

> A lot of the things that we talked about and we unpacked, if you like, came from real issues, from the grass roots and I think that drove the course, that drove the curriculum and it also drove us, and as students it was nothing for us to stay up late into the night and talk and discuss and write songs about separate issues.

Success takes many shapes and forms. In this story, success is a ripple of many small successes from at first stumbling into the teaching profession and then, through the right kind of support and with the right attitude, persisting through to personal achievement. Along the way there has been a willingness and desire to engage with the academy, to develop competency in the multiple discourses, to establish personal and professional relationships, and to develop a strong sense of self-efficacy.

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Chapter 7
Canada's Indigenous Peoples' Access to Post-secondary Education: The Spirit of the 'New Buffalo'

Jacqueline Ottmann

Introduction

As educators and school leaders we have been taught about child and human development, which included the stages of growth and the general milestones of each stage. We also learned the importance of supporting student learning and development within environments that are safe and caring, of stimulating student engagement with creative, fun, innovative activities, of inspiring students so they are motivated by learning. In addition to this, we have been introduced to foundational educational theories (e.g. constructivism, constructionism, ecological theory, etc.) that help develop our educational philosophy, a philosophy that determines how we take decisions, interact and behave in our classrooms and schools. With all this knowledge, educators should be fully equipped to navigate through and meet the challenges that are presented on a daily basis in their classrooms and schools by students, parents and colleagues. Every child should be learning and progressing from grade to grade in a systematic, predictable manner and finishing school on time – never 'failing' a test or a grade. Unfortunately, this is not the case. On their first day of teaching, teachers' ideals may be challenged by reality. They learn that teaching and learning cannot be fully captured and placed into neat and tidy theories and fix-all strategies – that the educational landscape is very complex. Many teachers learn that students are as diverse and sometimes as distant as the stars and that the education profession is an adventure that presents more questions than answers. In time, some teachers learn that clarity to complexities emerge when one actively listens and astutely observes, when one is open, responsive and humble, rather than being an executor of prescribed solutions and being consumed with unfolding possibly outdated curricula and implementing poorly developed (i.e. without community input) policies.

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So, with this in mind, in this chapter I focus on a people group that contributes to the complexity of the educational landscape, people who are indigenous to the land but often not recognised as such, people that continue to confound many researchers, educators, leaders and policy-makers at all levels of education (elementary, secondary and post-secondary) – Canada's First Nations, Métis and Inuit peoples. As an Anishinaabe person, I reside within this circle. In essence, I am asking the following questions: Why do significant educational gaps still exist and why do many First Nations, Métis and Inuit students disappear from the halls of our learning institutions, particularly in times of transition (i.e. from grades 6–7, 9–10, and 12–post-secondary)? How can educational leaders and teachers equip themselves to support students that see and experience the world differently – students that, in general, have not been responsive to traditional Eurocentric educational approaches? Do foundational educational precepts (i.e. philosophies, theories, methodologies and strategies) need to change to resolve long-standing issues (i.e. the education gap between Aboriginal and non-Aboriginal students in Canada) to make way for inclusive, innovative, caring and supportive spaces in education?

In reading this chapter, transition and access should be recognised as change processes that function in constant flux (Little Bear 2002) and a terrain that is inclusive of the Trickster's playground. Constant flux is fluid change, a reality where the dynamic relationship between order and chaos, and is the birthplace of creativity and innovation. As complexity theory teaches, this zone is the liminal space between the old and new way of being and doing, an energy-filled place that holds the potential for profound discoveries in the midst of time – past, present and future – that is definitely not linear but woven into each other. Little Bear states, 'If everything is constantly moving and changing, then one has to look at the whole to begin to see patterns … For instance, the cosmic cycles are in constant motion, but they have regular patterns that result in recurrences such as the seasons of the year, the migration of the animals, renewal ceremonies, songs, and stories' (p. 78). This can be volatile domain. In consideration of Little Bear's explanation, educational reform should include intentional reflection in- and on-action (Schon 1983), learning from past patterns and renewal of essential elements. It could be said that this space is also where the Trickster plays havoc. Jo-ann Archibald (2008) explains:

> First Nations, Indigenous stories about Coyote the Trickster often place her/him in a journey mode, learning lesson the 'hard' way. Trickster gets into trouble when he/she becomes disconnected from cultural traditions teachings. The Trickster stories remind us about the good power of connections within family, community, nation, culture, and land. If we become disconnected, we lose the ability to make meaning from Indigenous stories. (p. ix)

Archibald also describes the Trickster (also known as Raven, Wesakejac, Nanabozo and Glooscap) as a 'magician, an enchanter, and absurd prankster, or a Shaman, who sometimes is a shape shifter, and who often takes on human characteristics' (p. 5). The Trickster is a 'transformative figure' (p. 5) who falls into dire situations because of 'vanity, greed, selfishness and foolishness' (p. 5), and he teaches through 'humour, satire, self-mocking, and absurdity to carry good lessons' (p. 5). Ultimately, a mission of the Trickster would be to draw people to truth. It is through the awareness of flux, acceptance of the uncertainty that stepping into new

territory encompasses, and being open to the Trickster's lessons that learning institutions can better prepare for transition and access to various levels of education for Aboriginal students.

The Educational Landscape for Canada's Indigenous Peoples

In 2013, I wrote an article entitled 'Indigenizing the Academy, Confronting 'Contentious Ground''. The article explored the concepts of Indigenisation and decolonisation within the context of Canadian post-secondary institutions. I began the article with a scan of the state of higher education statistics primarily for First Nations students. I noted the following:

> In terms of post-secondary education, First Nations and Inuit enrolment rates have slowly increased between 1987–88 (15,572 funded students) and 1998–99 (over 27,157 funded students) (Indian and Northern Affairs Canada (INAC) 2000); however, more recent statistics indicate student enrolment decline: in the 2002–03 academic year, 25,075 students were enrolled and in 2008 approximately 23,000 students were funded on an annual basis (INAC). However, between 2001 and 2006, because of federal post-secondary under-funding, approximately 10,500 First Nations students who are eligible to attend post-secondary education were on waiting lists. Overall, it appears that the number of post-secondary students has been declining in recent years. […] Furthermore, the Canadian Federation of Students (2012) reported, 'Only 8 percent of Aboriginal persons hold a university degree compared to 23% of the total population' (n.p.). As a result of statistics like these and the dramatic disparity in the quality of living between segments of the general population and the Aboriginal population, identification of barriers and initiatives to improve Aboriginal educational success, and consequently quality of living, have emerged. (p. 8)

Not surprisingly, the education gap for Indigenous students begins in elementary school and continues into the realms of higher education. The Auditor General of Canada's 2011 Report indicates that the education gap continues to widen for First Nations students, and "efforts to close the education gap have yet to yield results" (n.p.). The Report states that 41% of First Nations over the age of 15 that live on reserve, versus 77% of the Canadian population, have graduated from high school. Students are opting out of schooling at specific times of transition – in between elementary and middle school, middle school and high school, high school and higher education, and undergraduate and graduate school. Unfortunately, students have tremendous difficulty accessing and remaining in higher education without strong foundations. Mendelson (2008) explains:

> Education is the bootstrap which First Nations communities must use to improve their social and economic conditions. Like all others in Canada, Aboriginal children need to acquire an adequate education to have a chance in succeeding in the modern economy. An adequate education is more than a high school education – a post-secondary diploma or degree, or a trade certificate, is required – but high school graduation is the door through which most students must pass to go on to post-secondary schooling. (p. 2)

Although it's important to strengthen higher education for Indigenous students, a multilevel approach to supporting Indigenous students is required since students are leaving school at an early age. Change has to happen at every level of schooling – from

early childhood to higher education. This can be made possible through collaborative dialogue that includes Indigenous and non-Indigenous educators and educational leadership that represent schooling from each 'division'. We have to believe that what is good for Indigenous students is good for all students, that what is good for Indigenous people is good for all society. Therefore, the changes that emerge from a constructive collaboration whose aim is to impact Indigenous education positively will benefit education and humanity as a whole.

The Barriers

What is the research saying about the typical journey for First Nations, Métis and Inuit students? Studies such as those by Restoule et al. (2013) indicate that First Nations, Métis and Inuit students are frustrated, confused by and suspicious of education systems, particularly post-secondary education. In Canada, there continues to be a general education gap between Indigenous and non-Indigenous students (Office of the Auditor General of Canada 2011). Systemic barriers (e.g. policies, programming and curricula that do not authentically and respectfully include Indigenous peoples – their histories, knowledge, teachings) are presented early and sustained in learning institutions causing long-term challenges for Indigenous students. Restoule et al. (2013) list the barriers in accessing post-secondary education that Canadian Indigenous people encounter; these comprised of 'inadequate financial resources, poor academic preparation, lack of self-confidence and motivation, absence of role models who have post-secondary education experience, lack of understanding of Aboriginal culture on campus, and racism on campus' (p. 1). Restoule et al. (2013) also described the profound intergenerational legacy of mistrust that Indian Residential Schooling and Eurocentric educational practices has left on the Canadian Indigenous population (p. 1).

In their study on Ontario access programs, Restoule et al. (2013) found that Aboriginal students pursuing post-secondary institutions were generally mature students over the age of 25 and that the majority of the students gained university admittance through a bridging program. Restoule et al. (2013) explained: 'When they were younger, these students were not able to access or chose not to access post-secondary education through the so-called "regular way"' (p. 2) (i.e. right after high school). This schooling journey can be described as a 'start-stop' repetitive approach, a walk down an unknown winding road, or a fearful saunter through a maze of experiences. So, what were the barriers or factors that contributed to the decision not to attend schooling after high school?

A 2003–2004 study was conducted in four Saskatchewan Institute of Applied Science and Technology (SIAST, now Saskatchewan Polytechnic) campuses to learn the reasons that students left the program before completion. The study revealed significant findings on Aboriginal students once they gained access into SIAST. In this study, a third of the 'early-leavers' were Aboriginal, and overall 'only 47.9% of Aboriginal students completed their programme' (2005, p. 5). The findings

are staggering but synonymous with other post-secondary institutions. Of the Aboriginal students that left early, '57.8% were discontinued from their studies by SIAST for not meeting programme expectations such as academic performance and attendance' (p. 5). Similar to the Ontario study (Restoule et al. 2013), the reasons for leaving SIAST included: family demands, transportation challenges, childcare issues, family health issues, employment attainment and financial and funding challenges (p. 5). The *Aboriginal Student Success Strategy: Final Report to the Committee* (2009) indicated that the barriers to post-secondary access for Aboriginal students also included: 'low awareness of training-related career paths at the prospective student stage; complex admission processes; difficulties in relocating to an urban environment; academic preparedness; and, lack of support for English language learners' (p. 4). Through surveys and focus groups, the SIAST study revealed that Aboriginal students experienced discrimination and insensitivity and felt misunderstood, segregated and on the periphery of the larger student body. The students expressed the need for further implementation and 'validation of Aboriginal ways of knowing and acknowledgement of Aboriginal cultures' (p. 6). They wanted to exercise their voice and to create a sense of belonging and a 'need for a transition programme between secondary and postsecondary studies' (p. 6).

Restoule et al. (2013) found that the post-secondary admissions application process confused and frustrated many Aboriginal students. The form that contributed to this confusion was Form 105 that asks students to consider self-identifying as an Aboriginal person. Form 105 had most students wonder about the implications of revealing their race, and asking whether the institution would be provided with additional funds for culturally specific support and programming if they chose to check the box. Many students also thought that self-identification would have a 'bearing on decisions of admissibility' (p. 3). Resoundingly, the answer was no. Once students 'self-declared', the information was sent from a university's Applications Centre to Aboriginal Student Services offices. The authors noted the importance of informing and educating everyone concerned about the purpose of self-declaration and the implications of disclosure. Namely, students would receive information about the support available to them through the Aboriginal Centre and it would provide universities with accurate data on Aboriginal student populations, which may positively impact funding for Aboriginal student service support.

Hudson (2009) explains the snowballing effect that occurs when schools do not make the meaningful and necessary links between classroom concepts and lessons to students' reality and future applications: 'The outcomes from unequal opportunities in public schooling have the potential to stem throughout life. If schools are not offering students with the skills to attain their aspirations, and limit their post-secondary opportunities, then public schools are not offering equality of opportunity for equality of outcomes' (p. 63). How can elementary and secondary schools better prepare Indigenous students for post-secondary schooling? How can they inspire Indigenous students to reach for and realise their goals? As Hudson has pointed out, if this is not done well, then individual lives and society are impacted. The income-gap between non-Indigenous and Indigenous people continues (Wilson and Macdonald 2010), therefore, the wide-reaching implications of poverty. The

cost to support Indigenous students through all schooling, this including post-secondary education, is significantly less than it is to support poverty and its social support systems (i.e. economic, healthcare and criminal justice systems) (Canada Without Poverty 2016).

Systemic and Systematic Roots

The complexity for non-Indigenous educators may stem from how education and schooling are perceived by Indigenous peoples. Cajete (1999) noted that 'there is no word for education, or science, or art in most indigenous languages.' 'Coming to know' is the best translation for education in most Native traditions. 'Coming to know' is a process that happens in many ways' (p. 78). Schooling which is more structured, siloed (i.e. subjects and grade levels), confined within a space (i.e. building) and limited to a construct of time (from 9 to 3:30) was a foreign concept in most Indigenous contexts. 'Coming to know' is an educational process that involves self, community, creation and cosmos alongside the Creator. The clash between Indigenous and Eurocentric worldviews began as soon as the first European stepped onto Turtle Island (an Indigenous term for North America) when it became evident that the land was valued and viewed in stark contrast – as stewards or as owners. To some degree little has changed over the last 500 years; clashes of ideologies, philosophies and pedagogies still occur.

Many of the issues that have been identified as stressors by Indigenous students are systematic and systemic and the origins can be located in history. In Canada, educational barriers for many First Nations people began with education policies that significantly differed from the general population. In 1871, First Nations leaders and the Crown negotiated and secured the first of 11 treaties. In each of these treaties, education was identified as one of the rights. Ironically, in 1876, contrary to the established nation-to-nation treaty processes, and while still in the midst of treaty negotiations, the Dominion of Canada unilaterally implemented the Indian Act, which essentially placed the federal government in the role as guardian over all 'Indian' people. The Indian Act defined Indian people as firstly, any male person of Indian blood reputed to belong to a particular band; secondly, any child of such person; and thirdly, any woman who is or was lawfully married to such person (Indigenous Affairs and Northern Development Canada 2016).

Those that were registered by Indian and Northern Affairs Canada (INAC) were labelled 'status' Indians and identified by a status card. A First Nations person could be both Treaty and status, and Treaty but not status if their leadership were only a part of Treaty negotiations but were not engaged in INAC registration; or a First Nations person could neither be Treaty nor status. A change to this definition of 'Indian' has not changed, until recently. On April 14, 2016, the Supreme Court of Canada unanimously recognised Métis and non-status Indians as 'Indian' people under Section 91(24) of the Constitution Act of 1867 (CBC 2016). However, the implications of this ruling for educational funding have not been determined.

The dichotomy of the federal action should not go unnoticed. Both the treaties and the Indian Act were made possible because of the Royal Proclamation of 1763, which outlined how First Nations peoples should be treated; they 'should not be molested or disturbed' by settlers and the Indian department would be the primary liaison between the Crown and First Nations people (Indigenous and Northern Affairs Canada 2013). The British North America Act of 1867 also declared 'exclusive Legislative Authority of the Parliament of Canada extends to … Indians and lands reserved for Indians' (Canada 2016). In both cases, the Crown then Canada has the primary role in determining how Canadian Indigenous peoples were to be 'governed' over.

This snippet of history is important as it sets the tone of schooling today for First Nations ('Indian' and Inuit) status students. First Nations students' elementary and secondary schooling is funded and monitored by Indigenous and Northern Affairs Canada, rather than by the provincial governments as for all other students. Local First Nations governments manage and execute the policies and student funding and often negotiate tuition agreements with the school divisions that their students attend. Interestingly, the tuition rate that the federal government provides for each First Nation student is well below what the provinces provides for tuition. For example, researchers and authors of *The British Columbia Funding Analysis: 2003/04 School Year found*, 'Overall 83 schools, provincial allocations exceed federal allocations by $8,936,844, an average of $2,126 per student. Federal funding would need an increase of 20% to equal provincial funding' (p. 23). First, it can be observed that 70% of the schools (58 of 83) […] would require an increase in federal funding between 0% and 75% to match provincial allocations. They represent the norm, the typical pattern that includes most schools and students. An increase of 23% in federal funding would be required to match provincial funding for these 58 schools' (Postl, p. 24). Interestingly, there continues to be confusion about student funding due to the complex formulae (Drummond and Rosenbluth 2013) and opposition and dispute remain regarding the disparity in funding for First Nations students (Bains 2014).

The complexity increases with post-secondary funding. Post-secondary funding is perceived as a treaty right by First Nations people – a right that has never been fully realised. On the other hand, the federal government sees First Nations post-secondary schooling as a policy, one that can be eradicated at any time. As Canada's Indigenous leaders continue to fight for the treaty right of education, Indigenous and Northern Affairs Canada continues to implement post-secondary education through policy – the Post-Secondary Student Support Program (PSSSP). PSSSP has had a 2% funding cap since 1996, which is not reflective of inflation and the increase in student population. The Assembly of First Nations (AFN) (an organisation that represents 634 First Nations communities in Canada) notes that in 2008 the PSSSP 'supported an estimated 22,303 students at a total cost of $300 million … $724 million was needed to support the number of First Nations learners qualified to attend post-secondary' (AFN 2012, p. 13). The First Nations Education Council (2009) argues: '[Indian and Northern Affairs Canada's] overall PSSSP funding has been historically inadequate, resulting in a backlog of 10,589 First Nations students who

could potentially enrol in post-secondary programs today, but have been denied PSSSP funding due to INAC's imposed 2% cap' (First Nations Education Council 2009, p. 41). AFN highlights that 'approximately seven in ten First Nations youth aspire to complete a post-secondary degree' (p. 13). These tensions create an unstable environment for First Nations students, and many have cited insufficient funding as a stressor and the primary reason for leaving a post-secondary program before completion (Timmons 2013; AFN 2012).

The Purpose of Higher Education

Many Indigenous students pursue higher education for reasons beyond economic gain. For many Canadian Indigenous people, education is the new buffalo (Christensen 2000). Stonechild explains:

> In the past, the buffalo met virtually every need of the North American Indian, from food to shelter; this animal was considered to be a gift from the Creator, intended to provide for the peoples' needs. Today, elders say that education, rather than the bison needs to be relied upon for survival. (2006, pp. 1–2)

From this perspective, education is the new means of survival, and it is also the means to achieve individual and collective self-determination. Pidgeon (2008a) posits that many Indigenous students pursue higher education as a 'tool of empowerment' (p. 55) and 'to actualise their goals for self-determination' (p. 24), and she states that self-determination, rather than financial gain, is the definition of success for many Indigenous students. Pidgeon cites Linda Tuhiwai Smith's framework to describe self-determination. From this perspective, education is an act of social justice that encourages movement from survival to recovery to development, and this requires individual and collective processes of mobilisation, healing, decolonisation and transformation (Tuhiwai Smith 1999, p. 116). Archibald et al. (2010) explain: 'The challenge of incorporating these perspectives into institutional structures aimed at student success and persistence is evident in the disconnections between retention theories and Indigenous students' (p. 11). Pidgeon (2008b) states that Astin's 'involvement theory' and Tinto's 'theory of persistence' (p. 344) exclude or do not fully consider the differences in worldview, socioeconomic circumstances (i.e. poverty), age (more mature) and the array of background experiences that Indigenous students bring to the higher education landscape. At the University of British Columbia, Archibald et al. (2010) explain: 'Improving retention in this view meant providing institutional supports to help students with the transition rather than altering the institution to accommodate different cultural perspectives, values, and practices' (p. 15).

The Role of Indigenisation and Decolonisation Practices

Meaningful transition and access to post-secondary programs for Indigenous students begin with processes of decolonisation and Indigenisation. Mohawk activist Taiaiake Alfred defined Indigenisation as:

> [I]t means that we are working to change universities so that they become places where the values, principles, and modes of organisation and behaviour of our people are respected in, and hopefully even integrated into, the larger system of structures and processes that make up the university itself. In pursuing this objective, whether as students attempting to integrate traditional views and bring authentic community voices to our work, or as faculty members attempting to abide by a traditional ethic in the conduct of our relations in fulfilling our professional responsibilities, we as Indigenous people immediately come into confrontation with the fact that universities are intolerant of and resistant to any meaningful 'Indigenizing.' (Alfred 2004, p. 88)

Indigenisation of access and transition programs begins with understanding Indigenous systems of transition. Transition and access to a new stage of life for many Indigenous youth in Canada was marked with rites of passage ceremonies where the whole community was involved in mindful preparation. In the midst of this collective activity and celebration, it could be assumed that youth were filled with excitement, anxiousness, and anticipation of the transition and access to new learning and responsibilities. As a result of the collective embracing of a natural development process, the rites of passage preparation and ceremony strengthens both the individual and community. Belonging, the importance of place, strength, courage and purpose are cultivated in times like this. This is an example of a renewal process that meets and embraces transition for the purpose of gaining access to wholeness and wisdom. How do Indigenous students currently feel during developmental change? Is there mindful community preparation of youth? Celebration? How can educators apply similar practices in schools today?

Transformation can only begin when university leadership and educators acknowledge that change needs to happen; when it is acknowledged that higher education and consequently society can be made stronger inclusive of Indigenous voices and knowledges; when the hard 'truths' of past and current systemic discrimination and racism are confronted within all learning institutions. Indigenisation is a positive process that involves acknowledging, legitimizing, valuing and celebrating Indigenous Knowledge systems (this including languages, traditions and cultures) and their inclusion in spaces and places where they have historically been silenced. Decolonisation involves intentional and concerted action to challenge divisive and destructive colonial entities that harm and separate people. Decolonisation practices have the power to bring people to meaningful reconciliatory relationships where voice and the respectful hearing of perspective and story are enabled.

Increasingly, Canadian universities are working at Indigenising the Academy and striving to become integrative and respectful of Indigenous peoples – their histories, knowledge and pedagogies and practices. There are increasingly more examples of mobilisation, healing, decolonisation and transformation of policies,

programs, curricula, pedagogy, overall climate and culture of institutions. The depth (first- and second-order) and the pace of change do differ from institution to institution.

Access and Transition Programming

Jody Wilson-Raybould, while she was Regional Chief, BC Assembly of First Nations, stated:

> Transitioning can certainly be a difficult time. For many of you, this journey is an even more challenging one as you balance family responsibilities. Many of you will be leaving your community to pursue your education. It is important to stay connected with your family and with your community and to surround yourself with a positive support system. This will go a long way in achieving success. While the transition can be tough at first, remember that this is a journey and an adventure. (Indigenous Adult and Higher Learning Association and University of Victoria 2011, p. iv)

In November 2015, Wilson-Raybould became the first Indigenous woman to become the Minister of Justice Canada. She has demonstrated strength in the midst of the adversity that change and transition presents.

There is so much to consider in supporting transition and improving access to post-secondary institutions for Indigenous students. First, since '[m]any Aboriginal youth are unaware of the education requirements of jobs they aspire to; are inadequately prepared for postsecondary pathways in terms of course selection, credits earned, and study skills; and are disadvantaged by the lack of role models' (Bruce and Marlin 2012, p. 68), then, or in addition to post-secondary institutions, access and transition programs should be located in high schools (Hudson 2009). When it comes to access and transitional support, both Hudson and Restoule et al. (2013) emphasise the importance of beginning these initiatives in high school, if not earlier. Restoule et al. (2013) contend:

> The transition issues begin much earlier than the point of access. Establishing relationships with Aboriginal students in high school or earlier is clearly important as is developing these relationships in the context of community, not just to the individual. Many students did not feel supported in high school or that they belonged in post-secondary institutions. (p. 8)

Creating spaces where students feel that they belong is important, and initiatives that promote climates and cultures of belonging work towards decolonising the learning institution. Career counselling, mentor and role-model programs, family and community partnerships in program creation and implementation, financial, scholarship and infrastructure information, localised and contextual, culturally supportive curricula and programming, and cross-organisational partnerships contribute to bridging secondary and post-secondary transitions for Indigenous students (Bruce and Marlin 2012). The *Aboriginal Post-Secondary Education and Training Policy Framework and Action Plan: 2020 Vision for the Future* (2013) document also highlights the importance of 'continuous improvement based on research,

data-tracking and sharing of leading practices' (Ministry of Advanced Education, Innovation and Technology 2013, p. 3). Finally, the First Nations Education Steering Committee (2014) encourages personal counselling 'to prepare Aboriginal students for the tensions and conflicts associated with the change of environment and expectations of higher education' (p. 6).

Universities across Canada have been implementing institution-wide 'actions' that support access, transition, retention and completion of higher education programs for Indigenous students. Many of these universities have been tracking Indigenisation and decolonisation initiatives through research, and this includes access and transition programs.

From the findings of their Ontario study, Restoule et al. (2013) provided the following recommendations for access programs located in secondary schools: 'information about "everyday issues" that relate to Aboriginal youth: funding (band funding, scholarships…Student Assistant Program), housing (single parent, on and off campus), food banks, childcare, and part-time jobs or job training opportunities' (p. 6); 'posters of successful post-secondary education graduates from their communities' (p. 6); elder and cultural access information. Restoule et al. also suggest having: Aboriginal youth speakers 'who can talk about more than just how important it is to go into post-secondary education' (p. 7); 'post-secondary education information made specifically for Aboriginal youth that includes a "what to expect" section, which takes applicants step-by-step through the first year process. This would include information about preparing to apply to post-secondary education' (p. 7). For some youth (as was in my case), the application process is perceived as a barrier as it may be the first time they have seen a detailed application form, and completing it alone may seem insurmountable. Finally, the authors emphasise introducing information materials and having a pointed dialogue about post-secondary requirements as early as Grade 9.

Gakavi's (2011) research study at the University of Saskatchewan found 'that students would benefit from interventions which provide opportunities to improve academic self-efficacy and skills (e.g. writing skills, time management skills)' (p. 157), which would ultimately support academic, social and personal-emotional adjustment. Gakavi also found that attributional retraining (i.e. the reframing of negative rumination) interventions would help to affirm student abilities and strengthen their commitment to schooling. Also, the students in this study posited 'skill-building workshops, mandatory advising sessions, and peer support/discussion groups would help to increase academic self-efficacy' (p. 158). The strong connection 'between family support, adjustment and persistence suggest[ed] that involving the family in the post-secondary experience may also be beneficial' (p. 158). A community-based, integrated (wrap-around), holistic and inclusive approach to post-secondary schooling would support this recommendation. Gakavi concluded that it is important to help students feel that they belong in the school, and one way of doing this is to embed Aboriginal knowledges and cultures within university programming and curricula. The author strongly encourages the 'continual growth and improvement of the Aboriginal Student Centres, the Aboriginal transition programs and consultation with Aboriginal communities' (p. 159), and that

'Canadian post-secondary institutions should directly seek the opinions of Aboriginal students as these individuals bring a form of knowledge and expertise to the table that administrators typically do not' (p. 159). Again, the importance of Indigenous representation in decision-making circles was highlighted.

The University of Manitoba has found that access programming has led to increases in First Nations enrolment and successes (AFN 2012). The University of Manitoba's access program is situated in the university, and the three primary components include academic support, regular academic advisor consultation for access students, and individual and family counselling. The students begin their post-secondary experience with an extensive summer pre-university orientation, and they are expected to take an 'Introduction to University' credit course. As outlined by Restoule et al. (2013), the students are offered housing, childcare, university/urban adjustment assistance, communication and personal development workshops, and academic counselling (Assembly of First Nations 2012, pp. 45–46).

SIAST strengthened their access and transition programing by first establishing an 'Aboriginal student success strategy implementation steering committee and [by] hiring a coordinator' whose mandate was to determine 'key performance indicators for Aboriginal participation and completion, giving priority to those programs with the lowest rates of Aboriginal student success' (SIAST 2009, p. 5). SIAST then worked at 'proactively supporting Aboriginal students through the application process, developing specialised information about finances and funding for Aboriginal students, increasing early intervention for Aboriginal students experiencing difficulties, establishing a post-secondary summer transition program on each campus, developing a marketing and communications plan to raise awareness about SIAST among Aboriginal people' (p. 5). In addition, the institution 'offer[ed] student support modules in key personal and academic skills, develop[ed] discipline-specific post-secondary preparatory programs, implement[ed] a strategy to help English language learners, address[ed] barriers created by attendance practices, develop[ed] targeted student recruitment activities' (p. 5). Finally, SIAST 'establish[ed] an Aboriginal alumni network, intensify[ed] SIAST's representative workforce efforts' and 'integrat[ed] Aboriginal knowledge and learning into programmes' (p. 5). Like SIAST, the University of Calgary has implemented an early intervention program for all students using a software program that is responsive to dramatic dips in student grades. If grades suddenly change then protocol is followed which includes contacting the student (i.e. a student is sent a general e-mail and if they respond, a member from the student service office follows up). In every case, an integrated, wrap-around, prevention-intervention approach is recommended.

Even though these examples are from three different contexts (secondary, post-secondary and polytechnic institutions), the recommendations they provide are comparable; emphasising that Indigenous students, regardless of the form of higher education, experience similar challenges and are responsive to similar approaches. All three studies found that it is important to provide quality culturally relevant, integrated, holistic and intensive programs. Each institution chose to implement Indigenous education initiatives that were evidence-based, context-specific and were inclusive of Indigenous peoples in decision-making, research and implementation processes from the outset. In each case a director was hired for

accountability – to ensure that the action items that were developed for each recommendation were realised.

To prepare for times of transition, an understanding of the general human responses to change is critical (e.g. the disorientation and fear that change may cause). Times of transition are liminal spaces – doorways that lead a person from one place to another. They are filled with incredible potential and the promise of transformation and of immense personal and professional growth, but with the condition that proper preparation, support, care and love is present to sustain one before, during, and after the decision to move into the unfamiliar has been made. Transition or change may be disruptive emotionally, physically, intellectually and spiritually, and therefore require courage and conviction to move into the unknown. Holistic and integrated approaches, an ethic of care, and enduring leadership (Ottmann and White 2010) go a long way in supporting students through these times.

Beyond Undergraduate Programs

Aboriginal Transitions: Undergraduate to Graduate (AT: U2G) is a program at the University of British Columbia and was included in this chapter because it provides a transition strategy that can be adapted for younger or more mature students new to a higher education program. AT: U2G supports Indigenous students during a time of liminality: transition from undergraduate to graduate school. Archibald et al. (2010) found that there were four categories that students considered before committing to a graduate program: 'the decision to pursue graduate studies, access and admissions, first-year experiences and completion of a graduate programme' (p. 16). Through research findings (a literature review, institutional scan, focus groups and interviews), Archibald, Pidgeon and Hawkley categorised transitional support for Indigenous students into three categories: access, relationship and digital technology. The strategy supporting Indigenous students is outlined as follows.

I. Proposed [access] programs include:

 1. Orientation/workshop sessions that provide general tips and information. Topics in these sessions include:

    • Factors to consider in selecting and applying to graduate programs
    • How to plan for graduate education
    • Admissions information and assistance
    • Financial planning
    • Expectations for applying for Tri-Council graduate fellowships such as SSHRC, CIHR and NSERC [in this case, relevant grants, funding opportunities]
    • Applying for Aboriginal-specific fellowships
    • Identifying potential faculty advisors/research supervisors
    • Writing letters of intent for applications
    • Balancing academic and personal life

2. Research internship/assistantship initiative. Students work with faculty members on their research, receive tutorials on research methodology, and become familiar with graduate programs and their requirements. Students will be paid a stipend. They will also develop materials for the other aspects of this transitional framework.

II. Proposed relationship-oriented initiatives include:

1. [In locations with large Aboriginal populations] a SAGE-like [Supporting Aboriginal Graduate Enhancement] initiative for undergraduates with pods/ sites located at various universities in BC (for now, it is called SAGE-Undergrad):

   • Each pod would require a faculty mentor and a student coordinator.
   • A provincial student coordinator and a provincial faculty mentor are required to ensure coordinated communications and sharing of information among the SAGE Undergrad pods.
   • Another function could be to develop and offer the access activities.

2. A province-wide symposium, to be held with faculty members (Aboriginal and non-Aboriginal) who are identified by Aboriginal graduate students as being effective mentors; they will discuss their mentoring approaches and suggest ways that faculty can be encouraged and prepared (in-service) to be mentors for Aboriginal undergraduate students who show promise and interest in graduate education. Their discussions will be videotaped and documented for future mentoring activities.

III. Proposed uses of digital technology include:

1. Record, display and archive activities through technologies such as video recording, podcasting, text and presentation formats
2. A website which would be a portal of information for graduate students
3. Developing modules about key areas of support, such as:

   • Specific disciplines or graduate programs
   • Completing a research ethics form
   • Getting ready for a thesis defence
   • What to consider in applying to a graduate program

4. Social networking applications such as blogs and wikis. (2010, pp. 60–61)

To meet the three AT: U2G goals, the UBC developed an informative and user-friendly website for students (http://www.aboriginaltransitions.ca/). The website includes detailed and institution-specific information on access, admission, first year and completion; and student stories, mentoring networks, and 'survive and thrive' points are presented to engage the student. Much can be learned from the UBC research and implementation of the findings that were aimed to support Indigenous student transition.

A Case Study

As noted in the earlier examples, the barriers to post-secondary access for Indigenous students are similar across Canadian learning institutions; and the actions to eradicate the barriers are contextual and responsive to local people – their needs, traditions and practices. In the fall of 2013, the Werklund School of Education (WSE) Indigenous Education Task Force was struck at the University of Calgary's faculty of education. The mandate of the task force was, 'to prepare recommendations to the Werklund School of Education on our future development concerning Indigenous Education, and also to recommend how we might productively align with, support, partner with and/or lead outside the School in areas/activities related to Indigenous Education' (WSE 2015, p. 10). In February 28, 2014 the (WSE) Indigenous Education Task Force sought to identify the barriers and possibilities (i.e. supports) to post-secondary education by bringing together a diverse group of approximately 300 people that represented faculty members, students, industry, the non-profit sector, Indigenous and non-Indigenous educators and leaders and provincial and local government officials from across Alberta, Saskatchewan, Manitoba and the Yukon.

The purpose of the one-day symposium 'was to identify tangible measures that could be taken in [WSE] programs to break down barriers that exist for Aboriginal students, as well as ways to better honour Indigenous perspectives within the School' (Alonso-Yanez and Paulino Preciado 2014, p. 3). Participants were assigned table groups (Fig. 7.1) that would draw upon the diverse perspectives and experiences, in essence creating ethical spaces. According to Ermine (2007) ethical spaces arise when competing for worldviews or 'disparate systems' come together for 'engagement' purposes. The connecting space, the overlapping space between the groups, is the binding ethical space. Ermine notes that the convergence of these groups 'can become a refuge of possibility in cross-cultural relations and the legal order of society, for the effect of shifting the status quo of an asymmetrical social order to a partnership model between world communities. The new partnership model of the ethical space, in a cooperative spirit between Indigenous peoples and Western institutions, will create new currents of thought that flow in different directions and overrun the old ways of thinking' (pp. 202–203). With table facilitators
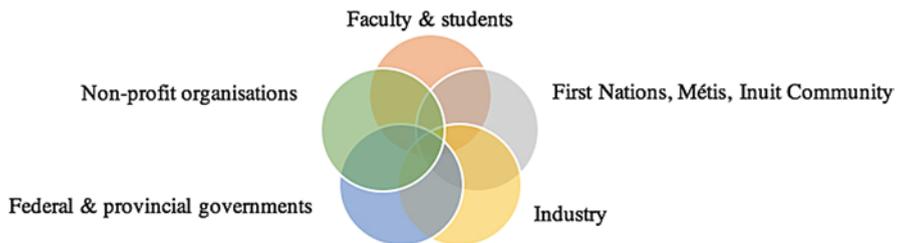

Fig. 7.1 WSE symposium ethical space table arrangements: Dialogue on Indigenous education. With permission from Maori Law Review

guiding the dialogue and note-takers documenting the conversations, attendees were asked to consider the following questions:

- What is standing in the way of weaving Indigenous perspectives into the [WSE]?
- What barriers exist for Indigenous people and perspectives in the [WSE]?
- What needs to be done to weave Indigenous perspectives into the [WSE]?
- In what ways can we break down existing barriers and more meaningfully weave Indigenous perspectives into the [WSE]?

The first two questions revealed the following four themes:

1. A lack of resources such as financial support (this including grants and scholarships) and institutional support to manage the bureaucratic procedures for accessing the financial support was highlighted. The importance for mentorship or Aboriginal networks for Aboriginal students was mentioned and categorised under this theme. These relationships would mitigate the adverse effects of contemporary forms of racism and discrimination, and the historical discriminatory treatment of Aboriginal peoples.
2. The participants identified mistrust in the 'western' format of education, or the 'westernised' curriculum.
3. An emphasis on a distinction between 'Indigenous education' and 'other types of education' was a barrier itself. The notion of 'Indigenous' education became a cognitive barrier for a genuine inclusion of Aboriginal students.
4. Another barrier discussed by participants was ignorance, articulated as the incomprehensiveness and unawareness of Aboriginal language and cultural practices by non-Aboriginal people. Some participants referred to the lack of knowledge and connections with Aboriginal communities as one reason for their ignorance about Aboriginal ways of knowing and being. (Alonso-Yanez and Paulino Preciado 2014, pp. 4–5)

Five themes emerged from the afternoon dialogue on the possibilities for Indigenous education. First, it was suggested that Aboriginal students, academic and support staff be offered opportunities to learn about Aboriginal issues, perspectives and culture. Second, it was suggested that Aboriginal presence be promoted by 'increasing partnerships with high schools with high Aboriginal enrolment … Participants also suggested promoting Aboriginal student success by identifying Aboriginal "role models" to serve as examples of success'. Third, it was important to increase collaborative research with Aboriginal communities. Fourth, the facilitation of alternative learning opportunities for Aboriginal students was perceived as important. Finally, it was stressed that 'the history of confinement experienced by Aboriginal people' be acknowledged. Many participants believed that 'knowledge of the policies and history of colonialism, both of which are deep root level causes of Aboriginal confinement, could lead to increased understanding about Aboriginal experiences by non-Aboriginals and ultimately to larger systemic change'. (Alonso-Yanez and Paulino Preciado 2014, pp. 5–6).

Overall, three recommendations emerged for the Werklund School of Education from this symposium. Alonso-Yanez and Paulino Preciado (2014) recommended that WSE 'engage in an exploration of the contemporary Aboriginal aims, issues, and

contexts.' The authors explained, 'The focus here is to engage openly with the tensions that arise from attempting to integrate Aboriginal perspectives into the WSE' (p. 7). Next, it was recommended 'that traditional knowledge and stories have space and are shared within the WSE' (p. 7). The final recommendation was '[t]o critically examine how research methods and educational theories are being taught and practised within the WSE, and articulating and discuss assumptions about the role of Aboriginal knowledge, epistemologies, and methods in the production of knowledge' within the institution. Alonso-Yanez and Paulino Preciado stated that it is important to compare 'the underlying assumptions of Western, as well as Aboriginal, research approaches [that] could reveal the value of applying Indigenous knowledge methods, and merge Indigenous and Western methods when appropriate' (p. 7).

This research was valuable for the Werklund School of Education (WSE) Indigenous Education Task Force as it contributed to research that leads to the *Moving Forward in a Good Way: Werklund School of Education Indigenous Education Task Force Recommendations and Report* that was presented and unanimously accepted for institutional implementation by the WSE faculty council meeting on March, 2015. The tone of the WSE Recommendations and Report is set with a Blackfoot story that was 'gifted' to the WSE. The story, This Place, describes significant places within the vast Blackfoot (traditional stewards of the land) territory which is shaped like a buffalo across the land. According to this story, the University of Calgary, because it is situated near Nose Hill (a protected park), is near the nose of the buffalo (the breath of life) and the head (the intelligence) of the buffalo. After this story, an extensive literature review of theory and practices related to Indigenous education, a scan of what universities across the globe are doing regarding Indigenous education strategic planning, and the following ten recommendations for WSE implementation are provided:

1. Engage in open and extended conversations of contemporary Indigenous aims, issues and contexts about the Werklund School of Education. The focus here is on openly engaging with the tensions that arise from attempting to incorporate Indigenous perspectives into the Werklund School of Education, in such a way as to recognise and pay respect to the protocols and ceremonies of Aboriginal people and cultures. The aim is to create and sustain respectful and welcoming learning environments that instil a sense of belonging for all learners and will in time assist in creating a habitus of mutual respect […]

2. Ensure that traditional knowledge and stories are valued and shared within the Werklund School of Education. Narratives, stories and storytelling are significant in building a communal culture and in understanding contemporary Indigenous contexts (Compton-Lilly and Halverson 2014).

3. Critically examine how research methods and educational theories are being taught and practised within the Werklund School of Education, and articulate and discuss assumptions about the role of Aboriginal knowledges, epistemologies and methods in the production of knowledge within the Werklund School of Education (Simmons and Christopher 2013; Medin and Bang 2014). Such discussions and following actions would enable the Werklund School of Education community to develop signature pedagogies and programs.

4. Critically examine the current and future courses within the undergraduate and graduate programs to ensure that each course is designed as a networked, patterned, living field of knowledge that is bounded generously so to encompass Indigenous ways of knowing, being and doing. This orientation to curriculum represents a departure from many current policies, structures and practices.

5. Establish community partnerships with Indigenous communities to ensure that Indigenous students registered in the community-based Bachelor of Education Program, as well as other programs in the school, are fully supported in achieving success… Indigenous community partnerships can also lead to the development and review of school-community collaboration of Aboriginal education, research and leadership policies and curricula. Such collaboration also has the potential to develop the capacity for knowledge and understanding for each stakeholder about the key areas and various perspectives in the process.

6. Create a series of research-focused community conversations across the province, inviting in Aboriginal community members, industry and other interested stakeholders that focus on various historical and contemporary phenomena and experiences of Aboriginal communities. These events could constitute a continuation of the Kindling Conversations series.

7. Act as an advocate and leader, listen to the educational needs of Aboriginal communities and work collaboratively with these communities to respond to their community-identified needs.

8. Collaborate with the various Indigenous initiatives across campus to ensure that initiatives are specialised, sustained and systemic.

9. Collaborate with select teacher education programs across western Canada, and beyond, on targeted initiatives with specialised programming.

10. Create an implementation committee to lead the recommendations contained in this report (Werklund School of Education 2015, n.p.).

Since the formal implementation of the Report and Recommendations, WSE has secured a Director of Indigenous Education Initiatives to ensure accountability. In other words, to ensure that action items are created for each recommendation and they are implemented within the institution.

It should be noted that in February 2016, the University of Calgary, as a whole, began an Indigenous Strategy process. In both cases (WSE and U of C), the task forces were co-chaired by an Indigenous faculty member and a non-Indigenous senior leader, were informed by traditional Indigenous Knowledge Keepers and Indigenous and non-Indigenous leaders from various sectors and communities. In each context, the steering and working groups had on- and off-campus representation. Furthermore, each Strategy was guided by Indigenous methodologies, and in each case a commitment was made to engage in 'parallel systems'. The WSE Indigenous Strategy document begins with a Blackfoot story that was gifted to the faculty, and a pipe ceremony led by Blackfoot Elders began the U of C Indigenous Strategy. For the U of C Indigenous Strategy, the Journey Towards an Indigenous Strategy (an Indigenous framework) document was created. This Indigenous framework document, which validated and outlined the change process from an Indigenous perspective, paralleled

the western Terms of Reference that defined the roles and responsibilities for the steering and working committees. The intention is to transform every aspect of Indigenous education in this post-secondary institution: access, policy, programming, curricula and content.

Conclusion

In writing this chapter, I am reminded of my schooling experiences. What memories emerged? I remember the small yellow school bus that our bus driver drove each morning to pick us up from our First Nation community to attend half-day kindergarten in a nearby town. I was 4 years old, not fluent in the English language and at the time, the oldest of three children. I was scared but excited for the learning that I would experience. Literally and figuratively that little school bus was transporting me from one reality to another, and there were no strong connectors nor a solid bridge in between. I remember stepping into the school for the first time and feeling so far from my home. Even though the walls had the colour of student work, the building seemed sterile and cold. A half-day seemed unbearable, and I remember feeling the ache in my chest and the strength it took not to cry. Judging from the lunch that my mom had packed (one that I could have shared with my whole class), it appeared that I was going to be away from home for more than part of the day. Thank goodness I had a caring teacher and a bus driver who was non-threatening.

Interestingly, each time I moved from one phase of education to another (i.e. grade 3 to 4, grade 6 to 7, grade 9 to 10 and from grade 12 to university), I have felt similar emotions. I was fortunate to have parents, grandparents and family that encouraged schooling success, and a supportive teacher at each of these transitional times. My high school English teacher, who was also my career guidance counsellor, was my bridge to university. She helped me gain access to post-secondary education by presenting the possibilities based on my academic and personal accomplishments, my skills and gifts, and she helped me fill out the university applications. My parents and my high school English teacher did their best to prepare me for the move from the tiny reserve and town community, with which I was familiar, to the changes that would occur in the city and the university. I did gain access to university the 'regular way', on time and with a strong grade point average, but I did not survive that first year as I could have and my transcript is evidence of this. The changes and the experiences were bigger than me. I can also say that I could not have gone back to university if it was not for the innate desire to affect positive change for the First Nations community, and if I had not had the unconditional support of friends and family. They believed in my potential and the story of my destiny. My second attempt at post-secondary education was different. There still was a small Aboriginal student population and few supports, the place still seemed large and cold, but this time I believed in what others saw in me. My parents also visited more often, a trip that they could not afford. They overextended themselves for a greater good. This is what we need to do now.

How little things have changed? As I mentioned in the introductory paragraphs, we know so much about teaching, development, leadership, change theories and practices; but there are still ineffective practices that need to be laid to rest to make way for policies and practices that are responsive to, and supportive of, all students. It is clear that learning and capacity-building is required by everyone involved – early childhood, elementary, secondary, post-secondary educators and leaders, Indigenous communities, parents and students – to mitigate resistance and halt perpetual patterns of harm, conscious or unconscious. There need to be creative solutions to long-standing issues, a focus on respectful relationships that are reciprocal in nature, authentic reconciliation efforts and the realization of an educational system that is truly inclusive of Indigenous Knowledge systems. To some degree, the Trickster (a character who entertains and teaches by challenging predictability, structure, comfort) has been involved in guiding post-secondary institutions in the desire to make order out of chaos, or bring chaos to the existing order, so something new can emerge. There are encouraging signs on the horizon; the spirit of the new buffalo is in our midst.

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Chapter 8
Perspectives on Enabling Education for Indigenous Students at Three Comprehensive Universities in Regional Australia

Bronwyn Fredericks, Susan Kinnear, Carolyn Daniels, Pamela Croft-Warcon, and Julie Mann

Introduction

In Australia, Indigenous students, particularly those from regional and remote areas, are under-represented in both higher education and vocational education (Behrendt et al. 2012). Enabling programs, which assist Indigenous students to enter and succeed in tertiary education, are vital (Behrendt et al. 2012; Fredericks et al. 2015). Enabling programs support Indigenous students to access education and, through education, attain better economic and socio-cultural futures for themselves and their communities. However, to date, there has been scant information regarding the experiences of Indigenous students within enabling courses and for examining the key ingredients for success (Oliver et al. 2013a, b; Kinnane et al. 2014).

This chapter describes a research project about enabling programs, aimed at informing equity policy design, implementation and institutional practice to improve higher education participation and success for marginalised and disadvantaged people in Australia.[1] A key focus of the project was to explore interpretations of 'success' from different perspectives, including the perspectives of students and teaching staff, the community, the institution and the government. The research also aimed to understand better how Indigenous learning journeys can respect and grow cultural identities while simultaneously developing study skills. As part of this, the research sought to understand how enabling programs can support Indigenous students to navigate the contemporary tertiary education landscape, while continuing to value and build on their Indigenous cultures.

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This chapter presents key findings from the perspectives of students and teaching staff, as a subset of the overall research project. The case studies used in this work centre on three Australian universities, each of which operates on a regional basis and offer educational programs in both higher education and vocational education (referred to as 'comprehensive' or 'dual-sector' institutions).

Enabling Education

Enabling programs – also known as bridging or access education – are courses that provide a pathway for people wishing to gain entry to higher education or vocational education, by focussing on foundation and/or preparatory skills. The importance of enabling programs has been acknowledged in a range of literature including Fredericks et al. (2015); Oliver et al. (2013a, b) and Kinnane et al. (2014). Behrendt et al. (2012) noted that in 2010, over half the Indigenous students entering university did so by this route, compared with only 17% of non-Indigenous students.

Indigenous students face formidable barriers in pursuing post-secondary education, including high levels of socio-economic disadvantage, rurality and limited exposure to the benefits of higher education (including limited exposure to the benefits that higher education offers to individuals, families and communities) (Pechenkina and Anderson 2011; Kinnane et al. 2014). Institutions offering enabling programs must be cognisant of these complexities and work to provide a teaching, learning and pastoral care model that responds to this environment as well as to the Indigenous individuals within it.

Research on enabling education is still in its infancy, with little evidence to guide the development of effective programs (Lum et al. 2011; Nakata et al. 2008), and very little evidence that is specific to Indigenous Australian students (Fredericks et al. 2015; Oliver et al. 2013a, b; Kinnane et al. 2014). Most existing research on enabling programs is limited to course-evaluation-style approaches, which are largely focussed on students' perceptions and/or experience rather than on attainment or broader capacity-building outcomes.

Education's Key Role in Addressing Indigenous Disadvantage

Gaining post-secondary education confers a range of benefits in economic and social domains, which can be identified in both private and public terms (Deloitte Access Economics 2011). Social equity in relation to higher education has been part of national policy discourse in Australia since 1990 (Cuthill and Jansen 2013). The last two decades, in particular, have witnessed increased global interest and awareness of the importance and need for Indigenous participation in higher education. Despite this, participation rates of Aboriginal and Torres Strait Islander peoples in higher education settings are below those of the broader Australian population

(ABS 2015). In fact, recent statistics for Indigenous education outcomes led Pechenkina and Anderson (2011) to declare a state of 'crisis'.

Turnbull (2014) noted that in the context of developing teaching and learning programs for Indigenous students (and specifically enabling programs), it is important to adopt (and adapt) appropriate teaching styles and learning environments. Learning and teaching environments that are positive, self-affirming and reflective of Indigenous realities and aspirations assist Indigenous peoples to see relevance in the value of education (Turnbull 2014; Kinnane et al. 2014). Moreover, these kinds of learning environments build on Indigenous perspectives. They recognise that there are Indigenous paradigms that consist of ontologies, epistemologies, methodologies and axiologies that operate as supporting platforms, thus offering strength and vitality for Indigenous people. By drawing on this, rather than dismissing it, universities can offer Indigenous Australians an ability to increase their choices and decision-making capacities. Incorporating appropriate pedagogies, methods and processes within enabling programs would be powerful for these students, who may be additionally marginalised because they are enrolled in an enabling program and not in other award programs offered by the institution.

The positioning of this chapter draws strongly on the work of Tew man Cajete (1994), who wrote about 'pathways' in relation to Native American education in the USA. We drew inspiration from Cajete's work since it has relevance to Australia and offers another philosophical pivot for us within the Australian Indigenous context. The *path* in this context is the well thought out structure on which the curriculum is developed, and also the landscape offered by the university (or other learning institution). The *way* refers to the process for students as they navigate their educational institution in their learning journey. This may involve some transformation within the inner self (Cajete 1994). We contend that both of these elements must knit together to form a student's own learning 'path+way' in order for the student to obtain a successful enabling education experience.

Conceptual Context

The concept of conscientisation (Freire 1972), developed over time within Indigenous Australian (Purdie et al. 2011), Native American (Villegas et al. 2008), First Nations (Battiste and Henderson 2000) and Maori (Smith 2003) contexts, underpins this research. All these works have connectivity at the philosophical and conceptual level and are based on research within countries where Indigenous people have endured colonisation and oppression and are able to move towards a critical consciousness of their situation. They offer a richness in approach to conscientisation and support Indigenous people to move beyond being an object of others to a self-determining subject (Smith 2003). Conscientisation is the process of developing a critical awareness of the social reality in which individuals exist and move beyond this point to transformation. It is achieved through reflection and action, where action is fundamental to the process of changing reality (Freire

Institute 2015). Smith's (2003) extensive work focusing on conscientisation with universities and dual-sector institutions in New Zealand, the USA, Hawaii and Canada has resulted in demonstrated changes in outcomes for Indigenous peoples across those institutions and communities. Thus it is also relevant to work with Australian universities and dual-sector institutions, such as those at the focus of this research. Coupled with Smith's work is the work of Malin and Maidment (2003), who extended the work into Indigenous education, examining theories of neo-Marxism, cultural capital, resistance, post-colonialism and visible pedagogy.

In the Australian tertiary education sector, existing measures of recognising and incorporating Indigeneity are often tied to Reconciliation Statements, Action Plans, NAIDOC celebrations and policies of inclusion. Other metrics linked to Indigenous people generally include 'poor attrition and retention rates' and 'low graduation rates' of Indigenous students. Many institutions place much effort on improving the raw statistics by servicing the 'under-achievement' of Indigenous students. In contrast, little effort is directed towards recognising and maximising the inherent strengths and values that Indigenous students bring with them. These strengths and values could influence success rates and impact on each student's opportunity to be dynamic, empowered, Indigenous leaders of the future. Devlin (2013) argues that universities need to do more than just spell out expectations for non-traditional students; reform in teaching and student support are needed, with institutions operating beyond the current deficit model of support for students. Thus, this research looked to begin from a 'strengths-based' position for Indigenous learners.

Method

The project used an exploratory, qualitative approach to collect and analyse different data sets. One-on-one interviews were carried out across three comprehensive Australian universities (CQUniversity Australia, Charles Darwin University and Federation University Australia) using opportunistic and 'snowball'[2] sampling to secure twenty-five participants in total. The study aimed to develop a deep understanding of the lived realities of four groups participating in enabling programs: Group (1) *Indigenous and non-Indigenous staff* teaching into Indigenous enabling programs; Group (2) *Indigenous students who have completed* an enabling program; Group (3) *Indigenous students who had enrolled but did not complete* an enabling program and Group (4) *Indigenous students who were still journeying* through an enabling program.

Semi-structured interviews of up to one hour were used to explore participants' experiences of enabling programs, their views of success, challenges they may have experienced, their suggestions for improvement, their experience of 'best practice', and their views on educational and personal 'path' versus/+ 'way'. The qualitative

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[2]This process involves asking current participants to recommend others who may be interested in taking part.

data analysis occurred through an open-ended process of thematic coding and cross-referencing. To preserve participant anonymity, interview data from all three universities was merged for presentation in this chapter. The findings for this research, as is usual for qualitative research, are context- and situation-specific (Collis and Hussey 2009). Therefore, care is needed in transferring these results beyond the regional university settings from where the data originated.

Findings

Staff Perspectives

Staff interviews were conducted to gain an insight into common enrolment practices (e.g. eligibility criteria), the ethos of offering and any barriers to student success. The thirteen participants had varying backgrounds, including secondary school teaching, ITAS[3] tutoring and lecturing. Participants' experience in teaching enabling education ranged from eighteen months to thirty years.

All participants agreed that enabling programs for Indigenous students effectively prepared students for further study and that *'bridging programmes were [an] imperative to Close the Gap'*.[4] One participant reflected on the *'underlying layer'* of skills that were imparted for lifelong learning:

> … the current programme prepares the students more effectively than any [other]… bridging programme that I have worked in before … rather than focus solely on academic skills, [the programme] has … an underlying layer if you like of skills that actually help build students in terms of their lifelong learning … things like resilience, being creative, having good strategic awareness, asking, being able to ask questions and make meaning out of what's been said in a paragraph. … We focus on ensuring that we have a 'both-ways' philosophy in it so we don't talk just about … and read about Western type things, we actually get them to bring out what they know in terms of the 'both-ways'.

In terms of student success, staff generally felt that success 'depends on … where students are in their life … for some … it's just not the right time or place for them at this stage of their lives.' One participant remarked:

> … there are other successes … [such as] self-esteem, growing, being strong in your identity, understanding what the Western educational system is, gaining other sorts of employment or opportunities for employment … it broadens students' ideas for career pathways, it helps students find their voice, it helps them be able to write.

Staff felt 'more time', having 'pastoral care' available and using some of 'our methodologies, like the lifelong learning programs … and the format cycle where you arrange classes according to … students' [preferred learning style]' would

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[3] Indigenous Tutorial Assistance Scheme.

[4] 'Closing the Gap' is broadly recognised within Australia as reference to addressing Indigenous disadvantage, such as socio-economic, health and other outcomes for Indigenous peoples, which do not currently match those of non-Indigenous Australians.

improve enabling programs. One participant explained that as 'enabling programs sit outside the higher education division … there is a chance that [they] could be undervalued or overlooked … [Enabling program] graduates are very valuable to the university … so that's a dilemma.'

One participant explained that an essential inclusion for best practice would be 'a fundamental understanding of cultural differences.' Most participants felt 'there needs to be more face-to-face teaching', while another thought:

> Best practice would be … to incorporate Indigenous culture [in coursework] and use Indigenous examples and cater to Indigenous ways of learning through story-telling … all Indigenous students aren't always the same…I think it's best practice for all learning, in particular Indigenous [learning] is just recognising that everyone is different, everyone has got a cultural background.

Staff were asked to outline their views on the balance for Indigenous students in terms of their educational journey and their personal journey ('path' versus/+ 'way'). While some participants felt that it was difficult to respond because *it's something determined by the individual'* and *'everyone has a different journey',* the following response was revealing in terms of the analogy of 'path' versus/+ 'way':

> [It's about] how people match together their personal journey with their educational journey. … I just think they are so intertwined that if you try to divide those two that you are on a path to failure. … We have to consider an individual's place where they are in life, what they've fought, where they're going and [what they're] hoping to get out of the education and find the way, the educational way that will suit them. … So we have to marry together our acknowledgement that every person will bring a different experience and so they can't just be stuck on a pathway that is already established … if we use that analogy, if we step off the path and we fall … we fall off the edge of the cliff … That's what we do in education … we make people get on this little narrow path, they fall off the cliff and that's the last we see of them, as they disappear down there. Whereas a 'way' suggests a more flexible approach.

Student Perspectives

The research questions used in the Indigenous students' interviews aimed to understand their needs and experiences, including factors that contribute to their completion or non-completion A total of thirteen students were interviewed: three who had successfully completed an enabling program, one who had exited without completing,[5] and nine who were still journeying through their enabling program.

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[5] It is important to note that only one interview could be secured with a student who had prematurely exited an enabling program, due to a lack of response to the recruitment call.

Completed Students

The three participants who had successfully completed an enabling program had all undertaken other study (at TAFE) prior to enrolment. All three also went on to further study, having completed the enabling program. In relation to navigating tertiary education (described as the 'path'), participants explained that 'being organised' helped with study and the fact that lecturers 'didn't expect people to have prior experience … they knew what we needed', assisted them to complete the enabling program.

In terms of how the completed students felt about learning (described as 'way'), participants said 'it makes you feel worthwhile … that you can learn', and that the programs 'enabled [learning] … and success' and helped 'build … communication skills'. Enabling education helped prepare the students for future study by encouraging them to 'ask for help'. It taught them 'how to write [and] … how to study', and imparted 'organisational skills' as well as identifying 'what type of learner I am'.

Participants considered that including Indigenous culture in enabling programs was beneficial because 'knowing … your non-Indigenous and Indigenous side [and] having to live and learn both sides' was seen as 'empowering'. Participants felt that enabling programs 'strengthened … Indigenous identity' and 'increased confidence'. When challenges occurred, participants explained 'support was always there', as was 'family'. One participant explained that the fact 'that people believed in me' ignited self-belief, encouraging them to believe that they 'could become a better person, a leader for my people'. By contrast, enabling programs that did not include Indigenous culture or where there 'wasn't much … cultural understanding' caused one participant to 'struggle'. All participants felt that enabling programs should be 'compulsory', while one participant felt it 'would be really nice to have an Elder … giving some history of the area that [we] are studying'.

Early Exit Student

The participant who commenced an enabling program but exited without completing was encouraged to enrol by a family member. The program assisted the participant to 'scrub … up on maths and English'. However, the program did not include Indigenous culture, and the participant said it did not help to expand or strengthen their identity, confidence and/or values as an Indigenous student or an Indigenous person. The participant left the program because it was 'just too hard for me'. The situation could have been made better through 'more support'. The advice this participant would give to new students considering enrolling in an enabling program would be to 'ask for help'. The participant suggested that staff teaching in enabling programs for Indigenous students should 'understand that not everyone is at the same level'. A course that included 'more cultural stuff would be good' and

universities offering enabling programs should 'make it easier for Aboriginal people; speak plain … don't speak academically'.

Continuing Students

Of the nine participants interviewed who were still active enabling students, six had undertaken other studies (primarily TAFE) prior to enrolling in the enabling program. Six of the students studied via distance education, while three received face-to-face learning. Before commencing, some participants had considered their 'family responsibilities', others 'learnt … the computer' while one participant 'made myself a timetable'. The decision to enrol in an enabling program was 'easy' for more than half the participants. One participant enrolled 'to become a role model to my children'. However, some participants found it a hard decision because of family responsibilities and because 'I felt like I couldn't do anything'.

In relation to navigating tertiary education (described as 'path'), more than half of the participants explained that they had only just begun their studies and were 'still learning … the procedures'. Some 'spoke to a lot of people … and learnt from Moodle'[6] or had 'help and support' to navigate through the formal settings of the university. This support helped one student to 'feel like I'm not alone'.

In terms of how the continuing students felt about learning (described as 'way'), almost half the participants said they were still finding their way. One shared:

> I've always felt a little intimidated by the thought of … university. The bridging programme has eased a lot of that anxiety … the value of what I've been learning has been monumental … and … has made me feel ten times better about myself as a learner'. Others said: '[I've] learnt about myself as a learner … I've really grown … [and] my resilience has grown', and 'as a learner I'm really proud of myself.

Participants felt the enabling program was preparing them for further study through 'understanding the processes of assessments', 'making me learn routine' and 'helping me to understand the time management aspects of study'. Participants shared that the program helped overcome fears; 'I've had to do a … bit of public speaking … through that I've … learnt not to be afraid and … I know that's going to help me in the future.' Others gained an understanding of their history: 'It has given me a greater understanding of where my Nanna and the older generation have come from and to really connect with them.' Many said the enabling program was extending their lifelong learning journey by equipping them with skills for 'everyday life' and 'study'.

Participants felt that including Indigenous culture in enabling programs was important because 'half the things I learnt about my homeland I didn't know myself; I've learnt a lot.' Participants commented, 'We were taught some of the [welcome and acknowledgement] protocols which are really, really good to know and

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[6] Moodle is an online learning platform containing course materials, assessment tasks, instructional guides and a term calendar.

understand', and 'we've had to learn about [two ways learning] and it's really helped because … there are a lot of Indigenous people who … want to do the Western way of learning.' All participants felt that enabling programs that included Indigenous culture strengthened their identity, confidence and values as an Indigenous person. One participant explained, 'Each assignment that I do, each piece of knowledge that I've learnt … builds that confidence, my identity … and my history as that Indigenous person.'

Many participants were 'not expecting the amount of help that is available' and were surprised at the 'friendly, supportive environment'. Challenges included 'miss[ing] my family and friends [when away studying]' and '[I'm challenged] every time I look at an assignment … but I'm getting more and more confident as the weeks progress.' For one participant, having 'a computer refresher course to start with' would have made the learning experience better, while for another 'being able to access lecturers … helped … meet challenges'.

Participants felt that some of the best aspects of enabling programs were 'being able to really focus … on the work without distractions' and 'gaining skills to … continue tertiary study'. One participant explained that enabling programs were important because '[in] the Indigenous community … we are all trying to better ourselves. … If we just keep studying and educating ourselves, we will start to better not just ourselves but our communities and our Country.' Others said they learned 'just how important education is' and that 'I'm learning to strengthen my identity and value as an Indigenous student' and 'being myself is OK'.

While most participants said they 'couldn't think of any' courses that should be included in the programs, one participant felt it was imperative to include Indigenous culture because 'culture and learning is very important to Indigenous studies.' Reflecting on the importance of enabling programs, one participant said, 'The more we get educated … the more … Indigenous communities are going to grow and Close that Gap.' Others said it had been 'a very exciting journey' and 'I feel more confident about being able to go ahead and … do further study.'

Discussion

Staff felt that enabling programs supported students' Indigenous identity through an Indigenous curriculum and through *both-ways*[7] methodologies that create a sense of belonging, and work towards Closing the Gap within the education system. For staff, enabling programs assist in reducing the disparity between Indigenous and non-Indigenous peoples across a range of indicators including education (as discussed in NACCHO & Oxfam 2007). Staff felt that including Indigenous culture in course content could build strength, culture and both-ways learning, and increase

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[7] 'Both-ways is a philosophy of education that brings together Indigenous Australian traditions of knowledge and Western academic disciplinary positions and cultural contexts, and embraces values of respect, tolerance and diversity' (Batchelor Institute as cited in Ober 2009, p. 34).

a sense of place and identity. Perhaps most importantly, staff argued that student success was not just identified as academic success, but also as increased self-esteem, strong identities, finding their voice and improved job opportunities. Staff recognised that for some students, study was overwhelming because of family and community commitments.

From the interviews, it was clear that enabling programs had supported *completed students* to navigate and understand the tertiary education system. The programs prepared them for tertiary education by imparting practical learning skills such as (1) organisation and communication, (2) encouraging them to ask for help and (3) identifying their learning styles. These practical learnings assisted with program completion. *Completed students* said that the support available within the programs built their confidence, engendered feelings of success and increased their perceptions of self-worth. Enabling programs that included Indigenous culture reinforced students' Indigenous qualities and strengthened students' identities.

Staff described several elements of best practice in developing enabling programs, including the need to: (1) recognise cultural differences, (2) recognise that Indigenous people are 'yarners',[8] (3) Indigenise the curriculum, (4) tell stories, (5) help students to be released from family responsibilities, (6) increase students' computer skills, (7) consider the impact of social determinants on students' learning opportunities, (8) develop students' study habits, (9) provide mentors and (10) provide face-to-face delivery of courses.

Students felt that when their learning journey was supported by the learning of culture, their cultural identity increased. While the support available through the enabling program was imperative to success, family support and knowing that others believed in their abilities were also vital in encouraging leadership qualities and expectations of success. Knowing about scholarships and other assistance prior to beginning the study was beneficial. In addition, students suggested that the programs would benefit from team-building activities, more cultural awareness and more input from Elders.

The *early exiting student* had been encouraged by family to study. While practical skills for learning were included in the student's program, this student required more support. In particular, the program did not include cultural learning. While it is difficult to draw a conclusion from the input of one participant, the voice of this individual must be respected, and it seems that the lack of cultural understanding within the program and the lack of required support impacted negatively on the individual's learning journey. This is particularly apparent when compared to the journeys of *completed students*, who used available support to build confidence, establish feelings of success and increase their perceptions of self-worth.

While the *journeying students* were still navigating their way through the tertiary education system, they recognised that they were not alone in their journey. The

[8]Yarning is an informal, relaxed discussion that requires the building of a relationship as teacher and student (or researcher and participant) 'journey together visiting places and topics of interest' relevant to study or research; yarning provides a culturally safe conversational process for sharing stories and ideas (Bessarab and Ng'andu 2010, p. 38).

practical skills already imparted had increased their understanding, helped to develop time management skills and allowed focus on studies. These *journeying students* described a self-realisation of personal growth. The supportive environments built resilience and confidence, allayed fears and encouraged personal pride and self-acceptance. Moreover, enabling programs that included Indigenous culture and 'both-ways' learning increased students' Indigenous identity.

Synthesis: Strength, Success and Transformation

The perspectives of the staff and students involved in this research shared a number of common elements that are useful in thinking further about the design and delivery of enabling education in regional, comprehensive university settings.

Across the completed and continuing students' learning journeys, the themes of belonging, strength, resilience, confidence and self-esteem produced feelings of success, allayed fears, and increased self-acceptance and feelings of self-worth. These feelings were attributed to the supportive environment of the enabling programs. Similar themes were also identified by teaching staff when they discussed positive student outcomes. Including Indigenous culture in the course content was viewed as a way to build strength and culture for students and as a way to increase students' sense of place and identity. In contrast, a lack of cultural understanding within enabling programs appears to constrain learning.

For Indigenous students in enabling programs, success was seen as a multi-layered construct impacting multiple dimensions of their lived experiences, including 'cultural identity', 'voice', self-realisation, self-acceptance and 'pride'. These inner transformations are compatible with Cajete's (1994) seminal work about 'pathways' in relation to Native American education, where curriculum and the learning space ('path'), and students' navigation of their educational institution (which may initiate some transformation of the inner self) ('way'), are integral to students' learning journeys and educational outcomes.

Smith (2003) contends that educational outcomes for Indigenous peoples can be transformed through the process of 'conscientisation'. Smith explains that where Indigenous peoples are experiencing educational crises, the following actions can assist: (1) Indigenous educators must be trained to become 'change agents' in order to transform the undesirable circumstances and (2) Indigenous educators must develop a 'radical pedagogy' – becoming a teaching agent for change that is informed by their own Indigenous cultural preferences relevant to their own critical circumstance (Smith, 2003, p. 10). We assert that this equally applies to non-Indigenous educators. While non-Indigenous educators cannot be informed by their Indigenous cultural preferences, they can reflect on their non-Indigeneity within the teaching space and offer a critical approach and a 'radical pedagogy'. As noted above, Pechenkina and Anderson (2011) have reported on the educational crisis being experienced by Indigenous Australians. There is a need for best-practice guidelines to be provided to teaching staff which are embedded with strategies and

processes for the development of a 'radical pedagogy' for Indigenous Australian circumstances as part of a best-practice framework for Indigenous enabling programs by the participating universities. This proposed 'radical pedagogy' aligns with Turnbull's (2014) observations of the importance of adopting and adapting appropriate teaching styles and learning environments when developing enabling programs for Indigenous students.

Summary

This research project found that enabling programs, from the perspective of completed and continuing students, were an 'important' and 'exciting journey' that brought about transformation of the inner self through building 'resilience', 'strength', 'confidence', 'self-esteem', 'self-worth', 'cultural understanding' and 'identity'. Success for students in enabling programs can be viewed as a multi-layered construct experienced as increased 'cultural identity' and the development of 'voice', self-realisation, self-acceptance and 'pride'. These outcomes were attributed to enabling programs with supportive environments. Strength-building strategies included discussing Indigenous culture in course content and gaining input from Elders. Strategies that constrain learning include having a lack of cultural understanding in the program. For the completed students involved in this project, enabling programs provided a stepping stone to further education.

The research revealed that staff considered the learning journey to be a holistic pathway. Apart from delivering practical skills, staff felt that enabling programs revealed an 'underlying layer' of skills such as 'resilience' and 'strategic awareness', and that including Indigenous culture in course content was imperative because it built 'strength', 'culture' and a sense of 'place and identity'. Staff felt that the curriculum needed to be delivered in plain English, in a way that recognised Indigenous people as 'yarners' and 'story tellers'. They also felt that 'both-ways' methodologies and recognition of 'cultural differences' needed to be taken into account when developing enabling programs. Staff argued that 'face-to-face' delivery of enabling programs was the most effective teaching method.

While the size of this research may be viewed as a limitation, and findings from this study are context- and situation-specific (Collis & Hussey, 2009), future research could move to extend the sample to a greater number of participants and universities. The results of this study suggest that in developing a best-practice framework for Indigenous enabling programs, considerations of pedagogy, curriculum and mode of delivery will be understood within the framework of the institutional ethos and drivers for implementation. These will, in turn, be framed by local, regional and national Indigenous perspectives and deliberated on in conjunction with the research outcomes. Support structures for staff and their professional development needs will be considered as part of the best-practice framework. Ultimately, the strengthening of enabling education for Indigenous Australians is regarded as an excellent platform for offering Indigenous students the best chance

of 'success', with 'success' having a multi-layered interpretation that includes impacts on participation (for the institution), reaffirming personal identity and confidence (for the learner) and broader community and indirect benefits.

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Chapter 9

How We Do Business: Setting the Agenda for Cultural Competence at the University of Sydney

Juanita Sherwood and Gabrielle Russell-Mundine

Introduction

The National Centre for Cultural Competence (NCCC) was established in 2014 at the University of Sydney (the University) to become a thought leader in cultural competence philosophy, praxis, process and methods. The NCCC contributes to the dissemination of knowledges, pedagogies and skills that inform a whole of university approach to embedding cultural competence. This requires a contextual, analytical and methodological focus on the organisation and its many systems. At the same time, the NCCC works to support, develop and inform a broad base of individuals; from students to the many levels of staff employed within the organisation.

The University's first ever Aboriginal and Torres Strait Islander Integrated Strategy Wingara Mura – Bunga Barrabugu (Wingara Mura) (The University of Sydney 2012) provided a vital framework from which to launch the NCCC. The NCCC's mandate includes developing models for effective cultural competence in order to grow a university that is inclusive and openly welcomes diversity. This mandate is firmly embedded in a social justice and human rights agenda and provides a critical framework for the rolling out of cultural competence. Such a perspective contains the imperative of challenging prevailing assumptions about power, privilege and various forms of oppression that underlie current policies, programs and methods of doing business across the University. A central part of our work in this space, therefore, requires us to advocate for the elimination of those policies that diminish people's sense of control over their lives. Simultaneously, we need to work for the expansion of those programs that enable individuals to exercise personal freedom which contributes to people feeling like integral and valued parts of society (Mertens et al. 2009).

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A vital first step in this journey for the University is to acknowledge the inherent rights of Aboriginal and Torres Strait Islander peoples to be self-determined and respected as Australia's first peoples (The University of Sydney 2012, p. 3). The University has done this through Wingara Mura (The University of Sydney 2012). The strategy is framed around three interpersonal and institutional building blocks: opportunity, capability and rights. Wingara Mura places the promotion of Aboriginal and Torres Strait Islander participation, engagement, education and research as a core objective of the University. Within this policy context, the NCCC aims to provide the essential framework to embed the cultural competence qualities necessary to implement the strategy across the organisation, its staff and students.

The NCCC's mandate has been supported by the leaders of the University and, critically, is now embedded in the University's strategic plans and policies (University of Sydney 2016) sending a clear message that cultural competence is core business. This level of patronage and cooperation is vital for the NCCC's directive, tenure and success, as well as for the University's ability to take up this change agenda.

Attending – and working – in universities can be a culturally isolating experience for many. There is a range of factors, including racism, that act as barriers to Aboriginal and Torres Strait Islander students accessing and succeeding at university (Behrendt et al. 2012, p. 109; Larkin 2013, p. 228). The 2011 report 'Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People' recommended that universities need to 'improve the cultural understanding and awareness of staff, students and researchers within their institution, including the provision of cultural competency training' (Behrendt et al. 2012, p. 113). The report's recommendations are necessary if universities are to change the culture(s) of their institution(s) and in doing so provide an environment where Aboriginal and Torres Strait Islander students and staff feel they belong, and that their cultures and are respected to enable a safe learning environment.

The University is in the start-up phase of achieving far-reaching systemic cultural change. While it has embraced the journey, there is still much work to be done on exploring the depths of what it means to create such a change across the whole university. This chapter seeks to set out the rationale for locating this systemic change in a cultural competence framework. The University is working on the systemic and organisational implementation of cultural competence through concrete actions such as the development of policies to increase Indigenous employment and Indigenous student numbers. This chapter will focus on the implications of this change agenda for Aboriginal and Torres Strait Islander students.

Higher Education Context

The focus on Aboriginal and Torres Strait Islander students is necessary to address the disproportionally low rate of participation of those students in the higher education sector. Although more Aboriginal and Torres Strait Islander students are

finishing Year 12, 60% of Aboriginal and Torres Strait Islander school leavers are not involved in study or work after leaving school (COAG Reform Council 2013). In 2015, 1.1% of university enrolments were Aboriginal and Torres Strait Islander students which represented a 7.6% increase between 2014 and 2015 (Department of Education and Training 2015, p. 1).

Despite this improvement there continue to be gaps between Aboriginal and Torres Strait Islander students and non-Indigenous students in various measures such as school attendance, Year 12 attainment and participation in higher education (COAG Reform Council 2013; Commonwealth of Australia 2016). These gaps persist in part due to chronic health problems experienced by Indigenous students, lack of access to educational institutions, financial constraints and social, cultural and language barriers (Australian Institute of Health and Welfare 2005, 2015). The persistence of these gaps represents a failure of the education system (Rigney 2011). The lack of recognition of Aboriginal and Torres Strait Islander people's languages, being the oldest of living languages in the world, should not be considered a barrier, although the mainstream education agenda has ensured that any language other than English is to be considered a barrier. This is cultural incompetence.

In order to address the issues, it must also be recognised that the current gaps in higher education participation have roots in the early years of the schooling system (Craven and Dillon 2013) as well as in the historical exclusion and discrimination experienced by Aboriginal and Torres Strait Islander people in education. For much of the past two centuries when it came to educating Aboriginal and Torres Strait Islander students, the prevailing view was that

> Aboriginal children should be offered only minimal schooling consistent with the perceptions about the limitations inherent in their race and their expected station in life at the lowest rungs of white society (Beresford 2003, p. 87).

Consequently, education was overtly focused on teaching Western morals, Christianising and 'civilizing' Aboriginal people away from their 'savage' ways (Bodkins-Andrews 2013, p. 35). This educational style effectively set up schools as purveyors of assimilation and led to a range of barriers preventing Aboriginal participation at all levels of education (Beresford 2003, p. 107).

The perception of education as being a vehicle for assimilation continues. As Buckskin (2013, p. 2) states, 'The main measure of success for Aboriginal Australians is our assimilation into the dominant culture through the mastering of English literacy and Western norms.' This statement highlights a way that universities have continued the assimilation impetus by failing to recognise and respect Indigenous knowledge systems within the academy (Battiste 2002; Buckskin 2013; Martin 2008; Rigney 1999; Riley et al. 2013; Sherwood et al. 2011). Rather than being considered equal participants, Aboriginal and Torres Strait Islander peoples have largely been the objects of investigation and study (Martin 2008; Smith 2003) and non-Indigenous people have been positioned as the knowers and experts who had authority, legitimacy, domination and control (Fredericks 2009, p. 5). Universities have failed to engage in significant and systemic ways with Indigenous standpoints (Larkin 2013, p. 231). Yet, to successfully increase participation in

education, it is 'critical that the unique position and perspective of many Aboriginal and Torres Strait Islander students be both respected and protected' (Bodkins-Andrews 2013, p. 41).

The experience of racism for many Aboriginal and Torres Strait Islander people must also be considered as an impetus for change if we are to effectively ensure a space where Aboriginal and Torres Strait Islander students can safely study. There is still ongoing resistance to teachings about cultural values, learnings and identities beyond the Western knowledge system (Bodkins-Andrews 2013; Cleland et al. 2012). Research by Bodkins-Andrews (2013, p. 34) highlights that embedded in this resistance is a level of racism which continues to present a significant obstacle for Aboriginal and Torres Strait Islander students in the education system. This is because the Western knowledge systems have dictated what is considered to be worth knowing within their institutions and silenced the voices and knowledge of those they have managed to construct as the other.

We have learnt a great deal over the last decade of the impact of racism on the health and well-being of Indigenous peoples worldwide, a direct result of the growth of Indigenous participation and effective research in the academy (Brondolo et al. 2011; Durey 2010; Karlsen and Nazroo 2002; Larson et al. 2007; Paradies et al. 2008; Power et al. 2015; Priest et al. 2011). Importantly, racism impacts on students' learning opportunities and plays a significant role in many marginalised students' experiences within the tertiary sector (Power et al. 2015; Ronnau 1994; Schroeder and DiAngelo 2010; Sherwood et al. 2013; Weir 2001).

Despite efforts by universities to increase participation of Aboriginal and Torres Strait Islander staff and students, as well as to respect, recognise and acknowledge Indigenous knowledges, there remain challenges (Larkin 2013, p. 228). Good will and good intentions do not automatically lead to improvements in higher education outcomes (Larkin 2013, p. 229). The willingness and effectiveness of universities to embed Indigenous knowledges in research, teaching and learning domains will be an indicator of the success of the various policies that universities profess to implement (Larkin 2013).

Moreton-Robinson et al. (2011, p. 1) conjure up an image of a stony ground to describe universities as 'places where the seeds of Indigenous human capital have struggled to take root because they have been under-nourished' (Moreton-Robinson et al. 2011, p. 56). Larkin (2013, p. 232) elaborates on the metaphor and suggests that the stony ground persists because of resistance by universities to address ongoing Indigenous disadvantage, attributing it instead to an Indigenous cultural deficit. The stony ground could also be as a result of universities claiming not to know where to start or what to do, or not believing that things are 'that bad', or being unwilling to take responsibility. Finally, Larkin suggests that universities tend to claim to know the answers without including Aboriginal and Torres Strait Islander peoples in any planning or development of solutions.

The constraints and barriers to Aboriginal and Torres Strait Islander participation in higher education are well documented (Behrendt et al. 2012; Kinnane et al. 2014), and there is no doubt about the importance of addressing these issues. Participation in higher education leads to a range of benefits (Behrendt et al. 2012;

Craven and Dillon 2013) and is a key pathway to decreasing inequity between Indigenous and non-Indigenous people (Bodkins-Andrews 2013, p. 30). As Universities Australia (2011, p. 17) highlighted:

> It is the key which unlocks the door to meaningful and well-paid employment, to better housing, health and access to society's valued resources. It is the foundation stone for the practice of self-determination and achievement of social justice and Indigenous equality.

The impact of lack of access to education for Aboriginal and Torres Strait Islander people at all levels, therefore, cannot be underestimated and enhancing Indigenous participation in higher education needs to be more widely recognised and proactively addressed as a significant international socioeconomic issue of our time (Craven and Dillon 2013, p. 22).

Evidence suggests that cultural competence is a mechanism that can work to reduce some of the disparities in education experienced by Aboriginal and Torres Strait Islander students (Sherwood et al. 2011; Sherwood et al. 2013). To further this agenda Universities Australia has recommended that all Australian universities embed cultural competence into their policies. Doing so will address the systems and practices that create barriers to Indigenous students both enrolling and flourishing at university as well as career pathways for Indigenous academics and professional staff.

> Indigenous cultural competence requires an organisational culture which is committed to social justice, human rights and the process of reconciliation through valuing and supporting Indigenous cultures, knowledges and peoples as integral to the core business of the institution. It requires effective and inclusive policies and procedures, monitoring mechanisms and allocation of sufficient resources to foster culturally competent behaviour and practice at all levels of the institution (Universities Australia 2011, p. 48).

Moreton-Robinson et al. (2011, p. 18) link cultural competence to governance in the sense of increased participation of Aboriginal and Torres Strait Islander people in the university's decision-making processes. Accordingly, if universities are to increase cultural competence, it is surmised that this is impossible to achieve without high-level Indigenous influence. It will also require significant change across the higher education system and will compel individual universities to systemically embed the philosophy and practice of cultural competence into all areas of their operations.

Responding to the Call for Change at the University of Sydney

Increasingly, higher education institutions are expected to graduate students that can effectively work in global and culturally diverse situations (Goodman 2013). At the University, these knowledges, skill bases, values and behaviours will be assessed as graduate qualities of undergraduate and postgraduate degrees (University of Sydney 2016). To achieve this, teaching, learning and research opportunities need to equip

students to develop their capacity to understand their worldviews as well as respecting those of others.

An additional impetus to engage in a cultural competence agenda is a desire to improve the equity and safety of the learning environment for all students. At the University, this entails a particular focus on Aboriginal and Torres Strait Islander peoples and cultures, and whose land our University is built upon. This calls for the recognition of our First Nation's people sovereignty and current circumstances, resulting from invasion and ongoing colonisation. It also calls us to be particularly cognisant of the rich diversity of Aboriginal and Torres Strait Islander peoples cultures, languages and experiences, along with students from other countries who also share diverse cultural and linguistic backgrounds who, because of this, have been similarly marginalised within the Western academy.

Internal research conducted at the University in 2014 highlighted that cultural competence was seen as an important personal and professional goal by both students and industry; however, it was also recognised that cultural competence as a graduate attribute was being under-delivered (The University of Sydney 2014).

The University has responded to the call for change in several ways under the umbrella of its Wingara Mura strategy (The University of Sydney 2012). The strategy is a whole of University approach which 'aims to ensure that all faculties and University services are committed to Aboriginal and Torres Strait Islander advancement' (The University of Sydney 2016).

Under Wingara Mura a wide range of activities and programs have been implemented which specifically focus on increasing participation (The University of Sydney 2012, 2016). For example, the Student Support and Retention team is responsible for promoting the transition from school and retention at the University. The Cadigal Special Entry Program assists Aboriginal and Torres Strait Islander school leavers and mature-age applicants with a modified entry and an intensive two-week Academic Skills Program designed to equip students with the skills to succeed in their first year of university. Culturally safe spaces are also provided which include a computer laboratory, a research library, tutorial room for study and a student/staff common room with full kitchen facilities. Retention and support strategies also include tutors, academic advisers and dedicated student-support services.

Cultural Competence: What Is It?

Cultural competence has been a growing field of study and practice over the past four decades (van den Berg 2010), particularly in the fields of health, education, social science and business (Bainbridge et al. 2015; Betancourt et al. 2005; Bond and Brough 2007; Campinha-Bacote 2002; CAN n.d.; Cross et al. 1989; Diller and Moule 2005; Goode et al. 2014; Kirmayer 2012; Kumagai and Lypson 2009; Leininger 1988; Ramsden 2002; van den Berg 2010; Walker et al. 2014). The

breadth of this theorising and practice continues to be dynamic and ever evolving (Rosenjack Burcham 2002).

'Cultural competence' is a term that can have many meanings and is not without its critics. For example, some critics claim that cultural competence leads to an essentialist view of culture and focuses too much on ethnicity (Garneau and Pepin 2015, p. 11; Kirmayer 2012). It is also often conflated with multiple concepts such as cultural safety (Bin-Sallik 2003) leading to differing and sometimes conflicting views (Ben-Ari and Strier 2010). The disciplinary diversity of these multiple views brings robustness to the dialogue about cultural competence, but also highlights that any implementation of a cultural competence model is highly dependent on the context and what cultural competence looks like in those specific contexts (Cleland et al. 2012). Any development of cultural competence models must be responsive to the business of the service and to the needs of those they are servicing. The most widely used definition derives from Cross et al. (1989):

> Cultural competence is a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or among professionals and enable that system, agency, or those professionals to work effectively in cross-cultural situations. The word 'culture' is used because it implies the integrated pattern of human behavior that includes thoughts, communications, actions, customs, beliefs, values, and institutions of a racial, ethnic, religious, or social group. The word competence is used because it implies having the capacity to function effectively. A culturally competent system of care acknowledges and incorporates--at all levels--the importance of culture, the assessment of cross-cultural relations, vigilance towards the dynamics that result from cultural differences, the expansion of cultural knowledge, and the adaptation of services to meet culturally-unique needs (Cross et al. 1989, p. 27).

In their monograph, Cross et al. (1989) provide a level of detail that clearly sets out a way to implement cultural competence: this is perhaps the reason why it has become the most commonly used description of what cultural competence means. The authors of this seminal publication have determined that working safely with different cultures demands a complexity of theorising, discernment, knowledge building and development of values along with action across all levels including for example; policy, education and training and resourcing change programs adequately. Cultural competence is regarded as an overarching aspiration to be worked towards that involves incremental and evolving processes and shifts in knowledge, values, behaviours and actions.

Although the Cross et al. (1989) definition is widely referred to and adapted, often people do not take note of the full conceptualisation of cultural competence put forward in their monograph. This includes five key elements which are essential to assist the individual, systems and organisations to navigate this journey. The National Center for Cultural Competence at Georgetown University (NCCC Georgetown), Washington DC (2006), has developed the Cross et al. (1989) elements to:

1. Value diversity and culture
2. Be able to conduct cultural self-assessment
3. Be conscious of the dynamics of cultural difference

Fig. 9.1 Cultural Competence Framework – adapted from NCCC Georgetown (2006) and Cross et al. (1989) (Adapted with permission of the Georgetown University National Center for Cultural Competence, Georgetown University Center for Child & Human Development, Georgetown University Medical Center ©2006)

4. Acquire and institutionalise cultural knowledge
5. Adapt services to reflect and understand cultural diversity in the community

From an organisational point of view, it is essential that these five elements function at every level of the system and that attitudes, policies and practices must also be congruent at all levels. Any organisational approach to developing cultural competence must include all these elements as identified in Fig. 9.1.

Locating Cultural Competence in a Social Justice and Change Agenda

Cultural competence can be understood as a philosophy, a paradigm and praxis. Its central tenet is the transformation from a sometimes unknowing, superior, and closed standpoint towards a more open and introspective worldview (NCCC 2015). Understood well, cultural competence is aligned with a social justice change agenda (Universities Australia 2011).

Cultural competence as a philosophical framework and practice was initially developed in the USA in response to health disparities experienced by children of marginalised and minority populations which were a direct result of racial

discrimination, poverty and, for some, such as First Nations peoples living in remote areas on reserves, geographical isolation (Cross et al. 1989).

Although a member of the UN, the USA was failing to uphold the 1946 Universal Declaration of Human Rights (Office of the United Nations High Commissioner for Human Rights & World Health Organization, 2008, p. 1), in particular, the right to health which is a 'fundamental part of our human rights and of our understanding of a life in dignity' (World Health Organisation n.d., p. 1).

The passing of the USA's Civil Rights Act in 1964 was a 'catalytic' event that led to previously excluded groups gaining access to services such as education and housing, which ultimately led to paradigm shifts across a range of service deliverers (Arredondo and Perez 2006, p. 2). Subsequent to the Civil Rights Act, equitable healthcare service and delivery to children of marginalised and minority population groups were mandated in the USA. With this in mind, Cross et al. (1989) published an approach to guide an organisation, its systems and its staff, to undertake and foster principles of the human rights of all peoples along with equity for all.

The human rights imperative for implementing cultural competence is equally strong in Australia. Evidence abounds of the failure of governments at all levels to provide an environment in which Aboriginal and Torres Strait Islander people can freely exercise their human and civil rights. Even while Australia was drafting and signing the Universal Declaration on Human Rights in Geneva (Australian Human Rights Commission n.d.), at home Protectionism, Absorption and Assimilation policies, which severely curtailed the rights of Aboriginal and Torres Strait Islander people, were being developed and implemented (Australian Human Rights Commission 1997). More recently, while Australia was reluctantly and belatedly supporting the UN Declaration on the Rights of Indigenous Peoples (Australia 2015) it was implementing legislation that was so far-reaching in its implications for Aboriginal people in the Northern Territory that the Federal Racial Discrimination Act 1975 was suspended in order to pass the legislation (Harris 2012).

The evidence of human rights failures is in the 'gaps'. Gaps exist in life expectancy, and outcomes of various diseases (Close the Gap Campaign Steering Committee 2016), the over-representation of Aboriginal and Torres Strait Islander people in jails, including the rapid increase of imprisonment of rates of women and juveniles (ABS 2016) as well as persistent gaps in education participation and outcomes and employment opportunities (Behrendt et al. 2012).

In the past decade, various strategies have been formulated at a Federal and State level to address these disparities. The Council of Australian Governments (COAG) continues to work to its Closing the Gap in Indigenous Disadvantage agenda, which seeks to overcome gaps in life expectancy, child mortality, education and employment (Council of Australian Governments n.d.). The Close the Gap policy agenda continues to focus on addressing health disparities (NACCHO-Oxfam-Australia 2007).

The NCCC locates its understanding of cultural competence very much in the context of addressing social justice issues. In line with the Wingara Mura strategy, our agenda within the University is to overtly address social injustice and create change.

Rolling Out Cultural Competence at the University of Sydney

The University was the first university in Australia and was established in 1850 (The University of Sydney n.d.-a). Its motto *sidere mens eadem mutate* ('The constellation is changed, the disposition is the same') (The University of Sydney n.d.-b) highlights its proud history which explicitly builds on the traditions of its British heritage, down to its sandstone buildings and disciplinary agendas which were entrenched in colonial imperialism. While the University was founded on espoused values of equality and access to all, like other Australian universities its pedagogical foundation was modelled on the British system which was originally designed to educate the aristocracy (Ma Rhea and Russell 2012). This embedding of a particular type of Western education is important to note because, like other Australian universities, the various functions of the University have impacted heavily on Aboriginal and Torres Strait Islander peoples:

> Universities in Australia have been educating professionals for over 100 years. The education provided by Universities has shaped the thinking and practices of generations of professionals who have played a significant role in structuring relationships between Indigenous Australians and the broader society, including advising colonial and contemporary governments, authorities and professional bodies on policy and practice, constructing and legitimating societal values and attitudes, and providing professional services to Indigenous peoples (Universities Australia & Indigenous Higher Education Advisory Council 2011, p. 18).

It is in this context that the NCCC works. In line with the University's philosophy that cultural competence is 'everyone's business' (The University of Sydney 2012) it is important to be mindful of our particular role. We have been established to guide thinking, develop best practice frameworks, produce resources and to lead a national dialogue on cultural competence. We work in collaboration with colleagues across the University to influence change in policy and structures, and we develop thinking and resources to support those changes and to address practices, attitudes and behaviours. We are mindful of the evolving nature of our mandate. For example, although the University is promoting cultural competence as a graduate quality, we cannot produce a culturally competent graduate as the theorising in this field clearly indicates that full competence is never achieved (Goode and Like 2012). What we can aim for is to support students to develop capabilities and capacity that will accompany them on their life-long journey towards cultural competence.

The first step on the NCCC's journey was to explore the many cultural competence definitions and build our comprehension of how we could work in this space. As we developed our thinking, we recognised that some models of cultural competence have been developed to work within specific disciplines such as health. Our mandate is far greater than a single academic or professional discipline; it is the entire university, and beyond. Therefore, we have sought to find the essential characteristics that are intrinsic to a cultural competence focus across different contexts. Importantly, to ensure successful and sustainable embedding across all domains of

the University we must contribute to the development of a cultural competence model that works for this University.

We have drawn on Cross et al. (1989), the further development of that thinking by the NCCC Georgetown, as well as the Universities Australia model. Also important to our conceptualisation and approach has been the many years of thinking in this area by Indigenous academics and practitioners (Angus and Wise 1997; Best 2014; Fredericks and Marlene 2010; Nash et al. 2006; Sherwood 2006).

One of our first tasks was to develop a values and principles statement which laid out the way we intend to operate. We know that to grow and thrive, the NCCC must recognise the First Peoples of Australia and their protocols, values and principles. In summary, our values and principles statement means that the NCCC aims to honour the spirit and integrity through its recognition of Aboriginal and Torres Strait Islander peoples. The statement informs how the NCCC staff will work together with the diverse communities of First Nations Peoples and the learning community of the University. The NCCC honours time, as a continuum between past, present and future. This understanding forms the basis of the NCCC's holistic philosophy. Another value we adhere to is respect which as we understand it, 'in the Indigenous sense, means to listen and to hear and value what we have to say about ourselves and our experiences, even if what we have to say challenges your ways of knowing' (Sherwood 2010, p. 261). We value listening as a key skill and see it as an active process and method which demands respect of the speaker through a disciplined openness of the 'listener' who is being provided with privileged information. We acknowledge all peoples, respecting, acknowledging and welcoming diversity of worldviews, cultures and standpoints and aspire to be open and flexible in our thinking. The NCCC also develops reciprocal relationships with partners and communities which define obligations are multidimensional and are balanced. The NCCC will practice and model critical thinking and reflective practice so as to know a sense of self and place and how to work with others.

We are taking a systems approach to our work that supports engagement and participation across numerous strategies. Intentionally, we are instigating cultural competence as a transformational change and social justice education agent. Central to our cultural competence framework is the imperative to utilise Indigenous knowledge practices and research methods to grow pedagogical models for teaching and learning. Importantly, we model Indigenous pedagogies with our academic peers to strengthen their ability to apply these pedagogies in their teaching and to strengthen their collaborative work with Indigenous communities. We are doing this by embedding Indigenous pedagogies into our resources as well as developing a specific focus on well-being, sense of self and relational learning. Importantly, we intend to model mentoring support for students and academic peers in the area of cultural competence and grow knowledge about culturally safe spaces; and develop strategies for delivering these spaces throughout the University for all students and staff.

Through this type of mentoring and peer support, we are focused on building the University's capacity to sustain its path of social justice education, across all levels of the University system. A significant part of this is to encourage and foster collaborative leadership and governance for shared purpose with Aboriginal

communities, and University faculties, student-support services, human resources, students and student bodies.

The effectiveness of the centre and its diverse body of work will be narrated, measured and evaluated through our collaborative community participatory action research model (CCPAR) (Sherwood, 2013a, b). CCPAR is a process that has been shown to be effective in providing a clear picture of our process and the outcomes of our research and work.

NCCC Work to Date

These are still early days for us. In the short time we have existed, we have consulted widely across the University's academic and research structures and systems including faculties, students, and outside the University, in particular with Aboriginal communities. We have bid for and won a number of consultancies and been awarded grants.

The NCCC's initial body of work has been to develop foundational resources to support and excite our peers into taking up the cultural competence philosophy and pedagogy in their curriculum, teaching and research. We are developing introductory workshops which focus on foundational elements of cultural competence including developing a sense of self and well-being; developing critical self-reflection capabilities, racism and relational learning pedagogies.

We are writing a series of research papers that clearly sets out the vision and implementation of a culturally competent university to build evidence and co-generate new knowledge. We are focused on collective and relational service learning hubs where Aboriginal communities are steering what processes will be used and voicing the outcomes they would like to see accomplished through these partnerships. We are also developing one of the first Massive Online Open Courses (MOOC) at the University, which focuses on relating cultural competence to an understanding about the context of our location here in Sydney from Aboriginal perspectives.

There are other signs that cultural competence is on the University's agenda and which highlight some of the successful partnerships and collaborations that have developed as a wide variety of projects are established across the University. For example, the University's Annual Teaching Colloquium in 2015, a collaboration between the NCCC and the University's Institute for Teaching and Learning, highlighted cultural competence. An inspiring keynote address from the Racial Discrimination Commissioner, Dr Tim Soutphommasane was intertwined with presentations from staff and students which showed not only the range of activities underway across the University but also the level of commitment and engagement that transverses discipline silos. According to the feedback from the day, it was the

most successful colloquium run at the University and has provided an opportunity to elicit interest from a range of staff and students about engaging further with the cultural competence agenda.

As much as our outward facing activities have been important, we have prioritised our development as a small team which is still establishing itself. We are creating the culture of the NCCC even while we labour under a heavy workload. We are developing new ways of working that are not typical of academic environments. We are co-generating shared knowledge and finding ways to do that effectively, efficiently and innovatively. This has not been without challenges, and we have come to refine our expectations about the range of skills, behaviours and attitudes that will flourish in this dynamic environment. We seek to model how to create a safe working and learning environment and have been through many of the challenges that we would expect to see in a changing space. As we have developed our team, we have seen great achievements but have also met with resistance and a preference for a more individual way of working which does not fit the way we seek to develop. We have welcomed people in to do particular projects and have farewelled some who have identified that this is not the space for them.

Conclusion

We have found at the University that the mandate for growing a cultural competence focus that includes involving and working with Indigenous communities has also opened up opportunities for students from other marginalised groups to have a safe space to voice their experiences and concerns. Providing knowledge and guidance for both academic and professional staff in the accommodating of cultural competence is paramount. This means thinking differently about how we approach our work and our clients, the students. It is about being respectful and responsive to their personal and learning needs while they are in our care.

One of our greatest challenges is to be strategic about where we focus our efforts. Our role is not to do the work of the University for them but to guide, to model and to promote best practice and innovative thinking. The University has embedded cultural competence into its strategic plan, as both as student learning outcome and a university change strategy which bodes well for the NCCC's mission.

It is perhaps too early to see the impact of the University's efforts, as it operationalises cultural competence across the University, in empirical evidence but we are confident that we are laying the foundations for an environment that is culturally safe and where all Aboriginal and Torres Strait Islander students and staff will flourish.

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Chapter 10
Grandmothers' Pedagogy: Lessons for Supporting Native Students' Attendance at Universities

Amanda R. Tachine

Introduction

Shimásáni (Navajo word for my maternal grandmother) was a beautiful person, full of faith in the Creator, tender and kind in her words, patient, a purposeful listener, and a conduit of wisdom. She cheered for me during joyful times and helped me through difficult times. Even after she passed away, her legacy and teachings remain within me. Although it's been sixteen years since I last held her close, she is persistently in my thoughts and prayers. I share my personal thoughts of my grandmother as an opener to this conversation, to position myself as a Navajo scholar who has a deep relationship and respect for Shimásáni and grandmothers at large. I believe that I'm not alone in viewing grandmothers with high regard. Among most Indigenous peoples, our grandmothers are considered precious and closely connected to our lives as Wilson (Wahpatonwan Dakota scholar) beautifully stated: 'The stories handed down from grandmother to granddaughter are rooted in a deep sense of kinship responsibility, a responsibility that relays a culture, an identity, and sense of belonging essential to my life' (1998, p. 27).

It was not surprising, then, to learn in my research that Native students also recognized the influential role that grandmothers had in their life. Since my professional work and research interest centers on Native college students, I am blessed to be surrounded by Native college students. And in those spaces, I heard over and over the many stories from Native students on how their grandmas sparked motivation that enabled them to keep moving forward in college. This made me think about my own experience and the personal connection that I had with Shimásáni. I then began thinking what lessons can we, higher education scholars, practitioners, and faculty, learn from grandmothers in supporting Native college students? What I share with you comes from my dissertation research and from my experience in

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working with Native college students (Tachine 2015). This is a reopening of an ongoing conversation that I hope will spark others to consider how we might engage in our work that reflects a grandmother's love.

Using Indigenous Storywork (Archibald 2008), an Indigenous qualitative methodological approach, and Narrative Inquiry (Reissman 2008), I share portions from a larger study that investigated Navajo students' stories as they transitioned into college. For this chapter, I highlight grandmother qualities such as listening, sharing stories, and having an openness to vulnerability that influenced and motivated Navajo students to navigate through complex challenges and persist in going to college. I then provide examples of United States (US) higher education institutions that are making strides in listening, sharing stories, and opening spaces of vulnerability, that advance educational and personal growth among Native college students. These lessons and examples probe our thinking to consider how higher education institutions can move towards grandmothers' pedagogy that cultivates a loving and caring environment for Indigenous and, potentially, all students.

Literature and Theory Guiding the Study

To contextualize the research, I first review the scholarship on Indigenous undergraduate students' experiences as they relate to accessing and persisting in college. I then provide experiences and literature centered on grandmothers that helped me to begin thinking about their role in higher education. I then offer a family educational model (Heavyrunner & DeCelles 2002) as an Indigenous theoretical concept to begin constructing an Indigenous student-specific version of what I am calling grandmothers' pedagogy in higher education.

In 2014, the US White House released a report stating, 'Native youth and Native education are in a state of emergency' (US Executive Office of the President, 2014, p. 19). The report detailed the history and current state of Native education, and also provided recommendations for change to address the many challenges plaguing Native youth. The impetus for the report arose after a visit by US President Barack Obama and First Lady Michelle Obama with six Lakota youths from the Rosebud Reservation in South Dakota. Students shared the reality of their lives after which President Obama commented, 'there were tears in that room pretty much the entire conversation' (Obama 2014, para. 18). Proponents of Native education stated that this was the first time a President had listened and expressed concerns about Native education since former President John F. Kennedy's leadership in the 1960s (Klein 2015). Promising plans are underway to strengthen the livelihood for Native youth through efforts such as the Generation Indigenous initiative, a national network to reach out, engage, and provide educational opportunities for Native youth (Gillettte & Thiele 2015). Yet 'cautious optimism' is also felt, as broken promises have been the lens through which many Native people have viewed federal and state governmental institutions (Stigliani 2015).

Although former President Obama and federal administrators focused attention on Native educational issues, empirical research on Native students entering and persisting in higher education is scarce. Most research – only a handful of quantitative studies – represents Natives as an asterisk, specifying that their numbers are so small that they cannot be studied (Fairchild and Tippeconnic 2010; Brayboy et al. 2012: Shotton et al. 2013). What we do know is a disempowering picture. Research documents that the high school graduation rate for Native students who attended public schools was at 68% in 2012; US Bureau of Indian Education schools fared worse with a graduation rate of 53%; that year, the national graduation rate for all students was 81% (US Department of Education 2014). Native high school students are the least likely to graduate from high school, compared to other ethnic populations; and when we highlight the Native students who move on to college, the numbers are even less promising. In 1980, the total enrollment of Native students in degree-granting institutions was 83,900; in 1990 the enrollment grew to 102,800; in 2000 the enrollment increased to 151,200, and by 2012, the total enrollment was 172,900 (US Department of Education 2013). Although the total numbers have increased over time, there has been a steady decrease since 2009 (207,900), and when you look at the overall Native population growth those numbers are less favorable. While the Native American population increased by 39% from 2000 to 2010, the rate of college enrollment and degrees conferred stagnated at 1% during the same period (US Department of Education 2012; Norris et al. 2012). These numbers illustrate a stagnation crisis in need of attention.

Closer examination of the first-year college persistence rates details that many Native American students withdraw from or drop out of college. However, national data is again sparse on first-year persistence rates, especially data that is disaggregated by race or ethnicity. Available research that has attempted to look at first-year persistence rates shows mixed results. For example, one study found that Native first-year retention rates were 14% lower than those for the total student sample for Division II schools, and 12% lower for Division III schools (Pavel 1999). The Consortium for Student Retention Data Exchange (CSRDE) reported that the first-year retention rates for Native students in four-year colleges were 70.5%, lower than the rate of 82.2% for Whites, 75.1% for Blacks, 79.6% for Hispanics, and 88.9% for Asians (2015). In general, however, the data on Natives is limited, and the numbers are discouraging and indicate that Native students are least likely to graduate from high school and college. These numbers reflect a global concern as Indigenous college students all across the world are negatively disempowered, with similar scenarios.

Despite the challenges previously mentioned, research also demonstrates that family and home has a profound influence on empowering Native students in their pathways to college (Rindone 1988; Pavel and Padilla 1993; Guillory and Wolverton 2008; Jackson and Smith 2001; Jackson et al. 2003; Heavyrunner and DeCelles 2002; Waterman 2012). For example, Navajo students from very low-income (below $5,999/year) homes mentioned family support was the driving motivation for promoting their academic success (Rindone 1988). We would reason that financial support should be indicated as the most important aspect, considering that these

students are far below the poverty level. Yet, family support mattered most in their motivation to move forward in college. And when Native students encountered challenges in college, they indicated that family was the most influential factor in helping them to overcome those challenges (Guillory and Wolverton 2008). For some Native students, such as those from the Haudenosaunee Nation, a crucial strategy for their success included being able to return home to family at frequent intervals (Waterman 2012). This is consistent with other research that found that 56.8% of 155 Native students indicated a need to go home compared to 31.6% of Blacks, 24.4% of Hispanics, and 16.7% of Anglos (Benjamin et al. 1993). Moreover, the Gates Millennium Scholarship (GMS), a prestigious and all-expenses-paid scholarship program, provides under-represented students with the opportunity to attend any university of their dreams. When given the chance to attend any college in America, Native GMS recipients chose schools that were closer to home: an indication that family and home are critically important in their college selection and overall successful progression (Tippeconnic and Faircloth 2008).

The previous findings surrounding family and community are congruent when we look at Indigenous students from other areas around the globe. Australian Aboriginal students were found to be more collectively minded than their non-Aboriginal counterparts (White and Fogarty 2000), suggesting that they were more likely to consider family as an important aspect of their worldview. Moreover, Aboriginal and Torres Strait Islander students reported that their experiences at universities increased their ability to contribute to their welfare of their community (a vital motivator for their college-going journey); yet, they indicated that the university did not provide support to help them cope with responsibilities such as family obligations (Asmar et al. 2014). Canadian First Nations students define success in terms that coincide with the relational dimensions of family and community (Juntunen et al. 2001). Understanding the lives of First Nations post-secondary students, including the awareness of their extended family obligations, was found to be a crucial strategy for facilitating success for those students (Hampton and Roy 2002). For Māori, academic participation and success are increased when the learning environment reflects the essence of a whānau (family) environment designed through an interdependent perspective that honors academics with emotion and culture (McMurchy-Pilkington et al. 2013).

Grandmothers' Experiences and Stories

Knowing that the literature and my own experience supported familial influence among Native college students, I began to be more conscious of how Native students talked about family. As I shared earlier, in my involvement with Native students there have been countless times when grandmother stories have arisen. Often these stories would occur when students wanted to share a fond memory of home, and also when they were confiding in me about the challenges they were facing in college. In listening to those stories, I noticed that when students began speaking

about their grandmother a soft smile would often appear on their face. Instantly, they became more at ease as they reflected on a specific message that their grandmother had told them such as 'You are doing good son. Keep working hard at school.' Or they would recount a story that their grandmother had shared with them which made the students feel stronger in tackling whatever current circumstances they were encountering.

These types of experiences support the literature on grandmothers and story sharing. LaBarre et al. (2010) found grandmothers played a central role in the psychopathology of children by assisting in their emotional development and being a second maternal figure. Regarding Indigenous grandmothers, Loppie (2007) investigated teachings from Indigenous grandmothers in expanding qualitative research enquiry. She found that through Indigenous grandmothers' stories, mutual support and life lessons are generated: 'stories are intended to teach' (Loppie 2007, p. 281). Wilson (1998), a Wahpaton Dakota scholar, described reflections of her grandmother who imparted lifelong lessons through story sharing, and instilled validation and affirmation of her sense of identity with wisdom and care. Rendón (2009) calls on institutions and educators to move towards a pedagogy based on wholeness and harmony that is rooted in ancient wisdom: 'Ancient epistemology is the first way of knowing, the way of our ancestors, the original way of work' (p. 133). In essence, grandmothers embodied holism in which the whole person is supported.

When we consider the Navajo way of life, it is important to know that Navajo is based upon a matrilineal society in which the mother is the matriarch and the core of the family and home (Parsons Yazzie and Speas 2007). Along with this understanding, there is a deeply valued reverence for women including mothers, aunties, and grandmothers. Contrary to Eurocentric frameworks where patriarchy is the foundation of governance, systems, and practices, Navajo way of life privileges and honors women as an integral part of life. To acknowledge the powerful role of family, including maternal figures, research among Native college students must call upon theoretical frameworks that address familial perspectives.

Theoretical Framework: Family Education Model

Using Indigenous frameworks among Indigenous students is critical to advancing our work in supporting their matriculation through college. Around the world, Indigenous peoples are creating family-centred, culturally responsive models. For example, Mason Durie, a Māori scholar, created the Whare Tapa Wha model where Māori development is viewed in a holistic manner (Durie 1994). He conceptualized a four-walled house wherein each wall represents a core aspect. One important wall included the Te Taha Whanau which consists of the wide family networks, and the obligation, commitment, and support that the family provides. Whanau also helps form the identity and purpose of a person, that goes beyond the individual by acknowledging the sacredness in a collective (Durie 1994). The Te Taha Whanau model has been applied to retention strategies for Māori students attending Victoria

University, yet the focus of family is centerd on 'pseudo-whanau' such as institutional support staff and mentors (Steward and Rawrhiti 2004, p. 41). Models such as the Te Taha Whanau are integral in providing a space for holistic and Indigenous worldviews to be interwoven in higher education sectors; however, careful and critical implementation and analysis of Indigenous models are warranted. Many universities often negate the influential role that Indigenous family members (outside of the college walls) have in helping to address retention concerns.

Understanding the valuable influence that family connection has on Native students and their persistence, Heavyrunner and DeCelles (2002) developed the Family Educational Model (FEM), a conceptual framework that positions family within the fabric of higher education in order to increase persistence for Native students. FEM has been used predominantly in Tribal colleges. FEM outlines several strategies. For the purpose of this chapter, I place attention on five strategies that directly relate to aspects of holism in which the whole (including cultural, racial, and spiritual) person is supported:

- Tribal college staff and students' families must work together in relationships based on equality and respect;
- Retention programs must affirm and strengthen families' cultural, racial, and linguistic identities and enhance their ability to function in a multicultural society;
- Retention programs advocate for services and systems that are fair, responsible and accountable to the families that are served;
- Student retention programs are flexible and responsible in regard to emerging family and community issues; and
- Principles of family support are modeled in all program activities, including planning, governance and administration (Heavyrunner and Decelles 2002; p. 30–31).

Mainstream colleges have adopted FEM to increase Native persistence rates, but the usage of FEM was limited within a specific program and not folded into broader institutional retention initiatives (Tachine and Begay 2013). To explore FEM, I have integrated the scholarship and experiences of grandmothers with FEM, creating grandmothers' pedagogy in higher education. Thus, I have developed a Native-specific theoretical concept that employs efforts to learn and develop, based on wholeness and liberation.

Methodology

Indigenous methodology has been what Emerson (2014) described as 'a new way of knowing and being that is so old that it looks new' (p. 58), meaning that Indigenous methodology has been employed since time immemorial. A powerful way in which Indigenous peoples have skilfully passed on methodology is through storytelling. The fluidity of storytelling and stories within Native societies has been vital and a

legitimate source of understanding and navigating through the multifaceted dimensions of life including solving problems (Kovach 2009; Archibald 2008; Denetdale 2014; Wilson 2008). There are creation stories that detail how life was formed and how we are all connected, trickster stories that are funny yet convey important life lessons, and experiential family stories that describe struggles and acts of resistance. To center Indigenous methodology in research, I utilized a mixed-methods approach that included an Indigenous approach.

Indigenous Storywork and Narrative Analysis

This study used a combination of qualitative methodologies, Indigenous Storywork (Archibald 2008) and Narrative Inquiry (Riessman 2008), as they both feature stories as an influential mode of inquiry by respecting the stories that are shared, valuing the knowledge gained through the analytical meaning-making process, and recognizing the interconnectedness between storyteller and listener. Indigenous Storywork was developed by Jo-Ann Archibald, who is from the Sto:lo Nation, in her work with Sto:lo and Coast Salish elders and storytellers as a way to bridge Indigenous storytelling into formal educational contexts. Seven theoretical principles guide Indigenous Storywork including adhering to respect, responsibility, reciprocity, reverence, holism, interrelatedness, and synergy. Overall, Indigenous Storywork acknowledges and claims Indigenous ways of knowing into research.

Narrative Analysis complements Indigenous ways of knowing, such that narrative analysis acknowledges that 'individuals must now construct who they are and how they want to be known' (Riessman 2008, p. 7). For Native people who have often been operationalized by non-Natives, reclaiming the research space by asserting 'who they are and how they want to be known' is a promising step towards decolonizing methodologies (Smith 1999). Narrative Analysis refers to a family of methods for interpreting texts that have in common a storied form (Riessman 2008). Narrative Analysis provides a space where people can make sense of the past, engage others in the experiences of the storyteller, and mobilize others into action for progressive change.

Research Site and Recruitment

The Southwest region of the USA is an ideal place to garner stories of Native student experiences because the location is home to many distinct federally recognized Tribal Nations, and is in an area that has the largest American Indian and Alaskan Native representation (US Census Bureau 2011). This study was conducted at a state university within the southwest. To protect the anonymity of the students, the pseudonym of the school is Big State University (BSU), a large, public research institution located in a state with a high concentration (5.3%) of Native peoples

when compared to the national average of 1.2% (U.S. Census Bureau 2015). Despite having a higher concentration of Native peoples in the state, Native students are under-represented at every level at BSU, accounting for only 2% of the overall population.

As I worked on the Big State University's Institutional Review Board (IRB) for conducting ethical research, I took steps towards seeking approval from the Navajo Tribe. Tribal Nations are distinct sovereign entities and many Tribes have their own process of conducting research with their people. I focused on Navajo students because they represented the largest student group attending BSU, they are the second largest Tribal group in the USA, and there is limited research on their experiences in entering college. Moreover, because I am Navajo I wanted to give back to my community by sharing the experiences of my people. Before acquiring Big State University's IRB approval, I consulted with the Navajo Nation IRB to see whether Tribal approval was needed for this study. Research that follows Tribal protocol is extremely important, as devastating circumstances have resulted from abusing research practices among Native peoples (National Congress of American Indians 2015). I learned that because this study would occur outside the juridical boundaries of the Navajo Nation, Tribal approval was not warranted as articulated in the Navajo Nation Human Subjects Code which states: 'The purpose of this Code is to set forth the conditions under which investigators, physicians, researchers and others may perform research activities on living human subjects within the territorial jurisdiction of the Navajo Nation' (Navajo Nation Code 3252, 2002, p. 295). With that understanding and upon review through Big State University's IRB process, I was approved to conduct the research.

Through purposeful sampling, ten full-time, first-time Navajo freshman students were selected to take part in this study. To protect the anonymity of the students, all students' names in this chapter are pseudonyms. I worked with the Native student support service offices to assist me in recruiting students by sending out emails to potential students through their LISTSERV. The ten Navajo students consisted of six female and four male students. They were all traditional college-aged students, meaning that they were between eighteen and nineteen years of age, had just graduated from high school and were in their first year of college. They were enrolled in various majors including political science, physics, pre-medicine/pre-nursing, natural resources, architecture, and engineering. Six students had attended Navajo Reservation high schools throughout 9–12th grades, two students had attended off-reservation high schools (located in border towns of the Navajo Reservation) and lived in school housing with other Native students for most of their 9–12th grade schooling, and two students had attended urban schools throughout their 9–12th grade schooling.

I conducted four open-structured, conversational in-depth interviews with each student throughout the spring semester of their freshman year, in 2013. A guiding interview question protocol was used at each interview; however, an open-structured conversational approach showed respect for the participant's story by allowing for the person to share openly what they wished to share, ultimately allowing the

'stories to breathe' (Kovach 2009, p. 99). Each interview averaged between two and two and a half hours.

The analytical process is not linear, as much of what I have described below occurred fluidly, sometimes simultaneously, and was often circulatory. Using thematic analysis, students' stories were first analyzed as a whole (Reissman 2008), whereby I listed all the themes that were emerging for each student. Then, using a constant comparative analysis, themes were compared to other themes within and across students' stories to see how they were similar and/or different (Merriam 2009). Furthermore, drawing pictures helped me with the analytical process. Archibald (2008) recognizes that 'by requiring visualization, the storyteller [researcher] is making the listener or learner use his/her imagination' (p. 134). This work is part of a larger study that looked at 'monsters', or challenges, that Navajo students encountered and the 'weapons', or sources, that helped them to navigate through those challenges (Tachine 2015). Within the weapons theme, trusting relationships and vulnerability emerged as one area of inquiry. I transported the analysis process to NVivo, a qualitative software used to analyze data. Codes were created, based on the themes that emerged from the prior stages that reflected my research questions and explored grandmothers' pedagogy of story sharing, openness to vulnerability, and motivation.

Guided by Indigenous Storywork's theoretical principles, I utilized mutual thinking, memo-writing, and peer review to validate the findings. For example, an important aspect in the formation of the students' stories was to ensure that they were interpreted and told correctly. I accomplished this by first offering students the opportunity to read over their interview transcripts and make corrections and/or add new information towards 'mutual thinking' where we get to know one other, including understanding cultural traditions and protocols, and establishing a consensual working approach (Lighting 1992). Secondly, I worked with students to ensure that I was culturally sensitive to their story by sending them copies of the findings and inviting them to provide feedback and make changes. Third, I utilized personal journaling and memo-writing as a way to trace personal analysis, formulate concepts, and document emerging ideas that helped to make meaning (Kovach 2009). Finally, I presented initial findings to a group of Native researchers and college students as a way to ensure that my interpretation was culturally nuanced in the students' terms. These steps were crucial to ensuring valid representation of the findings.

Findings

All ten students revealed remarkable stories of grandmothers and identified how vital their grandmothers were in guiding them through various challenges in college. Most often, grandmothers shared hardship stories with students and directed life lessons through experiential teachings. Grandmothers also comforted students while they withstood personal struggles. Because of their grandmothers' stories of

vulnerability and resiliency, life lessons, and love, students were equipped to press on towards their goals of going to college.

Story Sharing

Jessie, Sam, Joy, Amber, Cecilia, and Sarah explained that recalling and comparing their difficult experiences with their grandmothers' personal hardship stories instilled in them a determination to push through their own struggles. Amber questioned whether she would be successful in college, but remembering her grandmothers' boarding school stories made her reassess her situation. Amber stated, 'I don't know if I can do this, and they [grandmothers] would always tell me about their boarding school stories, and what they had to go through, and what a better place I am in now. My situation is for the better.' Being reminded of her grandmothers' stories of boarding school life redirected Amber to reassess her situation and then work through it. Joy had a similar experience. She shared her thoughts about listening to her grandmother speak about the past. She explained, 'It's just something about when they told me stories, like the way they endured all those difficult hardships and how much more they had to go through compared to what we go through today. A lot of the stories, you can really visualize all these things. … Nobody else can tell stories like that.' Their grandmothers' personal stories of adversity instilled perseverance in students as they worked through their own tough circumstances. In essence, students believed that because their grandmothers had endured much more suffering, they should be able to conquer their obstacles too.

Openness to Vulnerability

While Jessie, Cecilia, Joy, Amber, and Sarah dealt with complex personal and family trials, it was the straightforward, loving advice from their grandmothers that enabled them to maneuver through their challenges. As Jessie battled depression and contemplated suicide, her great-grandmother was the only person she confided in about her personal struggles. Jessie openly discussed the significant conversation that she had with her great-grandmother:

> She told me, 'You shouldn't question your life. You were put on this earth for a reason. You shouldn't take it for granted. You shouldn't take away the life that you were given.' She continued and said, 'When you were sick, you were given that second chance to live and you know the Creator thought this person is going to become somebody so I'm going to give her the chance to live longer.' And she said, 'I feel you're taking it as a joke like you don't care, like you just want to kill yourself.' And I was just like, 'oh.' I mean she didn't yell at me, she was just talking to me. It made me cry, and I said, 'No, I don't feel that way. You're not understanding me.' But it was what I needed to hear at that time. It was that relief, it was just like ok, yeah, you're right, I'm not doing something right here, I don't know what is wrong with me. Pretty much, I think she helped me. She said, 'I'm here if you

need to talk to anybody.' I have always felt that really good connection with my great-grandma.

During a time when Jessie felt alone and on the verge of despair, she confided her darkest secret of contemplating suicide to her great-grandmother. Connecting with her great-grandmother was extremely powerful for Jessie because she told Jessie that she had a purpose in life, a reason to live, and that insight was what prompted Jessie to re-evaluate her situation. Jessie's great-grandmother passed away later that December, soon after they had their talk. Jessie commented, 'I was really fortunate enough to have talked to her the way I did before she left and to have that intimate conversation with her.' Similar to Jessie, Cecilia battled depression and suicidal thoughts, and it was her paternal grandmother who gave her encouragement. Cecilia saw her as a symbol of 'strength' as she 'understood where I was coming from, especially with my experiences.' Grandmothers served as influential sources of support for students.

Motivation

The level of adoration and respect for grandparents was profound. For example, Sarah explained that her main motivation to get a college degree was to have the resources to one day provide for her grandparents. Sarah was accustomed to caring for her ailing grandmother who was battling diabetes. Her grandmother had several seizures, and it was Sarah who held and secured her grandmother when seizures struck her body. Eventually, her grandmother had to have both her legs amputated as her diabetes worsened. In tears, Sarah shared:

> My grandma, she's like my best friend. It's hard because my grandma and grandpa, they both are in nursing homes now. When I was younger I promised myself; they are not going to go in there. I'm going to always be here and take care of them. But as I grew older, you know, I can't take care of my grandparents without anything to fall back on. How am I supposed to get them places if I don't have a ride [vehicle] or gas money or anything? … And it just hurts so much. But that was my main influence. Once I get done, I will bring my grandparents home, and I don't care how much money it will take, I'm going to do it. I'm going to bring my grandparents home … That's how much I love my grandma. That is one of my motivations, and you know knowing that I could have some money, and a home to care for them, where they would feel most comfortable, that's what gets me through you know, day to day.

During her later years of high school, Sarah's grandparents were both residing in a nursing home. She was accustomed to being near them, learning from them, and caring for them. Knowing that her grandparents were no longer living at their homestead was distressing for Sarah. Therefore, this was a catalyst for Sarah to attain a college degree and to one day have the resources to tend to her best friends, her grandparents.

Through stories of historical adversity, intimate opportunities to disclose the private conflict, grandmothers exemplified wisdom and love to students. Having an

open and trusting relationship to be vulnerable, students were equipped to withstand adversity and overcome obstacles, and have the motivation to move forward.

Grandmothers' Pedagogy

What do I mean when I refer to grandmothers' pedagogy? I shared evidence that grandmothers' teachings of sharing stories and being open to vulnerability provide a beautiful space where students reflect upon their circumstances and are motivated to move forward through difficulties. Principles of listening, sharing stories, openness to vulnerability, trust, and motivation are traditional practices that assert and honor Indigenous ways of knowing. These powerful exchanges have been passed down from generation to generation as tools, or gifts, to help Indigenous peoples navigate through life.

Through grandmothers' pedagogy, institutions can learn from students, and reflect on and improve upon our work to support and increase students' retention and graduation rates. This process is an insightful way for practitioners and administrators to not only learn from students, who are often ignored or rendered invisible, but also provide a space for marginalized students to speak from the margins, validate their experiences, and share their stories of success.

An area of research that should be further explored is considering the gendered dynamics among Indigenous students. Indigenous men and non-gender-conforming identity groups must be included in thinking about family support and grandmothers' pedagogy. As mentioned earlier, the Navajo students in this study come from a matrilineal society in which women figures are respected and integral to family cohesion. Yet not all Navajo and Indigenous peoples should be considered as following a matrilineal worldview. There is much diversity among Indigenous peoples and, therefore, views should be critically examined and not generalized. What we must not forget is how Eurocentric frameworks of patriarchy and sexism have been embedded into our society, thus creating complex and tangled perceptions of being a woman, mother, and grandmother.

Currently, higher education and society at large do not use a grandmothers' wisdom framework to inform practice. Yet grandmothers are the pillars of many families. We can learn much from the teachings that they provide to our students and us. I believe if higher education institutions were to embody a loving, grandmother-like atmosphere and environment on our campuses, we would incorporate more programs and practices that teach others to care for one another. I am fortunate to have worked in various environments where grandmothers' practices of listening, story sharing, and openness to vulnerability have occurred. Let me share briefly what those looked like.

Arizona State University (ASU): Listening Sessions

As a postdoctoral scholar, I have worked with Dr Bryan Brayboy who fulfills many important roles at ASU. One critically important role is that of Special Assistant to ASU President for American Indian Affairs, where he works with ASU to increase retention and graduation rates for Native students. To better understand Native student concerns, he led a series of listening sessions with Native students across ASU's various college campuses. These listening sessions were built around learning from students about their college experiences, including listening to the challenges they encountered and the successful practices and programs that influenced their college matriculation. We received feedback from students indicating that they were pleased that an upper administrator took the time to not only listen to their experiences, but also fully engage in getting to know them. These listening sessions included FEM practices by providing a space where 'college staff and students can work together in building relationships based on respect' (Heavyrunner and Decelles 2002, p. 30). Moreover, grandmothers took the time to listen to students, especially regarding the challenges that they were encountering. When institutions of higher learning take the time and simply listen to Native students, by asking them what their experiences in college have been like, grandmothers' pedagogy of listening occurs.

University of Arizona (UA): Sharing Circles

To build on listening by then engaging in conversations, sharing stories, as we learned in the findings, was also found to be a crucial strategy in helping Native students in college. At the UA, a series of sharing circles – an Indigenous qualitative methodological approach – was conducted with Native college students (Tachine et al. 2016). Similar in nature to the listening sessions held at ASU, the sharing circles were an opportunity for students to share their collegial experiences. However, what was unique about UA's approach was that the sharing circles were designed as an exploratory research study led by Native graduate students and faculty in higher education, in partnership with the president of the university, vice-president of student affairs, and various student affairs leaders. The impetus of the sharing circles was similar in nature to grandmothers' pedagogy of story sharing: to learn from stories and then teach each other. For example, results from the sharing circles will be disseminated to university personnel and Tribal communities as an informative teaching tool that sheds light on the experiences of Native college students, in the hope that programs and practices will be strengthened to support their needs.

UA: Openness to Vulnerability

During a tragic period that impacted the UA Native community, I served as the director of UA's Native American Student Affairs (NASA), a Native student center that provides personal and academic support. At that crucial time, I witnessed UA open spaces for vulnerability that ultimately helped the healing process. For example, UA administrators allowed our Native student community to conduct a traditional Navajo cleansing ceremony in the residential hall where the tragedy occurred, and at NASA because of its direct connection with Native students. As I reflect back to that time, I am sure that some administrators felt uncomfortable and vulnerable participating in, and even approving, the ceremony. This scenario reminds me of when Native students shared traumatic personal stories with their grandmothers. At those difficult times, grandmothers displayed love and understanding by listening to students and meeting their grandchild where they were at. Higher education institutions like UA not only listened, but joined Native students during their times of struggle, and opened spaces for vulnerability to emerge by allowing cultural and spiritual traditions to help heal and strengthen a campus community.

Final Thoughts

Too often, in higher education, we do not take the time to nurture our Indigenous students. When we implement pedagogies that center on an ethic of care for Indigenous students, we will be informed about how to transform a campus environment into a loving and caring home environment for all students. Colleges should adopt practices where sharing circles and listening sessions are regularly applied. Careful attention and training would be needed for the people who lead such sessions to ensure that students' stories were treated with respect and not misinterpreted. Furthermore, like a tender grandmother, we must hold our children (students) during times of distress by implementing ceremonial protocols and policies that allow for students to freely practice their traditional, spiritual teachings.

From a grandmothers' perspective, we may look at college with a wiser outlook. In the college admissions selection process, we would not solely base admittance upon whether students were 'the cream of the crop,' but from a view of love and acceptance. We would see persistence not in terms of 'grade point average and credits earned,' but nurturing the development of self. We would understand that graduation is not simply completion and a bid farewell, but a stepping-stone of growth, and show this by offering continued guidance and support. We would examine our work based on the best interests of our children (our students), not the best interests of the institution or ourselves. We can learn a lot from a grandmother higher education pedagogy that honors listening, story sharing, and an openness to vulnerability.

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Chapter 11
Tackling Indigenous Incarceration Through Promoting Engagement with Higher Education

Christopher Lee, Helen Farley, Jacinta Cox, and Stephen Seymour

Introduction

In Australia, nearly 39,000 people are in prison. But the more disturbing statistic is that Indigenous prisoners account for some 27% of the prison population, yet only 2% of the general population (Australian Bureau of Statistics 2016). Between 2000 and 2013, the imprisonment rate for Indigenous Australians increased by 57%, while the rate for non-Indigenous Australians has remained relatively stable (Taillier 2015; Martin 2015). By the end of 2014, Indigenous Australians were twelve times more likely to be incarcerated than other Australians, and at the time of writing, the rate of imprisonment had risen an additional 6.3% from the previous year (Australian Bureau of Statistics 2016).

Indigenous Australians are more likely than non-Indigenous people to experience higher and more frequent levels of contact with the criminal justice system, with shorter times between contacts (Allard 2010). They are almost twice as likely as non-Indigenous people to be charged with an offence more than once (Allard 2010). Those risk factors for offending that apply to the wider Australian population are just as applicable to the Indigenous population. These include being young, from a low socio-economic status background, unemployed, a substance user and with limited education (Hunter 2001; Weatherburn et al. 2006). However, data drawn from surveys such as the National Aboriginal and Torres Strait Islander Social Survey (NATSISS) have found Indigenous people experience additional risk factors arising from insecurity around cultural identity (Hampton and Toombs 2013). Although difficult to measure, these risk factors can be linked to historic dispossession, colonisation, disempowerment of elders and forcible child removal, and are believed to be significant contributors to social disorganisation. This is

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characterised by intergenerational cycles of substance abuse, neglect and violence within and between families (Allard 2010), impacting on the larger community and engendering feelings of hopelessness, helplessness, despair and rage (Memmott et al. 2001).

This chapter reports on a project led by researchers at the University of Southern Queensland (USQ), which aims to increase access to higher education for Indigenous prisoners. The project, which is currently active in 20 sites in Queensland, Western Australia, New South Wales and Tasmania, has developed digital technologies that don't require access to the internet and allow prisoner access to a series of university courses and programs. Prominent in these offerings is a pre-tertiary program, the Indigenous Higher Education Pathways Program (IHEPP), designed specifically to act as a bridge into higher education for Indigenous prisoners. The chapter concludes with an examination of some of the other offerings the university is considering to effectively support Indigenous students both while they are incarcerated and upon release from custody.

Educational Attainment and Incarceration for Indigenous Australians

The intergenerational effect of insecurity around cultural identity is strongly correlated with increased levels of incarceration (Allard 2010). This is evidenced by the fact that Indigenous children are three times more likely to be removed from their families if a parent was forcibly removed. Also, these people are twice as likely to manifest behavioural issues relating to alcohol and drug abuse than their peers who escaped this trauma (Allard 2010; Zubrick et al. 2005). These behavioural issues almost certainly bring these people into contact with the criminal justice system. The detention rates for Indigenous youth is a staggering 24 times that of non-Indigenous youth (Allard 2010; Dodson and Hunter 2006). The policies leading to the forcible removal of children and subsequent institutionalisation have severely damaged the parenting capacity of many Indigenous parents. Having ineffective parents has been identified as a very significant risk factor for offending, as it contributes to high levels of truancy among young Indigenous people, compounding the ongoing cycle of boredom and unemployment. Research suggests that poor school attendance could be responsible for as much as one third of the difference in educational attainment between Indigenous students as compared to other young Australians (Hancock et al. 2013).

It is acknowledged that educational attainment is correlated with personal and social wellbeing across a range of indicators such as health, employment, housing, and contact with the criminal justice and welfare systems (Levin 2009). People with higher levels of educational attainment are less likely to have been arrested in a five-year period than those with lower levels of education (Australian Bureau of Statistics 2015). Research also shows that rates of recidivism are reduced by as much as 30%

among released offenders who, while incarcerated, obtained a post-secondary qualification (Callan and Gardner 2005). This is echoed in the 2013–2014 Custodial Inspector's Annual Report to the Western Australian Government, where it is stated that a key factor in reducing the risk of reoffending was educational attainment. The report goes on to say that prisoners who had completed only part of a secondary education, without pursuing further qualifications, were more likely to reoffend as compared to prisoners who had completed secondary schooling or a higher qualification (Morgan 2014).

Education is central to the economic, social and cultural development of an individual. An Indigenous adult who possesses a Bachelor's degree is over three times more likely to be able to secure full-time employment than another who has not finished year 10 (SCGRP 2009). It is reasonable to assume that participation in higher education may have a positive impact on Indigenous health outcomes, employment and productivity as it does with non-Indigenous people (Levin 2009). Access and support to engage with education is a crucial part of any wider strategy that seeks to address unemployment, financial stress, welfare dependence, housing challenges and health programs for Indigenous people, in particular for those who are incarcerated. Those agencies responsible for the supervision of prisoners need to ensure good access to vocational and higher educational opportunities, both while incarcerated and on release from custody (SCGRP 2009).

Education in Prison: Learning 'the Hard Way'

Correctional centres are challenging learning environments, even for the most committed student. By their very nature, they are stressful, noisy, disorientating and depressing environments (Torre and Fine 2005). Skyrocketing imprisonment rates have led to overcrowding in every Australian jurisdiction with the exception of Tasmania (Australian Government Productivity Commission 2015). This results in two or three prisoners sharing cells that are designed to house one person (Mackay 2015). This can be difficult for the prisoner who wants to study being distracted by his or her cellmate who wants to talk, listen to music or watch television. In addition, institutional 'norms' such as daily lockdowns, cell searches and head counts cause frequent disruptions (Hopkins and Farley 2015). Security restrictions, cultural constraints and inconsistent staffing may prevent students from accessing education centres, resources and support. The increasing privatisation of prisons comes with additional implications for students (Andrew 2007) who find themselves on strict working schedules without adequate study time (Hopkins 2015). Prisoners are moved between correctional centres or even released, often with little advance notice, further disrupting study.

Undoubtedly, the prison environment is not conducive to effective studying for any prisoner, but Indigenous students experience further challenges as compared to their non-Indigenous counterparts. Geographical separation from country, combined with lateral conflict inside correctional centres, may trigger complex issues

for Indigenous prisoners that cannot readily be resolved. These issues are compounded by a lack of appropriately qualified and culturally sensitive staff (Miller 2007). Incarceration often leads to heightened Indigenous anger, leading to even greater levels of fear and frustration (Grant 2014). Research also suggests that many prospective Indigenous students are reluctant to enrol in studies due to low levels of literacy and numeracy, feeling shame when they can't do a task (Callan and Gardner 2005).

Across the board, incarcerated students are further disadvantaged by low levels of digital literacy skills. These skills are now considered essential in nearly all workplaces, and are increasingly important in daily life for banking, shopping, interacting with government departments and accessing services (Farley et al. 2015). Research exploring the digital divide has identified that even outside of correctional centres, Indigenous people are excluded from fully leveraging the benefits of the digital age. Data from the 2011 Australian Census confirm this, with figures showing 63% of Indigenous households having internet access, compared to 77% of non-Indigenous households (Australian Bureau of Statistics 2013). Though this figure is likely to have improved when measured in the 2016 census, the disparity between Indigenous and non-Indigenous households is likely to endure.

Higher Education on the Inside

Only 1.5% of the eligible Australian prison population is engaged in higher education, with conditions of eligibility differing markedly between jurisdictions (Australian Government Productivity Commission 2015). The numbers of incarcerated students undertaking a specified higher education program in a particular correctional centre are very small. This mostly precludes the economic feasibility of universities providing face-to-face tuition in correctional facilities. In addition, correctional facilities are frequently very remote from university campuses. This is frequently true of those correctional centres with a high proportion of Indigenous prisoners. For example, the prison population of Lotus Glen Correctional Centre in Far North Queensland is 70% Indigenous (Queensland Corrective Services 2015). The closest university campus to this centre is the Cairns campus of James Cook University which is some 90 min drive away. The situation is even worse for some correctional centres in Western Australia and the Northern Territory that are even more remote from university campuses in metropolitan centres. In addition, educators are frequently wary of going 'behind the wire' at correctional centres either due to fears for their own safety and/or because of prejudice against prisoners ('they are in there for a reason') (Warner 1998). For these reasons, correctional jurisdictions have turned to distance education providers for the provision of higher education in correctional centres. Some universities have provided higher education specifically to Indigenous students in correctional centres. CQUniversity, through its Nulloo Yumbah Indigenous learning, spirituality and research centre, delivered its Tertiary Entry Program into the Capricornia Correctional Centre as well as supporting

prisoner access to other CQUniversity programs. The University of New England's TRACKS Tertiary Preparation Program has been delivered widely into correctional centres in Queensland (Woodford Correctional Centre) and New South Wales (Behrendt et al. 2012).

Distance education has traditionally been used to engage prisoners in higher education, delivering resources to students who are unable to undertake traditional face-to-face education (Salane 2008). Until recently, formal education and training delivery to prisoners in these jurisdictions was provided in non-digital forms, using large volumes of printed copies of the course materials and learning support resources, sometimes supplemented by CDs for use on in-cell laptops in some jurisdictions or in computer labs (Dorman and Bull 2003). This is costly for universities to assemble, print and post, is in no way interactive, and cannot incorporate all of the learning support resources of the course. Incarcerated students often have very little or no contact with each other and are not able to leverage the social learning supports that are available to students engaged in online courses. This undermines the social constructive pedagogy favoured in many post-secondary programs and poorly prepares students for the world in which employers expect their employees to be familiar with social networking and other web 2.0 resources (Erisman and Contardo 2005). Furthermore, the traditional forms of delivery to incarcerated students do not enable them to develop the crucial graduate attributes promoted by most universities, including the digital literacies, collaborative teamwork and critical thinking skills required to complete studies in higher education and to obtain meaningful employment after release from custody.

These issues are hugely exacerbated by the fact that prisoners in most Australian jurisdictions are not permitted to access online learning technologies due to procedural restrictions prohibiting prisoner access to the internet (Farley and Doyle 2014). This becomes problematic as most universities shift to a predominantly online delivery of their courses and programs. For example, in Semester 1 2015, USQ moved all of its courses and programs online and ceased production of hard-copy materials, including CD-ROMs. Though the university did slightly relent and still provides hard copy materials to incarcerated students enroled in the Tertiary Preparation Program, this is an interim measure. It is expected that these activities will not be funded beyond 2017 at the latest, and alternative methods of program delivery will need to be found or the provision of higher education into correctional centres will cease. In response to this urgent need, researchers began work on a series of projects to introduce digital technologies, which do not require access to the internet, into correctional centres to provide access to enabling and undergraduate programs. These projects will be described later in the chapter.

The University of Southern Queensland is the largest provider of higher education into correctional centres in Australia. It has been providing distance education into Australian prisons for some 25 years. The Tertiary Preparation Program, offered by USQ's Open Access College, was written specifically as a bridging program for incarcerated students and was later adapted for a broader (non-incarcerated) student cohort. At any one time, there are around 300 incarcerated students participating in the program (of about 900 enrolments). In addition, there are around 150 incarcerated

students from around Australia enrolled in a range of undergraduate programs. Though exact numbers are not known, very few (thought to be less than 2%) of these incarcerated students are Indigenous. This is thought to be because of the lower rates of educational attainment compared to non-Indigenous prisoners, because of the reluctance of Indigenous prisoners to engage with non-Indigenous prisoners to study (and vice versa), because of traumatic previous experiences with formal education, and because, to date, materials have not been culturally appropriate (Day 2003). USQ currently supports a large number of Indigenous students. Since 2009, Indigenous students have made up 1.6% of USQ's enrolments (in comparison with the national average of 0.7%). Incarcerated students make up some 1.3% of USQ's student population over the same period.

Improving Access to Digital Higher Education in Correctional Centres

The University of Southern Queensland's mission is 'To enable broad participation in higher education and to make significant contributions to research and community development' (USQ 2012), consistent with the recommendations of the Bradley Review of Higher Education (2008). The motto that USQ promulgates is *Per studia mens nova* – 'through study the mind is renewed' – and the university achieves this by making a significant contribution to the building of human and social capital through ensuring higher education is accessible to people regardless of their location and individual circumstances.

The first projects undertaken by the university to provide access to digital higher education did not have a specific focus on Indigenous prisoners. Though these students were encouraged to join the projects, participation by this group tended to be very low for reasons outlined previously. Each project built on the learnings of the previous project, ensuring that the outcomes of each were robust and repeatable before scaling up.

Approach and Evaluation

The projects were undertaken using a design-based research methodology which is a blend of empirical research and the theory-based design of learning environments (Design-based Research Collective 2003, p. 5). The method centres on the systematic investigation of innovations designed to improve educational practice through an iterative process of design, development, implementation and analysis in real-world settings (Wang and Hannafin 2005). A major strength of design-based research lies in its adaptability to adjust the intervention based on ongoing findings from participants.

An independent formative and summative evaluation was undertaken by an external evaluator with expertise in project evaluation within educational contexts for each project. The evaluation was undertaken at the commencement of each project as well as at the conclusion of each project stage to provide an audit of project processes, progress towards intended outcomes, potential pitfalls and the quality of the outcomes achieved. For *Making the Connection*, in addition to an external evaluator who scrutinises project processes and evaluation, the project has an Indigenous evaluator, Professor Peter Radoll, who advises on strategies for engaging with Indigenous prisoners and external stakeholders. The team uses the evaluation feedback to inform the planning of consequent stages, thus improving the outcomes. Several sources of data are used including critical feedback from stakeholders, focus groups with the incarcerated students, and interviews with education officers. As a consequence of student enrolment, the university automatically collects data about enrolment, retention, progression and marks for each incarcerated student. Ethics approval was sought and granted to the various project teams by the University of Southern Queensland Ethics Committee and the research departments of the correctional jurisdictions in which the projects were/are operating.

Portable Learning Environments for Incarcerated Adult Distance Education Students

In early 2012, a pilot project titled Portable Learning Environments for Incarcerated Adult Distance Education Students (PLEIADES) sought to develop an internet-independent version of USQ's learning management system, a Moodle-based product called StudyDesk. The idea was to address the challenge of providing students with no internet access an equivalent learning experience to that of those students with connectivity. Early versions of the OffLine StudyDesk were trialled with incarcerated students at the Southern Queensland Correctional Centre (SQCC) in a joint initiative with Serco Asia Pacific (operators of SQCC) and Queensland Corrective Services (QCS).

Because prisoners had limited access to computer labs, they were also provided with eBook readers loaded with course readings in ePub format. These were used with one course from the university's Tertiary Preparation Program called *TPP7120 Studying to Succeed*. This pilot was trialled over Semesters 2 and 3 2012. This project was led by the university's Australian Digital Futures Institute (ADFI) with the Open Access College (OAC). The pilot was a proof of concept. Those incarcerated students responded favourably to the eBook readers and the OffLine StudyDesk. However, the project was prohibitively time intensive for both university and SQCC staff. To make this approach sustainable, the process of installing the OffLine StudyDesk had to be automated, at least to a certain extent.

From Access to Success

From Access to Success: Improving the Higher Education Learning Experience for Students without Internet Access was an Australian Government Office for Learning and Teaching-funded project that built on the PLEIADES pilot and developed a level of automation to enable the OffLine StudyDesk to be deployed on the correctional centre education server through a series of DVDs and installed by the education officer. Again, the technology was trialled with *TPP7120 Studying to Succeed* but also deployed *TPP7181 Mathematics Tertiary Preparation Program Level A* at SQCC and the Maryborough Correctional Centre (MCC). This was significant as this project demonstrated that the OffLine StudyDesk could work in a publicly run correctional centre. This project built on the partnership between ADFI, OAC, QCS and Serco Asia Pacific and ran until June 2015. Again, student responses to the technology were positive.

The Triple 'E' Project (Empowerment, E-Learning and E-Readers)

This project began in Semester 1, 2013, and also built on the PLEIADES project. The project deployed eBook readers at three additional correctional centres beyond SQCC and MCC. The correctional centres were chosen on the basis of the number of students enrolled in *TPP7120 Studying to Succeed* and strong relationships between USQ TPP staff with the correctional centre education staff. The additional correctional centres were Brisbane Women's Correctional Centre, Wolston Correctional Centre and Woodford Correctional Centre. The three additional centres are directly administered by QCS. This project was led by OAC with ADFI, QCS and Serco Asia Pacific. The eBook readers were of a different model to those used in PLEIADES and were found to be unreliable, causing significant frustration to both education officers and students. The project was prematurely brought to a close so as not to disadvantage those students using the eBook readers. They were provided with hardcopy materials instead. Those students at SQCC and MCC also used the OffLine StudyDesk in the centre computer labs.

Sorting Out University Processes

To that point, the focus had been to provide technologies to correctional centres to improve access to digital higher education for prisoners. It was also recognised that there were some barriers at the university that made studying difficult for incarcerated students. Two projects funded by the Commonwealth government sought to improve university processes to better support incarcerated students. These projects,

Paper to Pixels (2014) and *Bridging the Digital Divide* (2015), realigned university incarcerated student support processes to be more efficient, but also allowed the university to benchmark itself against other Australian universities in regard to the provision of higher education to incarcerated students and other students with unreliable internet access.

Making the Connection

In the latter half of 2013, the University of Southern Queensland was awarded $4.39 million over 3 years by the Australian Government under the Higher Education Participation and Partnerships Program for a project titled *Making the Connection: Improving Access to Higher Education for Low Socio-Economic Status Students with ICT Limitations*. Beginning in early 2014, the project built on those previous projects led by the university which trialled digital technologies for learning in correctional centres.

Making the Connection builds on *From Access to Success* by continuing to develop the Offline StudyDesk so that it is robust, repeatable and reliable. One of the findings from the earlier project was that incarcerated students had only a few hours a week to access the correctional centre computer labs. This was because of the competition from other courses and programs, including vocational programs, for space and because students were typically employed in jobs in 'industries' within the correctional centre, restricting the time available to study. To help overcome these difficulties in access, the *Making the Connection* project will be providing notebook computers to participating students so they can take them back to their cells and continue working in their personal time.

The Technologies

A team comprising university ICT Services and *Making the Connection* personnel determined that the preferred solution remained to install the Offline StudyDesk on a separate server linked to the education lab network via a network switch. In the online environment, the StudyDesk works with a Learning Objects Repository (LOR) which holds course content. Course content is vetted for copyright status and tagged with metadata to make it searchable. When a student accesses a resource via the StudyDesk, they are actually accessing that resource through the Learning Objects Repository. This is obviously not feasible for those students using the Offline StudyDesk. To address this issue, a bespoke piece of software called a 'compiler' automatically harvests objects housed in the LOR, and packages the resources with the course for export to the correctional centre. Another piece of software called a 'checker' goes through each course to ensure that files within each course are functional and that links to the internet have been removed.

At the moment, the transfer of courses between the university and correctional centres occurs via DVD. In the near future, education officers will be able to download courses through a kiosk hosted at USQ and accessed via the administrative network (which is internet-enabled). The version of the Offline StudyDesk is approximately one version behind the main production version to allow for any glitches to be ironed out.

Because incarcerated students have limited access to the computer labs, it was decided that it would be desirable for students to have a personal device that they could take back to their cells. As with the modified learning management system, these devices cannot be used to access the internet. Focus groups with incarcerated students participating in eBook reader trials in a previous project were critical of the small screen size and onscreen keyboard in these devices. Taking this feedback on board, the project team conducted a detailed options analysis of some 32 tablet computers, laptops and notebooks. It was decided that a Windows notebook would be most suitable as it had an almost full-size keyboard and adequate processing power and screen real estate would not be compromised by an onscreen keyboard. Also, students would be able to use LibreOffice to complete assessments. The project team have managed to make the Offline StudyDesk stable and reliable on the devices which are currently undergoing security certification in some jurisdictions.

Developing appropriate technologies is only part of the challenge of providing higher education to incarcerated students. Appropriate courses and programs had to be adapted for use with the technologies and use without access to the internet. Taking into account the levels of previous academic achievement in the correctional centres and jurisdictional sensitivities around students accruing Higher Education Contribution Scheme (HECS) debt, there is a focus on the courses of the Tertiary Preparation Program and Indigenous Higher Education Pathways Program, both Commonwealth-funded enabling programs that are supplemented by three diploma programs: the Diploma of Arts (Social Sciences), Diploma of Science (Environment and Sustainability) and Diploma of Business Administration.

Developing offline technologies is only part of the challenge of providing higher education to incarcerated students. Courses and programs have to be modified to function well in the offline context. A number of factors were taken into consideration when choosing programs for modification. The primary consideration was the likely previous academic achievements and experiences of the students. Many incarcerated students are from low socio-economic status backgrounds where lower academic achievement is more common. Similarly, low levels of education remain a key part of the ongoing cycle that leads to the overrepresentation of Indigenous people in the criminal justice system (Weatherburn et al. 2006). As USQ has been providing education to incarcerated students for around 25 years, the project team could access a large amount of data around the programs incarcerated students have typically enrolled in. Sentence length was an important consideration, especially given that around 90% of prisoners are incarcerated for one year or less. The project team also consulted with careers advisors at the university about the careers in which ex-offenders could reasonably expect to be employed, given that they will have a criminal record, and what programs would prepare them for those careers.

The project team consulted with university course examiners (course coordinators), heads of school and executive deans about what courses could reasonably be adapted for delivery in the correctional environment; for example, courses with significant practical or residential components may be unsuitable. It was also established that it would be more beneficial to offer a selection of courses across a range of disciplines, rather than concentrate course modification efforts around one discipline as would be necessary with a degree program.

Jurisdictional administrators expressed concern about the potential for incarcerated students to acquire a significant HECS debt. They worked closely with the project team to ensure that HECS debts would be kept to a minimum and provide the best outcomes for prisoners. Taking into account the levels of previous academic achievement in the correctional centres and jurisdictional sensitivities around students accruing HECS debt, there was also a focus on the enabling or bridging courses, specifically the Tertiary Preparation Program and the Indigenous Higher Education Pathways Program, both of which are Commonwealth-funded enabling programs. These programs articulate into a number of undergraduate programs at USQ. In correctional centres, they articulate into three diploma programs: Diploma of Arts (Social Sciences), Diploma of Science (Environment and Sustainability) and Diploma of Business Administration. Diploma programs were selected in acknowledgement of the typically short sentence length of most prisoners.

The Indigenous Higher Education Pathways Program is of particular importance to this project given the overrepresentation of Indigenous Australians in correctional centres. The program has run for a number of years at the university out of the unit now called the Centre for Indigenous Studies, Education and Research (formerly the Centre for Australian Indigenous Knowledges). A key feature of this program has been a residential school at the beginning of the semester where students can meet their lecturers and each other before returning home to continue their studies, and students who are not incarcerated still participate in that residential school. As part of the *Making the Connection* project, the program has been developed for online and offline delivery. To make up for the fact that incarcerated students cannot attend the residential school, the program has been designed to incorporate a large amount of multimedia materials and interactivity. So far three courses have been redeveloped for deployment on the offline technologies. These are: *ISE7001 Talking the Talk: Claiming your Voice within Academia*; *ISE7002 Learning the Lingo: Academic Writing*; and *ISE7003 Keeping on Track: Study Skills*. Three more courses will be developed for delivery in Semester 2 2016. These will be *ISE7004 Mathematics, as Storytelling*; *ISE7005 Walking the Walk: Applying Academic Skills*; and *ISE7006 Academic Conventions and Indigenous Research Methodologies.*

Providing a Pathway

The Indigenous Higher Education Advisory Council (IHEAC) advised that increasing Indigenous participation in higher education is one of the crucial factors in reducing Indigenous disadvantage. In line with IHEAC's Priority 1 which advocates universities working with Technical and Further Education (TAFE) providers, the project team originally brokered a partnership between Bendigo TAFE and USQ to coordinate activity and 'build pathways and raise levels of aspiration and confidence of Indigenous students' (IHEAC 2006). This approach was also recommended by Pechenkina and Anderson (2011, p. 12), who advocated:

> the formulation of 'pipeline' programmes, which increase the pool of tertiary ready Indigenous students and transition programmes which provide academic development of enhancement for Indigenous tertiary students in order to ensure their successful completion.

This project provides a 'pipeline' by providing viable pathways into higher education for incarcerated students who are likely to be from low socio-economic status backgrounds (Pechenkina and Anderson 2011). Provision of access to these sorts of pathways is often sufficient for students from low socio-economic backgrounds, and once enrolled they frequently perform as well as their peers. Non-Indigenous incarcerated students will enter the pathway through the university's Tertiary Preparation Program. Indigenous incarcerated students may need additional pre-tertiary preparation, and hence originally it was envisioned that there would be additional entry points into this higher education pathway through Bendigo TAFE (now Bendigo Kangan Institute) Certificates I, II and III in Mumgu-dhal tyama-tiyt, before articulating into the university's Indigenous Higher Education Pathways Program (CSHE 2008). Behrendt et al. (2012) acknowledged the difficulties in providing education for Indigenous incarcerated students. They also acknowledged the societal and individual benefits to be gained by persevering. Unfortunately, due to uncertainty around delivery and funding in the vocational sector, the project team had to reluctantly delay the incorporation of additional vocational entry points into the pipeline into higher education for Indigenous incarcerated students. However, in the course of talking to Indigenous prisoners and correctional jurisdictions, the team has become even more convinced that these additional entry points are important and are talking with potential partners in multiple jurisdictions to this end.

Engagement with Indigenous Incarcerated Students

A major part of the project is focused on student engagement and outreach where two engagement coordinators liaise directly with students, where appropriate, to encourage them to participate in the project. The project has employed an Indigenous Engagement Coordinator who is Indigenous to talk directly to Indigenous prisoners. A former correctional officer himself, he visits in scope correctional centres and

talks to Indigenous prisoners about a range of issues including education. The engagement coordinator builds relationships with the Indigenous prisoners over time, gaining their trust and learning about each prisoner's particular circumstances. At an appropriate time, he talks to them about engaging with the project. Sometimes it is not appropriate that they work with the project and he may direct them to numeracy and literacy classes or other programs instead. The project is careful to guard against setting Indigenous students up to fail, especially as they often already have low levels of self-esteem due to previous traumatic experiences with formal education.

While the authors acknowledge that there are a number of disciplinary and individual viewpoints when considering Indigenous ways of learning, it is beyond the scope of this work to revisit these controversies. A fuller description can be read in the work of Donovan (2006) and Yunkaporta (2009). Even so, some current research suggests that Indigenous ways of learning may align with what the university's StudyDesk environment offers (Donovan 2006; Duggan 2009). For example, the platform allows for culturally relevant and complex imagery or materials that align with traditional Indigenous learning techniques to be embedded in courses. Although none suggest that these approaches are the only way in which an Indigenous person can learn, this approach reinforces a strong foundation in holistic (global) learning which includes visual/spatial skills, and contextual and spontaneous learning (Duggan 2009).

The Indigenous Community Engagement Coordinator has developed a culturally appropriate and sensitive Indigenous incarcerated student engagement strategy that acknowledges recognised Indigenous pedagogies. For the sake of harmony, practicality, expedience and simplicity, the various assertions and models of Aboriginal pedagogy in the corpus may be reorganised into eight accessible orientations, (1) deconstruct/reconstruct, (2) learning maps, (3) community links, (4) symbols and images, (5) non-verbal, (6) land links, (7) story sharing and (8) non-linear methodologies, to inform the *Making the Connection* project's Indigenous incarcerated student engagement strategy (Yunkaporta 2009).

Indigenous cultures are acknowledged as oral cultures where information and knowledge were handed down through song, ceremony, dance and images. As oral traditions still continue in many communities, the project's approach to engaging with Indigenous incarcerated students' needs to accommodate these protocols. This is especially true in correctional centres where the stories may not be creation stories but are nonetheless stories which have been handed down. Indigenous people use language which is a combination of Aboriginal English, Creole, slang and swearing. Formal English is very often not the first language for many Indigenous prisoners (Malcolm and Königsberg 2007). The formal English language of higher education can itself be a barrier to participation in higher education for Indigenous prisoners (Miller 2007).

The Indigenous Community Engagement Coordinator is developing the story of the USQ Offline StudyDesk initiative and will work closely with education officers and cultural liaison officers in all scope centres but particularly Wolston Correctional Centre, Brisbane Women's Correctional Centre and the Southern Queensland

Correctional Centre at Gatton to engage with Indigenous prisoners. The project is working on triggering motivations for incarcerated students to engage with education and break the cycle of reoffending and re-incarceration. As the project has a limited time frame, developing the necessary relationships with incarcerated students will require establishing connections through existing relationships including the education officers and cultural liaison officers at each correctional centre. The Indigenous community engagement coordinator is working closely with the College for Indigenous Studies, Education and Research at USQ to prepare the new version of the IHEPP to be accessed through the Offline StudyDesk initiative.

Results

The project team conducts focus groups with participating students as often as possible, which is difficult given that students are now spread out across the country. Focus groups are assembled opportunistically when project team members visit a correctional centre to deploy technologies or onboard new education staff. Focus group members are usually participants in the project but in some instances are prisoners considering joining the project. Not all participants joined the focus groups. Often conflicting work schedules or lockdowns prevented their participation. Generally speaking, prisoners are usually over 28 years of age. Education officers report that younger prisoners are generally not ready to undertake study. Both male and female prisoners have participated in focus groups. Initially, detailed notes were taken as it was very difficult to bring electronic recording devices into correctional centres. More recently, these restrictions have been relaxed and a small digital recorder is used to record discussions. These discussions are then transcribed using a professional transcription agency. Though interview guides were written and used, focus group participants tended to drive the discussions to also cover topics they were interested in. These discussions frequently centred around course materials and assessments. Discussion guides were intended to elicit responses around the ease of use of technologies, the nature of the correctional learning environment, challenges encountered by students trying to study, and previous experiences around study and technology.

To date, there have been some 622 enrolments across 20 sites in four states. Even so, the numbers of Indigenous students that have participated remain small. This is primarily because the Indigenous Higher Education Pathways Program courses have only been available since the beginning of the current semester. It is expected that the numbers of this cohort enrolled in the project will significantly increase from now on. In addition, the Indigenous Community Engagement Coordinator has only been employed with the project for some 5 months. One of the things that has become apparent during the course of the project is that courseware must also be supplemented with additional cultural materials for Indigenous prisoners. Even though cultural liaison officers do the best they can with limited resources, this is an area that has seen repeated funding cuts in response to the rising costs associated

with increasing rates of incarceration and overcrowding. The project team is considering a crowdfunding campaign in order to buy cultural resources that can be placed in the correctional centre library or electronic versions placed on the *Making the Connection* offline technologies.

During the planning of the project, it was expected that the digital literacy of students would be low. To overcome this potential issue, the project team ensures that the education officers and IT support staff are trained in the use of the technologies. These staff, in turn, would support the students in the use of the project technologies. The prior levels of experience of the students with computers and mobile devices was mixed, with some students (usually those who had been in prison for a shorter period of time) being more familiar with the technologies than others. This was evidenced by the following pre-deployment focus group responses:

Facilitator: Have any of you used a smart phone before?
Student A: I played around with one before. I used an iPhone before I came in here; it was a piece of crap. I messed around with it, but didn't actually use it.
Student B: I've never even seen a mobile phone other than on TV.
Facilitator: You've never seen a mobile phone?
Student B: Nope, only on TV.
Student C: For a lot that are studying here, technology hasn't been around for them for say the last five to ten years, they haven't done any sort of training at all.

The variability in the digital literacies of students as well as staff had the potential to impact extensively on the effectiveness of the project. Students may not make effective use of the technologies as a result of lack of knowledge about how they worked and education officers were often not aware of the necessary features to assist students effectively in spite of training by project team members. The project team have tried to overcome this by bringing education officers to USQ for specific training around the use of the technologies (as well as around university processes and support). In addition, the project team are in frequent telephone contact with the education officers and try to troubleshoot issues as they arise. There is also a dedicated number that education officers can phone if issues arise.

Before the *Making the Connection* project, education officers or their equivalents had to download and print materials where possible for pre-tertiary and undergraduate students. Education officers primarily have an administrative role and generally are not able to offer tutorial support to students. Though the *Making the Connection* project is unable to provide tutorial support for students, it is believed that the availability of multimedia materials and interactive activities will promote engagement of students with the programs offered. Students have been largely positive about the project, technologies and programs offered. Access to education can change students in ways beyond making them more employable. Here are some testimonials from incarcerated students. These responses show the diversity of motivations that prisoners have to engage in study. Many become almost evangelical about the benefits of study.

Student A: It's interesting that they treat education different to the core programs, when in fact it is the best form of rehabilitation. You are not going to change your person from some silly little six-month course … educate a person and give them the skills they need to have a legitimate, successful employment status. If you don't give them the tools they need, they are going to go nowhere. They definitely should be pushing the education flagship much, much further.

Student B: I found it as an opportunity to redeem myself with my education. I really enjoy learning again. I was involved with drugs for a while but now my mind is clear. I really enjoy learning again.

Student C: Having my kids see me and see me move on to a career – so my kids can see I am going to turn my life around. Hopefully, I can turn things around because I don't want them thinking it's fine to come to jail because it's not.

Student D: I have been institutionalised my whole life. And I have another life sentence yet to do. I'm starting to think that I can help younger kids to not do the same mistakes that I did. Do courses, and get out and stay out. That's my main motivation, is helping the younger generation and the youth in detention.

Student E: I want to advance myself before I go home. You've got big time to fill. Finishing with a degree. It gives your friends and family something positive to say about you.

Student F: I thoroughly enjoyed studying through USQ, as it made a horrendous experience much more worthwhile. I look forward to completing my degree and hope more incarcerated students have the opportunity to excel.

Short surveys are also distributed to participants of the project yet return rates remain relatively low. This is associated with the time pressures experienced by education officers making it difficult to both distribute and collect the surveys. The surveys are short, with just a few questions focused on the experience of using the technologies for learning. Most responses consist of just a few words: 'It was easy' or 'No problems' are typical responses. An open-ended question, 'What would you like your course examiner to know?' elicited responses mostly around the conditions under which students were trying to study. 'Studying in here is hard' and 'We need extra time to do assignments' are typical responses. Though there is very little in the way of meaningful qualitative data elicited this way, most respondents indicate that they enjoy using the technology and find it reasonably easy to use.

As the project expands to more correctional centres in more jurisdictions and as the IHEPP courses become available to incarcerated students, it is expected that the participation of Indigenous students will dramatically increase. Through the interactions between potential students and the Indigenous Community Engagement Coordinator, there is already a piqued interest not only in the *Making the Connection* project programs but also in the other numeracy and literacy and vocational programs available in correctional centres.

Where to from Here?

The *Making the Connection* project team have been very aware of the dangers of unreasonably raising the expectations of Indigenous prisoners only to let them down at the end of the project. The project team is working with senior management at the university to ensure that the technologies and programs developed as part of the project become part of mainstream offerings so that they are available beyond the life of the project. The development of the technologies and the redevelopment of the programs were completed by university staff seconded from their substantial area to the project, or paid for by the project, so that the expertise does not leave the institution at the end of the project at the end of 2016. This will ensure that the expertise to maintain the technologies and ensure that the offline courses are kept up-to-date will reside at the institution. The project team hope to augment these course offerings with additional entry points into the pathway through vocational education providers. Discussions with potential providers are underway.

Jurisdictional administrators have expressed a need for even shorter courses and programs to be offered to prisoners with very short sentences. To this end, the team is working with the Open University in the UK to make a selection of their badged Open Learn courses available in the offline environment. These courses cover a staggering array of topics from study guides to disciplinary introductions. The courses have been developed in Moodle and should require very little modification to be delivered via the OffLine StudyDesk accessed through the computer lab or the personal devices. These courses could provide a gentle introduction to learning for those students who lack the confidence or commitment to undertake a formal qualification.

An exciting possibility lies in making these technologies available for all those students without reliable internet access throughout Australia and the world. For example, broadband internet penetration is restricted in most countries within Southeast Asia due to poor infrastructure. This is mostly attributable to a lack of private investment coupled with the severely limited capacity of the people to pay for services (Jeroschewski et al. 2013). The technologies and programs developed as part of the *Making the Connection* project have the potential to make higher education accessible to those unable to travel to a large city to study face-to-face, allowing people to remain in their communities and support the economic and social development of their regions. The issues facing incarcerated Indigenous prisoners are very similar to the issues faced by incarcerated Indigenous peoples all around the world. The project team has undertaken the first tentative steps in talking to the educators tasked with providing education to those people with a view to sharing both the technologies and the considerable learnings from the project to date.

This chapter has introduced the startling and disheartening realities surrounding the overrepresentation of Indigenous people in the Australian criminal justice system. It has outlined a series of projects undertaken by researchers at the University of Southern Queensland, culminating in the Australian government-funded *Making the Connection* project. This project has a particular focus on providing a pathway

into higher education for Indigenous prisoners with a view to reducing reoffending rates and recidivism so that those people can remain in their communities, imagining an alternative future for themselves and for their families. In this way it would be possible to reduce the rates of Indigenous incarceration. The overrepresentation of Indigenous people in Australian prisons remains one of Australia's greatest and most shameful tragedies.

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Chapter 12

Digital Literacy and Other Factors Influencing the Success of Online Courses in Remote Indigenous Communities

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Introduction

Indigenous students enrolled in universities nation-wide still comprise less than 1% of all enrolments (Anderson 2015; Behrendt et al. 2012).[1] Indigenous higher education participation statistics indicate that despite small growth in numbers of commencements between 2008 and 2012, Indigenous representation in Australian universities remained virtually unchanged (Department of Education and Training 2014; Pechenkina 2014). The average national Indigenous completion rate was 28% in 2013, which was half that of non-Indigenous students (Pechenkina 2015). The low enrolment and completion rates among Indigenous students could be attributed to a number of challenges facing Indigenous Australian students before and after entering higher education (Barney 2013; Bin-Sallik 1996, 2003, 2000; Pechenkina 2014; Schofield et al. 2013). These challenges, summarised from literature, can broadly be classified into three areas:

- socio-cultural factors including attitudes, aspirations and intentions; societal, institutional and family support or lack thereof[2]; language and cultural barriers, and overcrowded housing.[3]

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[1] Indigenous Australians make up 2.5% of the Australian population according to the 2011 Census (Australian Bureau of Statistics 2013).

[2] Differing familial and social expectations faced by Indigenous men and women may have a direct and profound influence on the degree of support, or lack thereof, that either gender can expect or will receive.

[3] Overcrowded housing is a huge factor affecting remote students' ability to have regular access to a quiet place to study, as well as their ability to establish a study routine.

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- institutional and financial factors including availability, affordability and access to resources, socio-economic status, intergenerational poverty, chronic unemployment[4] and welfare dependence.
- individual factors such as schooling experiences and performance, aspirations and expectations, chronic health conditions, self-confidence and self-esteem.

Often Indigenous students face not one, but a complex mixture of these challenges; that is, those from low socio-economic backgrounds and remote communities are further disadvantaged (Hughes and Hudson 2011). Across the nation, non-Indigenous adults are over four times more likely than Indigenous Australians in the same age group to have attained a Bachelor degree or higher (24% compared with 5%) (Australian Bureau of Statistics 2011). Although widely critiqued, research produced by the Centre for Independent Studies makes an important point: Indigeneity in and of itself is not a factor that affects Indigenous participation and completion rates in higher education (Hughes and Hudson 2011; Hughes and Hughes 2012). Children of working, urban Indigenous Australians are participating in post-secondary education at rates similar to those of the non-Indigenous population; more than three quarters of this group are not from low-SES (socio-economic status) backgrounds; and 44% are not the first in their family to attend university (Hughes and Hughes 2012).

Evidence indicates that the attainment of higher levels of education was more likely to be found among Indigenous adults living in major cities than those in regional and remote areas. In 2008 Indigenous adults living in major cities were three times more likely to attain higher levels of education, such as a Bachelor degree (9%), than those living in remote areas (3%) (Australian Bureau of Statistics 2011). Statistically, however, Indigenous Australians are much more likely to live in regional and remote areas compared to non-Indigenous Australians. Their distances from higher education providers negatively affect remote Indigenous Australians' chances of accessing a university degree due to high costs for both institutions and families, whereby infrastructure is spread over fewer individual students who are required to travel longer distances for education (Biddle 2010). In theory, online education should be able to address many of these issues.

In this chapter, we examine the extent to which a lack of digital skills among Indigenous students might be impacting on the success or otherwise of online courses, and discuss other digital technology-related factors that may be playing a greater role. Firstly, we provide an overview of the spatial dimensions of higher education and online learning using available statistics. We then describe the Indigenous Futures Program, which is working with Indigenous communities and delivering online courses to provide Indigenous pathways into higher education.

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[4]Chronic unemployment can be inter- or multi-generational, which could also affect the ability of students to access and participate in higher education. Not only for reasons of access and equity but more commonly due to family dependence on a potential student's capacity as an income earner.

Our discussion of digital skills and other factors influencing online education is based on the preliminary results of that project including a survey of technology use and digital literacy collected at enrolment, interviews with the first cohort of students conducted four to 6 weeks after the commencement of the course, and our fieldwork observations from project meetings and planning days. The research project received ethical clearance from the Swinburne Human Research Ethics Committee, and all participants were made aware that participating in the research project was voluntary and that they could withdraw at any time. The chapter concludes with a discussion of the socio-technical barriers to online education, with reference to the capabilities approach proposed by Amartya Sen.

Reducing Spatial Inequality

Approximately a third of Australians reside in regional and remote areas (Australian Institute of Health and Welfare 2013). In 2011, 44% of Indigenous Australians lived in regional and 21% in remote and very remote areas (Australian Bureau of Statistics 2013; Behrendt et al. 2012). In 2008, 8.7% of Indigenous Australians living in major cities completed a Bachelor degree or above compared to only 2.7% in remote and very remote areas (Australian Bureau of Statistics 2011).

Higher education enrolment statistics in Australia indicate that the percentage of enrolments in external and multi-modal courses has been increasing since 2008, while enrolments in traditional internal courses have been declining (Fig. 12.1). Indigenous students are more likely to enrol in external and online courses than
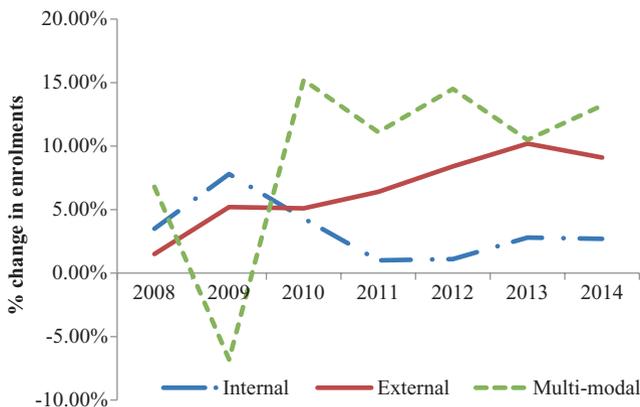
Fig. 12.1 Higher education enrolments in Australia (Source: Department of Education and Training 2015)

non-Indigenous students. In 2010, 27% of Indigenous students enrolled as external students compared to just 16% of non-Indigenous students (Behrendt et al. 2012).

Online education uptake data in Australia indicates that for regional universities external and multi-mode[5] enrolments were as high as 80% of all enrolments and comprised nearly 50% of national Vocational Education and Training (VET) providers' enrolments (Regional Universities Network (RUN) 2013). Comparably, in the US, in the period between 2002 and 2012, there was a significant growth in the number of students taking at least one online course, reaching 32% at its peak (Allen and Seaman 2012). These numbers suggest that online education has the capacity to address spatial barriers, and that digital technologies may provide access to culturally relevant education forums for those unable or unwilling to travel for education.

Online education, therefore, presents an opportunity to address some of the challenges facing the Indigenous higher education sector, including spatial inequality. Recent trends in Indigenous higher education have indicated that online courses are in fact succeeding in attracting and retaining Indigenous students, particularly in regional and remote areas (Batchelor Institute of Indigenous Tertiary Education 2014; Darwin Sun 2014). However, as discussed below, multi-mode delivery (including block delivery, whereby students travel into town for face-to-face intensive learning) can involve particular incentives that are tangentially related to education outcomes, and that need to be taken into account.

The Indigenous Futures Program

The Indigenous Futures Program (IFP), funded by the Higher Education Participation and Partnerships Program in 2013, involves three 'demonstrator' (pilot) projects, each of which is being planned and conducted in partnership with local not-for-profit organisations working with Indigenous individuals and communities in low-SES regions. Three criteria were used in selecting and designing the projects: (1) existing relationships with partner organisations working with Indigenous individuals and communities in low-SES regions; (2) an identified need for further education in the subject area/field; and (3) a willingness to use new technologies to deliver education in the areas where a need exists. The courses for the three demonstrator projects were designed specifically to provide clear pathways into higher education (i.e. from certificates to diplomas, associate degrees and degrees) and to facilitate engagement and progression to higher-level qualifications, particularly for Indigenous learners.

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[5] A course that has a combination of two or more methods of teaching, for example online and face-to-face classes, is known as mixed-mode or blended course.

Media and Creative Industries Demonstrator Project

The media and creative industries demonstrator project is working with Goolarri Media Enterprises (Goolarri), an Indigenous media organisation based in Broome, WA. This demonstrator project seeks to address the need for further training in media and creative industries fields by extending and filling the gaps in Goolarri's training remit beyond the broadcasting sector and into design and digital media skills development. Such a workforce typically requires tertiary qualifications.

Goolarri is part of the remote Indigenous media sector, a multi-faceted system that has evolved since the mid-1980s to include regional radio networks, a satellite television channel (ICTV), film and television production, and music production (Rennie and Featherstone 2008). Goolarri also works closely with the Pilbara and Kimberley Aboriginal Media Association (PAKAM)[6], which coordinates radio and video activity in approximately 20 remote communities in north-west Western Australia. Goolarri has been providing training to remote media workers, including PAKAM workers, becoming a Registered Training Organisation in 2003. Until now, Goolarri's training has primarily been directed at remote media workers – Aboriginal people residing in remote areas that produce radio content for Remote Indigenous Broadcasting Services (RIBS radio, including PAKAM) and locally focused video content distributed on ICTV, NITV and Indigitube. Although the learning platform and courses developed through the IFP may assist this group, the project aims to connect with students living in remote areas that aspire to creative jobs beyond the remote broadcasting sector. By producing digital media- and design-qualified creative workers, Goolarri ultimately seeks to expand the creative economy of the Kimberley and Pilbara. The project is thus responding to what has become known as the 'creative economy', which extends beyond what we traditionally see as the arts and cultural industries, to account for the growing need for creative skills in other industry sectors (Bakhshi et al. 2013). The creative workforce consequently includes those working with new technologies, content and applications to coordinate businesses and lifestyles, producing design solutions within a broad array of industries including traditional services and manufacturing (Hearn et al. 2014).

Health and Community Services Demonstrator Project

The health and community services demonstrator project aims to develop new training methods and resources to facilitate online and mixed-mode delivery in this area. This project is being developed in partnership with four partner organisations, collectively dubbed the NT Consortium, working in the Northern Territory (NT) delivering services in the health and community services sector. The NT Consortium

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[6] Goolarri is the business arm of the Broome Aboriginal Media Association, which also auspices PAKAM.

includes Carers NT, Carpentaria Disability Services, Council for Aboriginal Alcohol Program Services and Human Services Training Advisory Council. Courses to be offered by this project include certificate level courses that will provide formal qualifications to individuals working in the disability and community services and alcohol and other drugs treatment and rehabilitation sectors. These courses will serve as pathways to an associate degree in health and community care and other similar courses.

Since its inception in 1992 Carers NT has been dedicated to improving the lives of family carers living in the Northern Territory who provide 'unpaid care and support to family members and friends who have a disability, mental illness, chronic condition, terminal illness or who are frail' (Carers 2014). It operates across the NT providing services to individual carers as well as advocating on behalf of all Territory carers. Carpentaria Disability Services (CDS) has been providing services, support, information and encouragement to the disabled and their families since its formation in 1973 (Carpentaria Disability Services 2014). Previously known as NT Spastic Association, CDS was formed to provide services to Northern Territory children with cerebral palsy and other disabilities, and their families. In response to the community's needs, it has broadened its role to provide specialised early intervention, respite and adult services.

The Council for Aboriginal Alcohol Program Services (CAAPS) Aboriginal Corporation is a family-focused residential alcohol and other drug rehabilitation centre in Northern Australia (Council for Aboriginal Alcohol Program Services 2014). It provides a substance misuse service that supports Indigenous families who are experiencing alcohol and other drug issues. It has an all-Aboriginal Board and strives to maintain a minimum 60% Indigenous staff body. CAAPS has been operating for 30 years and came into being with the support of NT's remote communities. It provides evidence-based assistance to overcome problems caused by substance misuse, while raising public awareness and advocating for client and community needs.

Human Services Training Advisory Council (HSTAC) provides advocacy, products and advice about training packages for vocational education and training in the human services (Human Services Training Advisory Council 2014). It is one of six training advisory councils contracted to provide advice to government and industry about vocational education and training. HSTAC provides both free and commercial services essential to supporting future workforce development across a range of human service industries. Its key focus is on workforce development for the health, community services, local government and correctional services sectors.

In this context, the health and community services project and the NT Consortium are committed to building a cohort of skilled and qualified Indigenous workers and managers in a range of health and community service industries including developing skills for management-level positions. In addition, they are committed to developing and delivering course and training materials that are culturally appropriate and accessible to Aboriginal remote area learners and workers regardless of their geographical location.

In 2011, almost 2% of the Indigenous population were employed in health-related occupations compared with 3.4% of the non-Indigenous population (Australian Institute of Health and Welfare 2015). More Indigenous Australians (3%) were employed in the community services sector than non-Indigenous Australians (2%). Of all Indigenous people aged 15 and over about 6% were employed in health and welfare sectors represented, and of this, 15% were Indigenous health workers. Indigenous people aged 15 and over accounted for almost 4% of all community services workers in Australia. The largest occupational groups among Indigenous people in the community services workforce in 2011 were education aides or support workers, welfare support workers, and aged and disabled carers. The economic contribution made by this workforce is significant, yet generating direct pathways for these workers, particularly those living in remote and very remote communities, is not easy. Although the partner organisations in the NT Consortium will continue to provide training to the community and health workers, collaboration with the Indigenous Futures Program is expected to provide opportunities to engage remote and very remote learners interested in working in this sector, while simultaneously opening pathways to higher degrees at Swinburne University of Technology and other universities.

Education Demonstrator Project

The education support workers' demonstrator project is developing an online course that recognises prior learning of existing Indigenous education and liaison support workers in schools, and provides gap training so that they can attain Certificate IV in education support. This project was initially set up in partnership with the Queensland University of Technology (QUT); however, due to changes within QUT in late 2014 this partnership did not continue. Since then Swinburne has been in negotiations with other potential partners, some of whom are playing a key role in student recruitment and student support, including Australian Catholic University and Nahri, an Aboriginal not-for-profit consulting firm. The Department of Education and Training, Queensland, has been key to promoting the course in Queensland by providing referrals and word of mouth recommendations. Despite this, the course offered by this project commenced delivery and will serve as a pathway to education degrees offered through Swinburne Online and other institutions.

Education and training is the second largest industry that employs Indigenous Australians (Australian Bureau of Statistics 2011). However, only about 20% of Indigenous Australians reported an occupational status of professionals or managers compared to about 36% of non-indigenous Australians (Gray et al. 2012). The aim of IFP is to provide opportunities to particularly Indigenous education support workers to use their prior learning and experience in obtaining formal qualifications, and subsequently enable them to access higher education, particularly teaching degrees.

Table 12.1 Student enrolment in the three projects

Project	Course	Total enrolments	Withdrawals	
			Number	%
Creative industries	Cert 3: Media	21	14	67%
	Cert 4: Media & design	5	1	20%
Education support	Cert 4: Group 1	15	1	7%
	Cert 4: Group 2	13	–	
Health & community services	Cert 2: Community services	7	3	43%
	Cert 3: Disability services	8	1	13%
	Cert 4: Alcohol & other drugs	13	4	31%
	Total	82	24	29%

Student Enrolment

Partner organisations are an integral part of the IFP project as they are crucial to student recruitment, course delivery and student support. All the partners were involved in course development and were instrumental in providing expert input and locally relevant Indigenous knowledge course content and advice on delivery methodologies and appropriate student support structures. All courses developed for delivery through these demonstrator projects underwent varying degrees of adaptation to meet local needs, such as including local knowledge and content to meet community and workforce needs. Course delivery has commenced in six courses across three demonstrator projects. The courses being delivered in online and blended formats are:

- Certificate IV in Education Support: This course has now enrolled two cohorts of students.
- Certificate III and IV in Media and Interactive Media, respectively.
- Certificate II in Community Services, Certificate III in Disability Services and Certificate IV in Alcohol and Other Drug Rehabilitation.

At the time of writing, there were 82 students enrolled across six different online and blended certificate-level courses ranging from Certificate II to Certificate IV. Student enrolments were spread evenly across each of the three demonstrator projects (Table 12.1). The student cohort was predominantly female (68%) and mature age (45% being older than 40 years and 21% aged between 30 and 40 years).

Students enrolled in all the creative industries and education support courses and Certificate II in community services all identified themselves as of Australian Aboriginal or Torres Strait Islander origin. However, about 46% and 50% of the students enrolled in the Certificate III and IV, respectively, in the health and community services project identified themselves as non-Indigenous. Overall, Indigenous enrolments were 87%, and non-indigenous enrolments were 13%.

Student attrition, at the time of writing, was 29% across the entire student cohort. The highest attrition was in the courses offered by the creative industries project (58%) followed by 29% in the health and community services project, and 4% in the education support project. Historically, student attrition from online courses has been higher than on-campus courses both in Australia and internationally (Ali and Leeds 2009; Cochran et al. 2013). The attrition in these courses was comparable to international online courses (Bruff 2013; Burnsed 2010) but lower than online vocational courses in Australia where there was a completion rate of less than 10% (Jacks 2015; Kollmorgen 2014).

The differences in attrition are possibly due to factors such as student motivations, and whether the course was required or encouraged by their employer. These non-ICT related factors are likely to have influenced completion rates and student experience. For instance, a significant factor was the extent to which students were motivated through work incentives. In both the health and community services (NT) and education (QLD) demonstrator projects, students were encouraged to undertake the course by their employer. Community health workers are required to have qualifications to work in specific areas, including alcohol and drug rehabilitation. The education support workers saw value in having their existing skills acknowledged through the recognition of prior learning mechanism. For the creative industries cohort, the incentives were less direct. Some students were involved in PAKAM and came into the program through that connection. However, PAKAM workers were not required to do the course as a condition of their employment and some already had similar qualifications. Other students enrolled in that course of their own volition.

Moreover, the project was still in development when the data collection occurred, and some level of attrition might be attributable to the platform and delivery at the time. For instance, on the health and community services project, the students found that the devices they were using (iPads available for loan through the project) were not suitable for tasks such as assessment submission. On the creative industries project, course content-creation had fallen behind schedule. The delayed timelines meant that staff had not received professional development when students commenced, which might have made a difference in terms of online forum participation. A majority of students in that project commented that they wanted more contact with trainers, either in person or through discussion boards. Despite having the highest dropout rates, the majority of students in the creative industries project stated that they were happy with the platform and appreciated the ability to access content on the device from home, suggesting that the platform itself was not the reason for the high attrition.

Factors such as student motivations and incentives undoubtedly influence the success of online education, as will the functionality of the platform and trainers' proficiency in delivering content online. Community obligations and English-as-a-second-language also need to be considered, and these will be explored in future publications.

Digital Literacy

Digital literacy is the ability to access, understand and create knowledge using devices, platforms and tools commonly referred to as digital or information communication technologies (ICTs). According to Buckingham (2007), literacy of any kind needs to be understood within the context in which reading takes place – 'where the text is read, with whom and why' – as well as the social and economic forces within which texts are created and circulated. Digital literacy thus holds multiple meanings: functional digital literacy is focused on competencies and tasks, but the term can also refer to a level of self-efficacy and conduct (for instance, in relation to online threats such as scams and cyber safety), or to societal transformations that result from the adoption of new technologies.

The skills to make use of online resources are clearly important, and are critical to success in most educational disciplines and occupations (Murray and Pérez 2014). Researchers have identified that educational institutions frequently overestimate students' ability to use information and digital technologies to solve common problems related to study; one of the main factors influencing dropout or attrition rates in online courses is technical expertise, skills and technical experience (Fini 2009; Hart 2012; Kennedy 2014). Digital competencies, or functional digital literacy, thus plays a crucial role in retention, particularly for novice learners (Fini 2009).

However, just because a level of competency is required in order to participate in education, it does not follow that possessing digital skills will result in students making full use of online education resources. The question of whether digital skills are a major factor in the success of online education for Indigenous people living in remote areas is important, as digital skills can be taught and thereby addressed within programs. If it turns out that people's engagement with online learning is related to other aspects of technology access and use, then the feasibility of online education as a strategy to counter spatial inequality may be less straightforward.

Research on digital inclusion has interrogated the significance of various factors including skills, motivations, resources, and social and cultural capital, in influencing whether an individual experiences benefits from Internet use (Selwyn 2003; van Dijk 2005). One point of entry into understanding the outcomes of Internet use is the 'knowledge-gap hypothesis', whereby social stratum determine the resources and motivations that people might have for engaging with information, resulting in knowledge inequality despite the same information being made available to all (Zillien and Hargittai 2009). Another particularly useful approach is to examine the 'domestication' of technology (Silverstone and Haddon 1996), paying attention to how social context shapes people's digital choices and the values they ascribe to technology. Household and workplace circumstances can lead individuals to adapt technologies to their needs, often in ways that were never anticipated in the design of a technology. As discussed below, domestic factors are significant in the success or otherwise of online education for remote-living Indigenous students. However, as Blank and Dutton (2014) argue, the limitation of the domestication approach is that

it fails to address other structural issues that may play a part in people's digital choices, including systems that determine infrastructure availability and pricing.

Specifically to Indigenous experiences with digital technologies, some of the common issues shared by a number of Indigenous peoples are the lack of prior involvement with information technology due to limited educational opportunities, the high costs of computers and the insufficient infrastructure in Indigenous places of residence (Gaidan 2007; Hui Ying Ooi 2007; Mau 2007). In Indigenous Australian contexts, research (Mills 2008) has suggested that taking advantage of the multi-literacies focused pedagogies can enable a meaningful learning design and ultimately improve Indigenous educational outcomes.

In assessing the digital literacy of the students in the Indigenous Futures Program, we set out to measure students' digital confidence and competence. What this data could not tell us was whether other motivations, resources and social dynamics might be influencing the success or otherwise of the program. Possessing the skills to take part in online education is of little importance if, due to other factors, the individual chooses not to take up the online education opportunities on offer. As discussed below, evidence from interviews provided important insights into how the domestic environment, as well as regimes of access (infrastructures and related pricing and availability), impacted on students' engagement with the courses, suggesting that the provision of culturally appropriate digital education platforms and skills may not resolve barriers to education for all. A further extension of this, which we do not have the space to consider in this chapter, is the question of whether participation in online education, once achieved, enhances the life of the individual in tangible ways. As indicated above, motivations and aspirations related to employment – as well as negative incentives such as welfare that are linked to education participation – can play a significant role.

Instead, we have limited our focus here to the normative connection between offline circumstances and digital inclusion (Helsper 2012). A useful explanatory framework for such an investigation is Sen's capabilities approach, which sees exclusion in terms of people's freedom (or otherwise) to achieve certain 'functionality' when their life circumstances are taken into account. If skills are not the main factor influencing engagement with online education, what other technology-related issues might be at play?

Method and Data Collection

All the courses designed for this project have a large digital and online presence whether they were delivered through online or blended formats. The online presence and delivery require the students to be comfortable in an online environment using technology and web-based services. To determine the levels of digital literacy of enrolled students and how they were coping with the online courses, the data was collected in two stages:

1. At enrolment students were asked to complete a 'Technology Use and Digital Literacy Survey'.
2. A face-to-face interview with the students about six to ten weeks after enrolment about their experiences with the course.

Digital Literacy Survey

The digital literacy survey was specifically designed for this project to gauge the extent of students' digital literacy. The survey was paper-based and contained three sections with a series of simple questions. Sections A and C contained questions about Internet and technology use, respectively, and also contained one self-assessment question each that asked the students/ respondents to rate their skills in using the Internet or a preferred device based on the following criteria:

- *Beginner:* I know a little but don't use it often and am not comfortable using it. Need help to go online and do any tasks.
- *Intermediate:* I have been using it on a regular basis, and am fairly comfortable using it. Can do simple/routine tasks (email, chat, read news, etc.) without help.
- *Advanced:* I have been using it for many years, know all of the basic aspects, and am comfortable using it and rarely need help.
- *Expert:* I have been using it for a number of years and am very comfortable using it. Can create/post complicated content online, can figure out and solve problems and people come to me with their questions.

The survey's section B contained a set of statements that measured the respondent's Internet skills. The statements in this section were synthesised from digital literacy measurement criteria developed by Murray and Pérez (2014) and van Deursen et al. (2014). The statements in this section addressed the functional knowledge and basic skills as well as critical thinking required to successfully study online. The statements were divided into five categories:

1. *Operational skills*: necessary to operate computer hardware and software
2. *Information navigation skills*: necessary to operate in the Internet environment and to find relevant information
3. *Online safety and security skills*: necessary to send and share information securely and to know when and what to share
4. *Applying knowledge skills*: required to create or generate something new from information gathered from the Internet
5. *Mobile skills*: needed to use and operate a mobile device

The students were presented with simple statements in each of these five categories and were asked to score the statement on a five-point Likert scale with self-reported truth response items: 1 = Not at all true of me; 2 = Not very true of me; 3 = Neither true nor untrue of me; 4 = Mostly true of me; 5 = Very true of me. The mean score for each statement was then calculated by adding all the individual

Table 12.2   Response rate for the digital literacy survey

Digital literacy survey	Total enrolments	Responses	
		Number	%
Creative industries	26	23	88%
Education support	28	28	100%
Health & community services	28	17	61%
Total	82	68	83%

scores and dividing it by the number of responses for each statement. The mean or average score for each category was calculated by adding the mean score of each statement in the category and dividing it by the number of statements in the category. This procedure was followed for all the categories except for the category on information navigation skills because this category contained negatively worded statements like 'I find it hard …' or 'I get confused (or tired) …' etc. In this case, if the respondent answered 1 ('not at all true of me') it meant that they did not find it hard or were not confused. If the scores for this category were calculated on the existing scale, then the respondents were likely to score very low when they did not have problems and vice versa. As this was counter-intuitive, the scale was reversed to ensure that the scales for all five categories were similar.

The overall response rate for the digital literacy survey was 83%. The number of responses for each project is presented in Table 12.2. The response rate for the health and community services project was lower (61%) than the other two projects.

Face-to-Face Student Interviews

About six to ten weeks after enrolment the students were approached by the researchers and invited to participate in an interview about their experiences with the course and to share their views, particularly about the online and technology components. The students were encouraged to provide feedback on topics such as:

- The course, including challenges and highlights, course materials, teaching, student support, etc.
- The learning management systems accessibility, navigation, content online, etc.
- Technology and Internet aspects, including data and connectivity issues, devices loaned to students[7]

The interviews were conducted at the time of the second workshop or block release for the health and community services and creative industries projects,

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[7]At the time of the interview, devices were not yet available for students enrolled in the education support course as there were issues with their ownership and loan agreements. These issues were subsequently resolved and the students were able to borrow devices towards the middle of their enrolment period.

Table 12.3 Response rate for face-to-face interviews

Face-to-face interview	Students eligible for interview	Responses	
		Number	%
Creative industries	9	6	67
Education support	15	13	87
Health & community services	13	9	69
Total	37	28	76

respectively, while the interviews were conducted at the time of the first assessment discussions for the education support project. These occurred approximately between six and ten weeks after enrolment. The interviews took about ten to 15 min each and the students were assured that they would not be identified in any way, and only de-identified data would be reported or published.

Only eligible students – that is, students who were still enrolled and active in the course – were invited to participate in the interview (Table 12.3). At the time of writing this chapter 37 (45% of) students were eligible to participate in the interview, and all were invited to participate. Of those invited 76% agreed to participate, with the education support project having the highest participation rate (87%).

Digital Literacy Survey Findings

Of the students that completed the digital literacy survey, 94% said that they use the Internet regularly. About 56% had used the Internet for more than 10 years while 34% had used it for less than 10 years, and 10% either did not remember when they first used the Internet or did not respond, compared with 78.7% of the mainstream adult population having used the Internet for 10 years or more, and 21.3% having used it for less than that[8] (ARC Centre of Excellence for Creative Industries and Innovation 2013). The top uses were email (82%), browsing (72%), social networking (71%), watching YouTube videos (68%) and banking (63%). About 61% of the respondents said that they had used the Internet to study in the past (Table 12.4).

About 64% of the respondents said that they had a fixed Internet connection at home.[9] A majority of the respondents said they used the Internet either at home including on mobile devices (73%) or at work (66%), and 21% said they used the Internet when they were away from their home town. A quarter (25%) of respondents said they used the Internet at a local library or community centre.

More than half the students (53%) assessed their Internet skills at the beginner or intermediate level, while 47% considered themselves to be advanced or expert Internet users (Table 12.5). There were more beginner and intermediate Internet

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[8] Based on a representative sample in terms of age and gender.

[9] In 2014–2015, 86% of households in Australia had an internet connection, up from 83% in 2012–2013 (Australian Bureau of Statistics 2016).

Table 12.4 Internet use by the students

Variable	% of respondents
Email	82.4
Internet browsing/searching	72.1
Facebook/Snapchat/social networking	70.6
YouTube/videos	67.6
Banking	63.2
Music	61.8
Checking news, weather, sport	58.8
Photos	55.9
Playing games	54.4
Shopping (eBay)	44.1
Centrelink	41.2
Homework/study	41.2
Contacting services (Land Council, health, etc.)	41.2
Making letters or posters	39.7
Looking for work	33.8
Skype calls/chat/video calls	27.9
Indigitube	16.2
Other	2.9

Table 12.5 Internet skill self-assessment

| Skill level | % of respondents | | | |
	Creative	Education	Health	Total
Beginner	17.39	3.57	17.65	11.76
Intermediate	47.83	39.29	35.29	41.18
Advanced	21.74	35.71	29.41	29.41
Expert	13.04	21.43	17.65	17.65

users enrolled in courses offered by the creative industries project (65%) than in any other project, while the education project had the highest number of advanced and expert Internet users enrolled (57%).

The results of the survey indicate that there were no differences in the five skill categories between students enrolled in the different projects (Table 12.6). The only exception was that the health and community services students scored higher than the other students with regard to online safety and security skills categories. The students scored low in the information navigation and applying knowledge categories, which could affect the students' ability to perform tasks required for studying online.

A comparison of the Internet skill scores and the self-assessment indicated that the students had underestimated their digital and Internet skills. This is expected because when conducting a self-assessment, respondents often either over- or

Table 12.6 Digital literacy skills of students

Internet skills	Creative industries	Education support	Health & community services	Total
Operational	4.04	4.15	3.90	4.06
Information navigation	2.22	2.13	2.22	2.34
Online safety and security	4.49	4.47	5.00	4.31
Applying knowledge	2.94	3.06	2.97	2.73
Mobile	4.02	4.15	3.82	4.19

under-estimate their skill levels (Murray and Pérez 2014; van Deursen et al. 2014). In this instance, students' under-assessment of digital skills points to their lack of confidence – a possible contributing factor for the higher dropout rate in these courses.

In interviews with students and staff, it was also implied that lack of confidence was an issue, particularly in comments on how to improve course delivery and design. Staff and students felt that all students would benefit from a short but intensive workshop about the various digital tools and technologies used in the course, and that troubleshooting and help materials would be of benefit.

Discussion

The results of the survey indicate that the functional digital literacy levels of most students should have been adequate for the tasks required. Digital literacy, therefore, did not appear to be the reason for the high attrition in the creative industries project. In this final section, we discuss how ICT-related factors other than digital literacy may have a greater impact on the success of the online courses. We used information from interviews with the Indigenous students to identify barriers faced by the students. Students spoke of two particular difficulties in undertaking online education that related to social and cultural dimensions of living in remote communities, namely, accessing and using the Internet at home, and the isolation of online learning.

Accessing the Internet at Home

Students enrolled in the community health and creative industries courses were able to borrow devices and received mobile Internet assistance. The first cohort of students enrolled in the education project was the only group that did not receive devices (on loan) or Internet assistance. Half of the students interviewed in the education program (five of 10) informed us that they did not have Internet at home, while others stated that the cost of Internet was too high, or the speeds too slow.

Access to devices and assistance with Internet costs were provided to these students on request.

Three of the six students interviewed on the creative industries project stated that they had issues with accessing the Internet at home despite being provided with mobile Internet and data. Reasons included family and friends using up the data, as well as their own fear of the device being taken and used by others. The other half stated that the data was sufficient, with one pointing out that they were conscious of having to manage their data but did so successfully.

While sharing of devices occurs across mainstream households, the particular sharing dynamics that occur in remote communities (related to traditional systems of demand sharing) influences how devices are shared and with whom. Sharing can also influence affordability, whereby the person who paid for the data is not necessarily the person who will use it up.

The findings align with ethnographic research on ICT use in remote communities in central Australia conducted by co-author Rennie and colleagues (Rennie et al. 2016). The researchers found that the digital divide in remote Australia relates to observable 'digital choices' (Dutton et al. 2004), which are in turn informed by community norms and practical considerations. The study examined issues such as ownership and sharing of devices, as well as people's travel, finding that these can influence adoption and use of computers and the Internet. Internet adoption in remote communities is not a linear progression from non-use to use; people can fall in and out of connectivity on a regular basis depending on location, credit and device-sharing. A widespread preference for pre-paid billing, as well as practical difficulties associated with satellite Internet connections, means that households are more likely to go without the Internet than enter into and maintain household satellite Internet services.

Online education thus needs to cater for students that do not have constant connectivity, but that are nonetheless likely to travel to towns where mobile broadband is available on a regular basis. Affordability is also a consideration: Pre-paid mobile broadband data is charged at a higher rate than post-paid satellite or fixed line services. The costs of online education are therefore greater for learners that are only accessing the Internet through mobile broadband, and education providers may need to subsidise Internet costs. Trainers and students have also requested that the projects provided preloaded content that updates through cloud-based applications when the student is connected, for this reason.

Preference for Group and Face-to-Face Learning

Although many students commented that they liked the ability to access content and study at home, a high number preferred to carry out their work in face-to-face classrooms with trainers present. On the creative industries project, some students stated that they were used to block learning. Moreover, there were clear incentives to block learning, including travel into town and social interaction with other students and

trainers. The students suggested that trainers be available for face-to-face assistance if the students were in town between block training sessions. Interestingly, on the education project, some students self-organised face-to-face group study sessions.

Creating more engaging online forums could potentially counterbalance the current preference for face-to-face learning. However, it is possible that some students are not likely to make the transition to online learning, especially those that have become accustomed to the standard mode of block delivery. Trainers at Goolarri, for instance, are now looking more closely at how to provide both and to ensure that students can participate in the delivery mode most suitable to them.

Capabilities and Online Education

The capabilities approach, developed by economist Amartya Sen, is a broad normative framework which can be used to access individual, social and community capabilities (Klein 2015; Robeyns 2003a, 2003b; Saito 2003). Capabilities are the real ability or freedom to achieve areas of functionality, like the ability to be healthy. There is some debate in the literature about the application of the capabilities approach to Indigenous issues and policy which seems to violate its core concepts of freedom, agency and pluralism (Klein 2015). However, the capabilities framework is useful here in that it asks what freedoms people have and what ability they have to enact things they value, given the constraints placed upon them. Answering this question requires knowing what barriers are surmountable, and which are related to complex (or multiple) exclusions. Such an approach also requires understanding how group norms, sometimes referred to as remote Indigenous sociality (Austin-Broos 2011), are influencing choices and motivations. If spatial disadvantage is a significant factor in Indigenous higher education, then online education may increase enrolments and completions. However, for that to eventuate, new models of online delivery that take into account factors such as the sharing of devices will need to be developed.

Conclusion

In this chapter, we have shown that digital literacy is not necessarily the primary barrier to online education for people living in remote areas. However, other aspects of ICT access and use that are distinct to remote Indigenous sociality may be playing a significant role, including the ability to access the Internet at home and demands from family members for Internet credit and access to devices. A further factor is the historical model of education provision which has centred on block learning, whereby students travel into town for face-to-face instruction and activities. The block learning model involves incentives for some (travel, per diem allowances, social interaction) that may make online learning less appealing.

The Indigenous Futures Program is currently looking at ways to deal with these barriers, including interactive online forums, student support and peer-mentorship. We recognise that addressing the provision of ICTs and online student support cannot overcome all of the barriers to education (for instance, it will never resolve poor literacy and numeracy stemming from poor primary and secondary education). Some students might always prefer face-to-face learning. However, for those that wish to study in their communities, online education may prove to be a significant opportunity.

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Chapter 13
Promoting Engagement and Success at University Through Strengthening the Online Learning Experiences of Indigenous Students Living and Studying in Remote Communities

Judith Wilks, Katie Wilson, and Stephen Kinnane

Introduction

This chapter has two goals. First, to provide a synthesised, well-informed, and nuanced understanding of the online learning experiences of Aboriginal university students living and studying in remote and very remote locations of Australia. Second, to identify culturally informed teaching and learning strategies to improve the learning experiences of these students for uptake in the higher education sector. To achieve these goals we draw together some related key findings from an Office for Learning and Teaching (OLT) funded project, '"Can't be what you can't see": The transition of Aboriginal and Torres Strait Islander students into higher education' (Kinnane et al. 2014),[1] with subsequent additional field research conducted in 2015 in the western Kimberley region of Western Australia, where experienced Indigenous and non-Indigenous educators from regional education networks were interviewed in regard to their views, expertise, and experiences in tertiary online learning forums.

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[1] Further funding was made available by the OLT for extension and dissemination activities to the *Can't be what you can't see* project, and this project, titled *Come be what you can see* was undertaken in 2014/2015.

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We are a collaboration of Indigenous and non-Indigenous researchers from regional universities, who have worked together since 2011 on a number of projects funded by the Australian Office for Teaching and Learning. Previously, in a nationwide survey of 26 Australian universities (Kinnane et al. 2014), one of our key findings was that Indigenous students living in remote communities believed not enough was being done to engage them in online university studies. Our study found rural and remote students were geographically removed from most Australian university opportunities, and many experienced the impacts of lower socio-economic status on educational attainment. Very low numbers of rural and remote students transitioned to higher education, although higher proportions of rural and remote students accessed VET, with low transitions from VET to university. Blocked on-campus teaching is only financially viable in a small range of disciplines, mostly education, teaching, and community development. Further, limited equipment and Internet coverage hinder accessing external studies programs in rural and remote regions. Outreach to Indigenous students in rural and remote regions is costly and being cut back, not expanded, and students have fewer chances of experiencing university prior to attending (Kinnane et al. 2014, p. 105). It was these findings that prompted us to delve more deeply into the circumstances and experiences of these students and to initiate the research reported in this chapter.

In Australia, the National Census data is collected every five years in August of the allocated year. The results of census data collected in August 2016 are not likely to be released until June 2017. The most recent census data available for this chapter is information collected on August 9, 2011, released in June 2012.

The 2011 census reported that 21% of Indigenous peoples lived in remote (51,300) and very remote (91,600) Australia, compared with 1.7% of the non-Indigenous population (Australian Bureau of Statistics 2013a). In 2006, there were 1180 discrete Indigenous communities in Australia, and 1008 of these communities were in remote[2] areas; 767 of the very remote communities had population sizes of less than 50 (Calma 2009, p. 98) (Fig. 13.1).

It is vital that remote Indigenous learners are able to remain in the community to study when this is the only viable option for reasons of cost, community and family responsibilities, and for other reasons associated with not wanting to leave, including relocation trauma. There are some benefits of undertaking study away from home such as experiencing new cultures, travel, and increased tutoring support and time dedicated to studying alone. However, these benefits exist in tension with above-mentioned constraints for many students, and as with non-Indigenous students in rural or metropolitan settings (who increasingly choose external online study as an option), Indigenous students are keen to seek creative online solutions for their education needs. Diverse platforms of delivery offer the opportunity for students to make considered choices when deciding to undertake university studies,

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[2] For the purposes of this chapter, remote is identified as category three by the ABS, having an SA1 Average ARIA+ Value range of greater than 5.92 and less than or equal to 10.53. Very remote is identified as category four by the ABS, having a SA1 Average ARIA+ Value range of greater than 10.53 (Australian Bureau of Statistics 2013b).
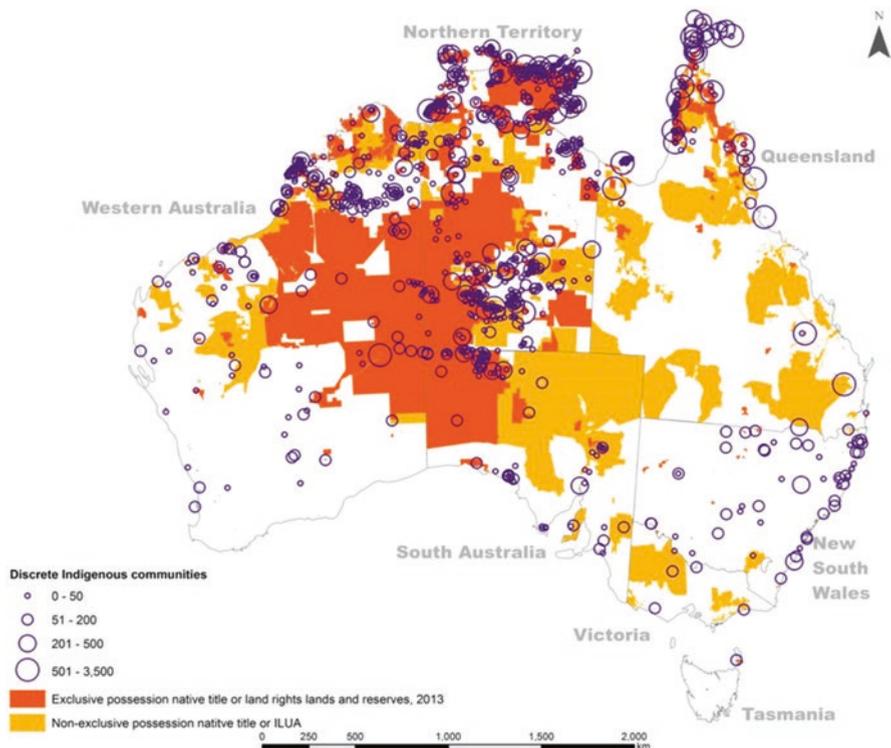
Fig. 13.1 Discrete Indigenous communities on Indigenous lands (Altman 2014)

even when living in locations of vast geographical distance from university campuses. Blended delivery models involving significant amounts of online elements are of particular benefit to those studying in remote regions, and for students with dependents or employment responsibilities.

This chapter argues, however, that despite the promise of being able to undertake university studies online, and the affordances of Information and Communication Technologies (ICT), there are many challenges – cultural, geographical, technological, personal, academic, language, literacy, computer literacy – for students in remote and very remote locations (Kinnane et al. 2014; Anthony and Keating 2013; Behrendt et al. 2012; Eady and Woodcock 2010; Kral 2010; Young et al. 2005; Zepke and Leach 2002).

Two years ago in our national study, 'Can't be what you can't see' (Kinnane et al. 2014) we investigated and documented 14 elements – enablers and constraint – experienced by Aboriginal and Torres Strait Islander students successfully transitioning into and benefitting from higher education. Element 7, *Blended delivery for remote student access* is the particular focus of this chapter, in which we build upon and extend the broad scale findings of our previous research with new research reported here. Following will be a synthesis and discussion of the challenges and of

desirable culturally informed practices to counter these challenges, in relation to the online/blended learning experiences of Aboriginal students living and studying in remote locations.

There is little doubt that online course delivery aligns with a particular and popular business model of universities, one that is promoted as meeting client needs but whose underlying goal is to maximise student numbers (Anthony and Keating 2013). Yet paradoxically, online learning may in fact be widening rather than narrowing the equity gap in education (ibid.) for Aboriginal students living and studying in remote locations. In this chapter, we make the case that students have many family and community demands on them which, in addition to persistent technical issues relating to access and participation, make it difficult to focus on their studies and increase their feelings of isolation in the self-regulating environment of online learning.

Background

The United Nations Educational, Scientific and Cultural Organization (UNESCO 2011) has expressed concern that Indigenous peoples have limited access to digital technologies, limited access and connectivity to Internet providers, and low ICT skills and literacy; all of which are exacerbated by living in a remote community.

Aboriginal and Torres Strait Islander people living in remote communities in Australia experience many barriers to participation in online learning environments. The most recent available data (Fig. 13.2 below) indicate higher education
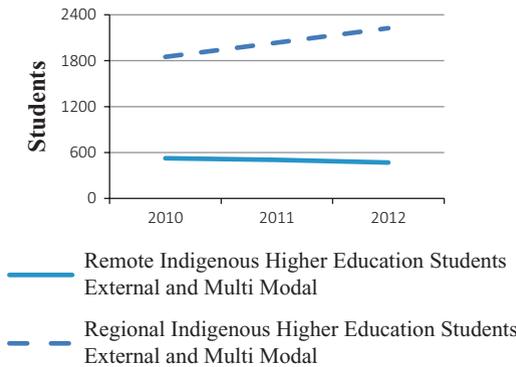

Fig. 13.2 Remote and regional undergraduate Indigenous students with external mode and multi-mode of attendance (Source: Department of Industry 2014)

participation numbers of Indigenous students in remote areas, relative to regional areas, are low and declining.

The Review of Higher Education in Australia (Bradley et al. 2008) identified access and participation rates for students from remote locations as being of significant concern (regardless of study mode), with participation rates in higher education of less than 2%. When these factors are combined (that is, Indigenous *and* remote), the effect is a particularly marginalised group. A considerable body of insightful research is developing around the challenges and affordance of online study for Indigenous learners. However, it is questionable how many findings from this research have made their way into the design of university online teaching practices and curriculum.

Four years after the Bradley Review, Recommendation 15 of the *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People: Final Report* (Behrendt et al. 2012) stated that universities must:

> Consider how to best support the needs of regional and remote Aboriginal and Torres Strait Islander students including through the use of virtual networks and other technology-based solutions to provide greater access to universities by remote and regional students (p. xxi).

Despite improved technologies for delivery in online learning environments (for example, described by Allen 2011; Christie 2010; Partridge et al. 2011; Sachs et al. 2011), a significant gap remains in collective knowledge across the sector about the specific experiences of students in online learning environments and about what works well and in what types of settings. This knowledge gap is amplified for students from geographically remote communities.

Commonly Identified Challenges

Geographical and Internet connection issues impact on students' ability to access quality technologies and reliable Internet connections. Few households in remote locations own computers or laptops, or have Internet connection. Additionally, even if the Internet and wireless access are available, they are often unreliable, slow and difficult to access. Access to technological resources in community telecentres (where they exist) can be difficult (Behrendt et al. 2012; Kinnane et al. 2014).

Software issues, particularly continual version upgrades of software packages and inconsistencies with computer interfaces, can disadvantage students in terms of mastering the technological skills needed to access online learning environments.

Design and delivery issues, identified as early as 1989 in the goals of the National Aboriginal and Torres Strait Islander Education Policy (Department of Employment Education and Training 1989) which stated that 'Aboriginal people have consistently called for greater Aboriginal influence in educational decision making, with a view to improving the accessibility, relevance, appropriateness, sensitivity, and effectiveness of educational services' (p. 9).

Methodology

The research discussed below consisted of two phases. Phase 1: A desk audit of research literature on the experiences of Indigenous university students (in Australia and overseas) who live in remote and very remote locations and are studying online. Phase 2: Employing a naturalistic inquiry methodological approach (Lincoln and Guba 1985) and applying purposive sampling methods, interviews were conducted with ten key educators in the West Kimberley region with experience teaching and supervising Aboriginal and Torres Strait Islander students undertaking university studies by way of distance education. Teachers in the VET sector in this region were also interviewed in view of the intertwined VET to university articulations and pathways programs and the nexus between the two sectors in this region. Respondents were identified through the relevant regional educators' networks. Interviewees comprised both Indigenous and non-Indigenous educators. Interviews consisted of nine open-ended questions (refer Appendix 1) and lasted approximately 50–60 min each.

Findings

Technical Access

Students' physical access to Information and Communications Technology (ICT) for online learning purposes is limited to their own personal and their community's capability to access services and their income level. Indigenous people are consistently identified as 'being on the wrong side of the divide' (Leung 2015), as recent statistics indicate. 'Indigenous Australians are among the lowest users of internet services and Indigenous people living in remote communities are the least likely to have used the internet' (Anthony and Keating 2013, p. 1). In the 2011 ABS census, 63% of Aboriginal and Torres Strait Islander households reported having an Internet connection compared with 77% of other households (Australian Bureau of Statistics 2012). In the 2008 National Aboriginal and Torres Strait Islander Social Survey, 20% of Aboriginal and Torres Strait Islander households in remote areas had a computer with Internet access at home compared with 53% in non-remote areas. High subscription cost was the main reason given for not having an Internet connection (Australian Bureau of Statistics 2011).[3]

These statistics reveal significant gaps in access and reliability of service for Indigenous students. However, care is needed in the application of statistics and how they are interpreted in cultural contexts (Drew et al. 2015). In the case of household technology access, Rennie et al. (2011) note: 'the term "household" may not mean much more than simply the physical space in the context of remote

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[3]At the time of writing, results of the 2015 NATSISS survey had not been released.

Indigenous communities. This has implications for how we understand home internet and the factors influencing take-up' (p. 54). Further, gaps and inconsistencies exist in the collecting and reporting of statistics because of changes in government structures and priorities. Some statistics relating to Indigenous remote and educational experiences included in this chapter appear to be no longer being updated.

Technical access to computers and the Internet, or lack thereof, explains many of the reasons underpinning the digital divide between remote Indigenous communities and non-Indigenous communities. Although technical access is a major and influential factor, other aspects including ICT skills, cultural factors, learning design, pedagogical approaches, and community arrangements play an influential role. Taking these social and cultural contexts into account highlights the unique circumstances and challenges facing Indigenous students, and the combined effects of all of these factors can be debilitating even for those familiar with online programs. One Kimberley respondent, a senior Indigenous educator who was studying for his MBA by distance education, described feeling 'cut off' from the course even though he worked in distance education and despite the fact he 'knew the drill' in online learning.

Two commonly cited technical challenges for students studying in geographically isolated rural and remote communities are slow or no Internet connection (due to the paucity of telecommunications infrastructure) and a lack of technology skills (Anthony and Keating 2013; Rao et al. 2011). The paucity of technical access is further compounded by the need for students to be able to afford and maintain and be willing to use a webcam and microphone in order to take part in online classes. Most students cannot afford such equipment, and many are not comfortable using them even if they possess one, for reasons associated with shyness, concerns about images going into digital space, and avoidance relationships in group situations (especially for older students).

Technical failure is an issue identified by respondents in this research; for example, not being able to get online to watch lectures and students who are reliant on recorded lectures missing important material and information. The recording (at the point where the lecture is being delivered) is set to cut out after 56 min. However, it is often after the first 56 min but within the allocated hour that the lecturer might talk about things of vital concern to students such as information relating to upcoming assignments.

Some remote communities have very good Broadband Internet access and others have good satellite access, but on the whole Internet access across remote Australia is variable in terms of bandwidth and reliability. The physical environment is 'harsh, making maintenance of the equipment difficult' (Daly 2007, p. 277). Further, 'the ratio for internet access at home is particularly low for Indigenous people in Western Australia and the NT (Northern Territory)' (Daly 2007, p. 274).

Community-Based Technical Facilities

We found broad agreement amongst respondents that community-based technical facilities have a vital role to play in assisting students with online access and with the technical skills-building components of effective engagement in distance education. Students need a quiet work area away from home, and facilities such as community resource centres (CRCs) have traditionally provided them with this opportunity.

All Australian state governments have had versions of programs promoting CRCs where facilities such as fax, telephones, computers, photocopiers, Internet, and videoconferencing are provided in small remote and rural towns. However, the funding for such resources is reliant on the whims of governments, and some facilities now charge fees for using a telecentre in an effort to make up for government funding shortfalls. Other resource hubs such as libraries, registered training organisations (RTOs) and not-for-profit centres have computers that students can potentially use, yet such entities are thinly scattered in remote areas and are subject to the ebb and flow of government funding.

Cultural or social barriers may occur in small communities where locally employed coordinators inhabit avoidance relationships with some students, or where families have historically not associated with each other. In this context, the laudable goal of a shared resource in the form of a CRC simply becomes a no-go zone for some students. There are innovative solutions to this, such as governance of telecentres including representatives of family groups, and further training for young people within the specific clan or extended family structures. The issue is not to over-complicate complex social structures but simply to work with them to ensure access and knowledge sharing through locally owned solutions.

Reflecting funding availability and the community's ability, individually and collectively, to pay for services (Papandrea 2010), the majority of CRCs are only open during business hours Monday to Friday, yet 'computer access off-campus appears to be one of the most prominent problems for implementing tertiary education online for Indigenous students … where students are able to access 24-hour student computer labs on-campus, participation rates are promising (Foster and Meehan 2007 in Dyson et al. 2007, p. 134). Reedy (2011) found that these facilities are 'generally locked up unless a lecturer was visiting the community' (p. 1067). They need to be located to encourage use and access, yet 'are often accompanied by lack of privacy and often uninviting ambience (for example, computer and screen places behind a protective screen and keyboard on a bench-top in the foyer of a Community Council office)' (Papandrea 2010, p. 13).

Mobile Phones

Many Aboriginal people residing in the Kimberley, especially the younger demographic, have mobile phones. Mobile phones are user-friendly and more intuitive than other digital technologies. However, mobile phone access relies on having coverage, a reliable battery and charger, and the money for credit; prepaid is overwhelmingly preferred to contracts (Rennie 2011).

Enhancing Indigenous remote online learning through increasing the blend of mobile technologies with online learning design can be a way of maximising students' abilities to engage with online courses and keep in step with evolving contemporary university delivery practices. There would be great utility in linking online delivery with the resources of local and regional Indigenous cultural media. It is noted that the NMC technology outlook for Australian tertiary education (Johnson et al. 2014) predicted, amongst other things, that mobile learning, use of open content, and hybrid learning environments are likely to become the norm in future.

Many communities do not have *any* mobile telephone service at all unless they are close to a main road, which are few in remote areas. In 2007 (latest available figures) 'only 26% of communities were within terrestrial mobile telephone coverage' (Papandrea 2010, p. 46). Communities also have satellite TV, a popular and potentially important communication tool for higher education. Communities may have a pay phone and the community office a landline but often only the one if the community is very remote. Statistics available at the time of writing indicated that 'only 57.7% of remote Indigenous communities had access to at least one standard telephone service … and only 52.5% had at least one payphone … 29% of communities had access to neither type of service' (Papandrea 2010, p. 46).

Facebook

A number of respondents commented on the potential of social networking tools such as Facebook as a useful communication tool to engage remote students, with the rider that it is not a teaching tool per se. It was agreed that perhaps its potential lies more in giving notices and announcements, and sharing resources between students.

Technical Skills and Knowledge

Uneven computer-related skills and knowledge are significant factors underlying the creation of the digital divide. One respondent working in an outreach capacity training teachers' aides, in a very remote area in the Kimberley, only has about an

hour a week face-to-face with her students and they are expected to do the rest of their studies online. This educator related the need for more in-community support for her students and observed that students require significant computer skills support, even basic skills: 'If I wasn't there, on site to help, these students would not do that course … and these students are at the higher end of literacy and numeracy.'

Mixed Platforms for Information Delivery

Many respondents were adamant that literacy support of various types is needed in addition to technical skills support to complement and strengthen students' engagement in online learning contexts. One respondent noted that in one learning context students use printed material and source books known as 'small print books' developed by her institution as an alternative to online resources to make it easier as this 'works better for them compared to having to access everything online or in e-format.' Others have found that the traditional online university learning management systems such as Blackboard and Moodle are not effective for all students, with one observing: 'A student writing it down in a book is stronger than those typing into bb [Blackboard online learning site] as their literacy is being enhanced through the former.'

Targeted Approaches to Enhancing Computer Use

Respondents related that their students don't like online learning management systems. As one put it: 'They want to be able to use a paper and a pen. *But* they need computer skills so they have to persevere. Most of my time with them is spent helping them with computer skills and also with literacy and numeracy skills.' One respondent in the Kimberley observed that at one community she frequents: 'Three languages in addition to English are spoken – so what language would you use if you wanted to put online learning modules together for these students?' Although students from remote areas are often not confident with online learning environments, it was also expressed that this improves greatly if delivery is complemented with on-campus workshops to introduce students to online learning.

Educators expect a lot of online learners in terms of confidence and competency in computer-related skills. Anthony and Keating (2013, p. 7) list some of these expectations which include being able to use web browsers and search engines; access online journal articles and e-books; manipulate graphics and photographs; write, communicate, access resources on the web; use spreadsheets, presentation software, email, word processing; take part and present in online forums; undertake group work online; and videoconference. But the reality is that often even the basic things required to get them started such as access, physically and financially, to the

Internet and to the necessary software and hardware in the community remain a persistent challenge.

Enhanced Onsite Training to Enhance Specific Regional Indigenous Learning Styles

As previously stressed, for students access to on-site in-community technological support and training is vital. Respondents in the Kimberley shared a range of teaching strategies associated with the students' computer use that improves success and engagement. They were adamant it is essential that the lecturer gets back to students quickly and that online activities are designed to be interactive. Mentors are important and the Indigenous Tutorial Assistance Scheme (ITAS) tutors have an important role to play here, for reasons that will be elaborated on later in this chapter. It is a case of many things working together: being open and communicative is very important; building study capacity; and while still in school, exposure to university study and knowing what it entails. The university year's introductory week is important in bringing students onto campuses wherever possible to learn study skills, form study buddy and online learning groups, and make sure students studying online fully understand and get to *see* what support is available.

One educator in the Kimberley was especially passionate about students needing to be *shown* the pathways into tertiary education and the 'baby steps' to get to these pathways. Retention is his teaching team's primary goal: 'There is a lot of pressure on everyone about this.' He has established programs whereby teaching staff work with students, one on one, to develop individual learning plans around their academic and other needs.

Students' Roles in Family and Community

As one Indigenous Kimberley educator put it, 'The ideology of community is the opposite of the individualistic nature of online study.' Online study can be seen as having the potential to take students away from their responsibilities to family and community. Respondents stressed that mature age students especially have family pressures such as supporting other family members and children, and finances, and many are likely to be leaders within their communities and therefore hold significant responsibilities. Jobs come up, and due to family financial pressures, it is hard for students not to take those jobs, even if only for a while. Reflecting these realities, Indigenous students tend to take longer to complete their degree as they cannot turn jobs down nor ignore family and community responsibilities. Students are then confronted by an accumulating debt on an unfinished degree for units completed, or units discontinued after the official census date.

Crises in families and the poverty in communities, and ill-health and deaths in extended families, can also result in students 'getting sucked out of university' and never finishing. Respondents identified the isolating effects of online learning, observing that 'when Aboriginal people study it takes them away from community and family time, even if they are just in another room.' This causes stress for them; they want to do both but they are very torn. Also, even with the best will in the world to commit to study, often just finding a quiet place within the home to study can be a challenge.

Respondents related that the online courses in which they teach have a high drop-out rate due to a myriad of 'push and pull' stresses on the students. They shared that issues in the community– ill-health, carer responsibilities, suicides, and funerals – can make life very challenging for their students: 'There's always something going on, it's very distracting for their focus on work or study.'

One Kimberley educator found that families can put a lot of pressure on women to be with their partners and not away somewhere working on a computer: 'When they're in class they're getting constant text messages from their partners and kids … they don't understand that this is a white fella structure … that (the women) need time away from family to do the study.' She reflected that as lecturers 'we can get annoyed' because students are often late, but there are often many reasons to do with family and community as to why they're late. These students, just like students elsewhere, mostly work and find it hard to get time away from work: 'They could not go into x for blocks; they wouldn't be able to get the time away.'

One respondent had taught a student who had received an offer for a university place on the other side of Australia but didn't want to go away from home, her family, her country. Her mother did not want her to go away either: 'University is a foreign land … studying in cities is the going away.' Some Elders cited the danger of city life as a key reason they preferred children and grandchildren to stay at home and not undertake study. The students' different roles in family and community and as 'a student' constantly impact on each other.

However, online study isn't a solution to these dilemmas and pressures because online is difficult too, although for different reasons. Students are caught between the two, neither are optimal, and both are *really* hard; and as Reedy's research (2011) found: '… where a student's identity as a learner is not strong, and where that identity is in conflict with the values of their family, peer group and community, the student is less likely to persevere with education' (p. 1069). Promoting increased community awareness of the benefits of higher education, showcasing the successes and positives that it can bring to a community, identifying leaders with the desire to complete further studies, and explaining the roles and requirements of being a student are activities that can assist to demystify university study and why it is of value to communities.

Another Kimberley educator, both a teacher and postgraduate student, reflected that as an active community member with many responsibilities he sometimes feels too thinly spread, having to be 'everything to everyone … it's important to grow the young up to be culturally strong, but they need to work/study/face community

responsibilities as well. It's so important that young people set their goals and keep trying to achieve them despite setbacks and pressures on them.'

Outreach and In-Community Support

As with most teaching and learning, relationships are extremely important in online learning contexts, as one respondent commented: 'It's always better to go out to teach the students in the community in very remote locations, that way you can bring the community into your teaching.' Many respondents teaching in the community have found success in bringing community members into classes; for example, asking Elders to be present. Elders can identify training needs and appreciate and want to be involved in the design of on-site delivery.

Respondents in the Kimberley articulated strong support for an outreach style of teaching delivery and in-community support for students studying online in remote locations but like all factors, there are positives and negatives associated with these elements. One respondent related:

> … some of the courses I teach in have more of an outreach model rather than blocks, lecturers go out to the sites, but for blocks at various sites we do have self-contained accommodation for husbands/wives and kids to come as well as part of the students' journey. But blocks are draining on families and the women miss their children, husbands get jealous. Large complex units however need to be blocked – it helps the students to unpack the content.

Funding is vital for longer-term outreach activities such as dedicated programs building relationships and linking universities with students and communities, particularly in remote and very remote regions. Outreach activities, however, are expensive and many institutions are reducing or withdrawing their outreach programs. In the words of one respondent: 'The Kimberley is so vast. We used to send out mentors to visit students in community in the program to help the students with technical problems and with literacy and numeracy.' One solution might be that where universities are geographically remote from enrolled students (for example, in another state or territory) they could explore the possibility of building relationships, centred around student support, with institutions that are closer.

It was stressed that the students need a lot more time with their lecturers than they are getting. In nearly all cases lectures are video conferenced from the metropolitan campuses, with most lecturers rarely visiting. One respondent noted: 'FIFO [Fly In Fly Out] lecturers are not ideal. FIFOs are not as invested into the community … don't understand the nuances. We need our facilities to be set up as a training centre with human support for computers and assignments.'

There is an important value in outreach and *in*-community support for remote students, and also *of* the community's support for their programs. Communities can offer education providers practical assistance, ensuring that outreach programs run smoothly and effectively; for example, providing accommodation for visiting teachers, organising teaching spaces, sourcing additional computers, and providing

informal moral support for the students and their families (York and Henderson 2003). One such program of note resides at the University of Newcastle where academics travel to western New South Wales with staff from the community engagement portfolio of the Wollotuka Institute; they take out information to communities and bring information back to researchers about communities' aspirations, needs, and interests. Effective information flows are created, researchers' activities are matched with the communities' needs, and channels are created for the sharing of research findings.

The Role of ITAS

Another potential element of in-community support is ITAS. This program was an initiative of the Australian Government. It was introduced in 1989 as the Aboriginal Tutorial Assistance Scheme (ATAS), reviewed in 2003 and renamed the Indigenous Tutorial Assistance Scheme Tertiary Tuition (ITAS -TT) in 2005. Since its inception, it has been a central plank supporting Indigenous university students in their studies. ITAS is widely recognised as a key enabler of students and as a reliable and central means of engaging students successfully. Yet despite its huge value to students, ITAS is far less available for students in remote and regional locations. The limited availability of ITAS tutoring to students residing in remote areas puts these students at a disadvantage and it is, therefore, tempting to envisage that schemes such as ITAS tutoring or peer mentoring might accordingly move more into online mode. However, the tutors and students interviewed in a recent study (Wilks et al. 2017) stressed that a key strength of ITAS is that most tutoring is done face to face. As one respondent in her survey observed: 'It's a cultural thing, a human thing'; and another: 'Relationships are so important; we need to get people who work effectively with Indigenous students.'

Pedagogy, Curriculum and Teaching and Learning Design

Importance of Blocks/Residential Programs

Mixed mode Away from Base (AFB) for higher education institutes has been utilised as a mixed-mode delivery tertiary study program for Indigenous students in remote and rural areas. Mixed-mode courses have combined online education in local communities with some face-to-face teaching at 'blocks' held on campus. The Australian Government has provided funding for travel, meals, and accommodation for eligible Indigenous students in the higher education sector in approved programs where students are away from home (Department of Education Employment and Workplace Relations 2011a, b).

Respondents in the Kimberley emphasised that workshops conducted during blocks in mixed-mode/blended delivery contexts facilitate learning, small group collaboration, and the setting up of peer support mechanisms. They expressed that face-to-face workshops should be the foundations of the course, conducted as early as possible in the semester, perhaps as part of the Orientation week: 'It's about developing relationships; the setting up of learning groups at the blocks – these groups can support students for the duration of the semester.'

A firm belief was expressed in the value of block release to supplement the students' online learning and as a suitable model for Aboriginal students in remote locations. Most respondents felt that attendance at the blocks should be mandatory: 'Attendance at blocks needs to be linked to accreditation and then no excuses not to come.' Another respondent offered:

> If I had all the money in the world? I would fund the introductory session (block) for everyone for the start of the session; cover travel and accommodation costs. Put as much money as possible into the block … but of course, it's more than about money.

Another:

> Some say that Intensives don't work because people don't return, but Intensives are an absolute incentive, it's interesting to see students interacting for example, traditional with not so traditional Aboriginal students, they learn from each other. You can talk online, but physical face to face early on in their course is so important. Lecturers should also travel to Communities to introduce themselves.

One respondent gave a distinctive example of how Indigenous and non-Indigenous students can learn from each other during blocks:

> We asked Aboriginal Tourism students how they would handle a tour group if there was a fire. They said their No. 1 priority would be to warn people about all the snakes coming out of the fire, whereas non-Indigenous students had a preoccupation with hard hats, wardens, assembly points, etc. In two-way learning we learn so much from their local knowledge. They can teach tourists so much more than non-Indigenous tourist guides in regions like the Kimberley.

One remote settlement provides accommodation for students for use during the blocks, but respondents indicated they're not being used:

> We're trying to find out why. It's perhaps because bringing students into town is difficult – there are temptations and distractions – the pub, disputes arise, there is family to visit. The rules about the dongas [accommodation] are very strict, they must only be occupied by students, but the blocks are draining on families, and the women miss their children, husbands get jealous … and the students want family and friends to come there too.

Travel and Accommodation Issues

Block accommodation at some sites have self-contained accommodation for husbands/wives and children to come as well and to be part of the students' journey. Educators in the Kimberley recognised that although individual learning times at

blocks are important, the blocks are a great opportunity for collaborative, group-based assessments. It is important to assess the extent of students' learning before they go back to their communities, and it is confidence-building for students to leave the blocks having already done and passed part of their assessment.

Many students are away from country when they come onto the campuses for their blocks and a Welcome to Country is helpful. As one respondent said: 'When we bring Aboriginal people onto campus they need to feel safe and comfortable.' Once she noticed that the students from a certain community were ill at ease on campus; it had something to do with a particular bird and was unsettling the students. On another occasion the students from one location were not comfortable with the wind at night: 'they have dogs on their own country to bark and protect them against the night winds.'

Learning Styles

The Western tradition of 'posing and answering questions' is a mode of questioning that can cause discomfort and embarrassment for some Aboriginal and Torres Strait Islanders (York and Henderson 2003, p. 80). One respondent related:

> You can't ask direct questions in teaching Aboriginal students, make a comment, and they will come back to you. Let them be the teachers. The humour is important. They are reserved (at first!). You have to make a connection with them. Be yourself. Find a way to connect. Connectivity is so strong – in every way.

Respondents related that in face-to-face teaching contexts teachers need to be cognisant of cultural factors. One educator observed: 'Students will just close their books and walk out if something is said, the nod of a head, or the presence of a person with a particular relational link or characteristic.' Non-Indigenous teachers need to be aware of these sorts of factors, and they have the potential to impact on online teaching settings as well; for example, in Collaborate (online) tutorials.

Online Pedagogy

Investment is needed in targeted study support programs for students that work to their strengths and build confidence in obtaining Western skills relevant for higher education. However, in thinking about the design of contemporary online higher education pedagogy, Anthony and Keating (2013) purport it to be mostly lacking in 'culturally appropriate learning mechanisms which have been a proven factor in the success of adult learning', and as largely reflecting Western values and pedagogic traditions (p. 6). One example these authors give (referencing Taylor 2012) is a unit of work objectives, the majority of which are based on personal success and status in mainstream terms. Reframing and reviewing these objectives through a

community or collective lens could assist their design to resonate more strongly with Indigenous students. University educators developing curriculum must possess cultural knowledge and capacities, and the delivery must be flexible enough to support remote learners (McMullen and Rohrbach 2003).

Rao et al. (2011) identified one of the main challenges in online pedagogy in the context of Indigenous learners as 'achieving empowerment in ways that consider their worldviews, cultural knowledge, and traditional community-based lifestyles' (p. 4). Some elements of online course design they suggest may help to achieve this include virtual meetings for cross-cultural exchanges, creation of online learning communities, 'visual instruction' – use of multimedia to clarify complex topics and promote visual exploration, and going beyond reliance on text-based materials – many have strong oral traditions that rely on verbal exchanges for communication whereas writing/reading can be discouraging.

McMullen and Rohrbach (2003, p. 109) use the term 'Aboriginal learning values' to describe learning based around storytelling, relationships and experiential activities and not so much text-based media. If opportunities for experiential learning and relationship building are incorporated into the course design and delivery practices, engagement with learning is more likely to occur. Essentially, it is about recognising 'the positive influence of culture' (p. 69), the qualities of culture, and ensuring that curriculum incorporates the knowledge and involvement of Elders, embraces relationship building, and 'respects the traditions and beliefs of Aboriginal students' (p. 110).

One Kimberley respondent stated: 'Aboriginal people are visual people, highly visual. You need to watch the signals from them - emotional intelligence.' Likewise, body language, absent in online learning fora, plays an important role in cultural and intercultural contexts (York and Henderson 2003), and online teaching staff would benefit from training in the application of culturally appropriate ways of utilising virtual teaching spaces to develop students' online collaborative skills. One strategy might be to provide students with a biography of the person teaching them to help overcome apprehensiveness around the lack of physical contact with teaching staff (McMullen and Rohrbach 2003).

Another relevant strategy comprises the embedding of Indigenous art, images, and symbols in the design of online content (Calma 2009). While always essential to put a rider on generalisations about how any one group of people might learn best, the reflections of Indigenous educators in the Kimberley study around learning styles reported in this chapter resonate with previous studies (for example, Kawalilak et al. 2012; McMullen and Rohrbach 2003). Emotion and feelings of connection, anecdotes, storytelling, and narratives, for example, play a critical role in the learning processes of Indigenous adults, signaling the need to create supportive learning environments; a challenge when learning is taking place online. There are other characteristic strengths of Aboriginal ways of learning – likewise not realised in online learning – such as observation; listening; imitation; context, spontaneity; imagery; and visual spatial acuity (Hughes and Moore 1997).

Timely and Meaningful Feedback

Another essential principle is prompt and meaningful feedback around assessment items; an elementary, effective teaching practice in any educational setting. Respondents stressed how important it is to mark students' work straight away and to provide lots of feedback: 'It's important to do this and to encourage them as much as possible.' Philpott et al. (2009) also promote the strategy of self-assessment by university teaching staff, the need for educators to reflect on which units of work students are having most/least success in, and thereby identifying and communicating 'student attributes for success in web courses' (p.13).

Across the sector many Indigenous students do not receive targeted support with assessments despite the presence of ITAS on campuses, nor is there awareness of their needs early in their course. Consequently, students are placed on the back foot from the beginning. Alert systems to trigger support vary. Some provide individualised learning support from enrolment, while others trigger communication to support services when a student does not respond or fails to submit work, or post-failure when debts are incurred. However, in online learning contexts, many supports lose their focus and potency, and the potential for students to lose touch is far greater.

Finding out about students' personal histories as learners and knowing their linguistic strengths is an important ingredient of online learning design to promote success (Kawalilak et al. 2012), yet the reality remains that:

> For the most part, our education system does not reflect Indigenous culture, its values and knowledge systems predominantly reinforce western cultural perspectives and western methods of learning … (yet) when students are able to make associations between the information they receive at school and at home they are able to integrate and scaffold new learning (Calma 2009, p. 121)

As one Kimberley respondent commented, ultimately successful teaching in any context is achieved through relationship building. All students learn better when relationships are forged and relational values are part of course design.

Conclusion

This chapter has identified a combination of elements with the potential to build capacity and connectivity in the online learning experiences for Aboriginal students living in remote locations. These relate variously to strengthening their participation through culturally respectful pedagogies, through teaching and learning design, through connecting with communities, and via technical access including ICT skills. Above all, university educators need to develop culturally informed principles around their practice and the related practical strategies to enact them, to underpin the development of a framework in higher education involving these elements. This includes fostering ways of learning in the community that seek to engage

students, Elders, community support workers, and related community resources in valuing and supporting Indigenous students.

In higher education 'successful outcomes' are generally evaluated in terms of incremental stages of progression of units passed until a qualification is achieved. Yet for these students and their communities, success in education constitutes more than achieving a score within a unit of a program of study. Success is encouraged when it is recognised that learning is not an individual activity; that in traditional communities, information is shared and negotiated with others and passed down from Elders; that traditional learning is important learning; and that many Indigenous learners prefer to work collaboratively, valuing community and kinship, and eschewing individual isolation (Calma 2009; Rao et al. 2011; Stoessel et al. 2015).

Education is relational, and having a sound education is a key enabling element in our lives. However, online learning in cross-cultural contexts is not a straightforward distance delivery matter. Challenges students encounter while studying from remote and very remote communities are frequently compounded by cultural, community and family responsibilities, and dynamic household arrangements and high levels of mobility. Students in remote locations have reported feeling doubly isolated when undertaking their university studies due to peer pressures and a lack of understanding within their home community where a 'cultural stigma' may be attached to higher education (Willems 2012). In an Indigenous community context, achieving individual 'success' at study not only relies on individual talent and hard work but also reflects Indigenous enablers and constraints that the remote community setting constitutes. In this sense, the importance of community as a factor in the relationships built around students' learning experiences cannot be underestimated.

Connecting with community enables a contextually situated and culturally responsive approach to education that fosters respect for, and the inclusion of, Indigenous knowledges. Further, it ensures the communities' and individual students' connectivity and relational needs are met, and support networks for students are strengthened, so as to ensure that students learn and can retain and own the education being undertaken in order to apply those skills for their personal and community benefit. In view of this, we must strive to build stronger partnerships between higher education institutions and students' communities when seeking solutions to best support their learning and engagement needs.

Education is a continuum from childhood into adulthood and incorporates many facets of community and culture. Indigenous communities benefit most from education when they are in a position to drive it, to enhance its links with other elements such as health and employment, and to be part of bringing together partners from government and other sectors (Calma 2009). As McMullen and Rohrbach (2003) reflected, rather than saying that our students are failing distance education courses, perhaps we should be putting greater energy into finding out about and addressing the ways in which the higher education sector may be failing them.

Appendix

Interview Questions

1. In your experience, which factors assist students to engage with their studies in online learning contexts?
2. In your experience, which factors mitigate against students' engagement with their studies in online learning contexts?
3. What role do you believe community plays in successful engagement for these students in their university studies in online learning contexts?
4. Can you describe any cultural sensitivities for these students that relate to their participation in online learning environments?
5. Which tools, e.g. phones; internet; apps; mobile devices; multi-platform networking etc., do you believe are the most useful and appropriate for these students?
6. Can you describe any in-situ educational and community support services that you believe would enhance these students' engagement with their online studies?
7. Which teaching and learning practices relating to educational design and delivery in online learning environments do you believe are the most useful and appropriate for these students?
8. If you had the money and the resources to innovate one thing in online learning for the benefit of these students, what would it be?
9. Is there anything else you would like to add?

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Chapter 14
The Impact of Enabling Programs on Indigenous Participation, Success and Retention in Australian Higher Education

Tim Pitman, Andrew Harvey, Jade McKay, Marcia Devlin, Sue Trinidad, and Matthew Brett

Introduction

Indigenous people remain extremely under-represented in Australian higher education. Despite a substantial increase in the overall number of Indigenous university enrolments since the demand-driven system was introduced, representation remains well below population parity (cf. Department of Education and Training 2015; Wilks and Wilson 2015). Along with participation rates, the university success and retention rates of Indigenous students are also relatively low (Behrendt et al. 2012). The causes of this under-representation and under-achievement have been well-documented. At one level, the relatively low secondary school completion and achievement levels of Indigenous people help to explain under-representation at the next level of education. At a deeper level, educational outcomes reflect broader disadvantage, historical exclusion and discrimination, and a system of education in which respect for culture and diversity often remains limited (Liddle 2016).

Australia's colonial past and history of dispossession makes Indigenous people an important area of policy focus for Australian higher education, and in social and

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economic policy more broadly. Indigenous Australians hold a connection to the continent that stretches back tens of thousands of years, but their exclusion from Australian society is demonstrated by being omitted from census population counts until 1967 and denied voting rights until 1962. Indigenous Australians now comprise between 2.5 and 3% of the Australian population. As contemporary society seeks to redress historical injustices, education is seen as critical to closing the gap evident in social and economic indicators between Indigenous and non-Indigenous Australians.

Many Australian universities now operate enabling programs to increase the participation, achievement and retention levels of Indigenous (and non-Indigenous) students. These programs typically involve free tuition and provide under-represented and other students with specific academic preparation before they transition to undergraduate study. In this chapter, we examine the impact of enabling programs across the Indigenous student continuum in higher education, drawing on national data provided by the Australian Government Department of Education and Training.

Enabling Programs: General Purpose and Design

Enabling programs are designed for a wide range of students; however, a significant number are designed specifically for Indigenous students. This is in recognition of the fact that while there are some similarities in the educational participation patterns between Indigenous people and other groups of under-represented students, there is likewise evidence of distinctive challenges for Indigenous people (James et al. 2008). We argue that enabling programs have contributed to broader university access for Indigenous students, and also to higher retention rates than Indigenous students who enter university directly through undergraduate programs. The extent to which the efficacy of enabling programs can be quantified is an issue we address in this chapter.

Enabling programs are diverse, and we begin by explaining their nature and context within Australian higher education. Many enabling programs cater to a wide range of students, from school leavers whose achievement is insufficient for their university course of choice, to mature age students returning to study after an absence of many years (Hodges et al. 2013). Alongside these broader programs are more specific ones, some of which are designed explicitly for Indigenous students. Indigenous students face particular issues within Australian higher education and we provide a brief overview of this context, including recent attempts to address inequity and improve educational outcomes. Enabling programs have been a central element of university attempts to improve educational equity, so examining their efficacy for Indigenous students is timely. We then outline our specific research based on an Australian Government Department of Education grant that examined national data on university participation, success and retention. We address each of these elements in turn, finding the impact of enabling programs to be significant on

higher education Indigenous participation and retention, though not without certain issues.

There are various alternative pathways to Australian higher education for students who do not qualify for direct entry into undergraduate programs (Andrewartha and Harvey 2014). These pathways include sub-degree programs such as diplomas, advanced diplomas and associate degrees, which may be provided either by universities themselves or by vocational education and training (VET) providers. Most sub-degree programs incur some cost to the student and offer a qualification that is typically counted as credit towards undergraduate study (Lomax-Smith et al. 2011). Enabling programs differ from these programs in that they do not lead to a formal qualification and they are usually provided to students with free tuition.

The quality of tertiary education provision is guided by the Australian Qualifications Framework (AQF) which was established in 1995 to monitor the quality of Australian qualifications (Wheelahan 2011). Higher education and VET programs, including those at sub-degree level, are typically bound by the Framework which ensures consistency of provision as well as quality. However, enabling courses are not part of the Australian Qualifications Framework and are not subjected to the same level of scrutiny or control as other programs of study. Some enabling programs operate over a full year, others only for a matter of weeks, some are delivered to distinct groups (e.g. Indigenous; mature age), and some are delivered online (Andrewartha and Harvey 2014; Cocks and Stokes 2013). A recent report into higher education financing noted that as enrolments in enabling courses have increased, the loading paid per student has decreased. In 2005, the rate per full-time student was $3592; this had dropped to $2044 by 2011, a reduction of 43% in the rate per student over this period (Lomax-Smith et al. 2011). Yet no review into the quality of education provision within enabling programs as a result of this reduction was undertaken. The major review of Base Funding, the Australian Government's review of the demand-driven system, and the major review of Indigenous education in Australia all highlighted the paucity of data and evaluation of enabling program quality and effectiveness (Lomax-Smith; Norton/Kemp; Behrendt).

Recognising an evidence gap, a national report into the funding of higher education, commissioned by the Australian Federal Government, recommended examining the effectiveness of pathway-enabling programs in comparison with the many other pathways to higher education (Lomax-Smith et al. 2011). Subsequent research by Hodges et al. (2013) focused on attrition *within* enabling programs, arguing that some attrition was both inevitable given the distinctive 'open door' nature of the programs and even positive given that students who decided not to pursue study were saved from student debt that would have accrued had they enrolled directly into a bachelor degree. Despite this study, and other evaluations at the program level (cf. Andrewartha and Harvey 2014; Cocks and Stokes 2013; Hall 2015), little analysis has been undertaken at the national level of the retention rates and university success of students who transition from an enabling program. Moreover, no previous analysis has been conducted of the effectiveness of enabling programs compared with other university transition pathways, such as vocational education and training (VET) sub-degree programs.

Enabling Programs: Relevance to Indigenous Participation in Higher Education

The larger research project from which this chapter derives considered the effectiveness of enabling programs for a wide range of under-represented student groups. One of these groups was Indigenous students, who have been explicitly referenced in higher education equity policy since the early 1990s (cf. Department of Employment Education and Training 1990). For Indigenous students, enabling programs have been particularly important in raising historically low university participation rates. Indigenous participation in Australian higher education is relatively recent, with the first Aboriginal Australian graduating from an Australian university in 1959 (Anderson 2016). Following three decades of minimal growth, university enrolments began to increase in the twenty-first century, and the past decade has seen substantial overall growth in Indigenous university participation, supported by rising school retention rates. The most recent figures indicate that over the past decade there has been a 70% increase in the number of Indigenous students in higher education award courses (Commonwealth of Australia Department of the Prime Minister and Cabinet 2016). One assumption is that the growth that has occurred has been largely facilitated by enabling programs. One recent estimate was that 'around 70% of Indigenous students gain entry to higher education through special entry programmes' (Devlin and James 2006, p. 12) and another reported that 'over half of the Aboriginal and Torres Strait Islander students who gained entry to university did so through enabling or special entry programmes' (Behrendt et al. 2012, p. 49).

In addressing the evidence base, our own study has consciously sought to measure the effectiveness of enabling programs by their contribution to university success and retention beyond participation rates. In Australia, the capacity for universities to deliver enabling programs is largely determined by support from the Federal Government and this support is not unconditional. The most recent policy signals are that alternative, sub-bachelor pathways may be preferred in the near future. Following the 2013 review of the higher education funding system it was argued that there was 'a strong case for expanding access to sub-bachelor pathway courses … in combination with the inclusion of non-university higher education providers' (Kemp and Norton 2014, p. 70). These include vocational education and training provider courses and diploma and advanced diploma courses offered by both public and private providers. Unlike enabling programs, these come at a cost to the student and at times that cost is not insignificant. The need for a broad evidence base as to the efficacy of enabling programs is particularly relevant to Indigenous students. As Anderson (2016) notes, the prevailing public priority in recent years has been to increase the participation of Indigenous university students, but strategies are required across all points of the education continuum, particularly to boost completion rates. Similarly, Liddle (2016) argues that universities have focused on getting Indigenous students 'through the door' more than they have addressed necessary support and cultural change to ensure student success and completions.

In this chapter, we seek to provide greater clarity as to what role one of these pathways – enabling programs – plays in providing higher education access *and* success for Indigenous students.

Approach to Study

This chapter draws upon research conducted as part of a wider study into the efficacy of higher education enabling programs in Australia. The wider study considered the implications for six groups of students formally defined as experiencing higher education disadvantage[1]; this chapter considers the findings specific to Indigenous students. The study adopted a mixed-methods approach, drawing data from three sources. First, an analysis of enabling pathways provided by Australian higher education providers was conducted between March and July, 2015. For each higher education provider, the institutional website was searched for information regarding alternative pathways to institutions and from these searches relevant enabling or enabling-like programs were identified. The structure of each program was analysed and compared in regards to age requirements, population targeted (e.g. Indigenous students), mode of study (e.g. online, campus), associated costs and which undergraduate courses could be accessed following completion of the enabling program.

Second, the team obtained detailed quantitative data from the Australian Government Department of Education for the period 2009–2013. Relevant to this study the data included: a count of the number of Indigenous students enrolled in undergraduate studies; a sub-count of Indigenous students for which the Department had recorded a previous enrolment in an enabling course; retention rates for the students and success rates for each of the equity groups. Prior enrolment in an enabling program is likely to be a significant factor in the subsequent enrolment of students in a bachelor program. However, because Australia's higher education standard data collection does not include 'enabling program' as a category of 'basis of admission to a new course', one cannot exclude from this study's analysis that students who had undertaken an enabling program have subsequently been admitted on the basis of other criteria.

The third source of data came from a national survey of students who were enrolled in undergraduate studies, to which they had been admitted on the basis of prior enabling studies. The broad aim of the survey was to establish demographics, motivations for choosing the enabling pathway into higher education, and perceived experience and satisfaction with the relevant pathway. However, as the response rate from Indigenous students was relatively low, the findings from this data source are not included in the discussion in this chapter.

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[1] For the purposes of Australian Government higher education policy, the six groups of 'equity' students are people who: are Indigenous; are from low socio-economic status backgrounds; have a disability; are from regional and remote areas of study; are from a non-English speaking background; and are women enrolled in non-traditional areas of study (e.g. science, engineering).

Scope and Delivery of Indigenous Enabling Programs in Australian Higher Education

The Australian Federal Government provides funding to universities to assist them in providing enabling programs, which are required to be tuition-free to domestic students. The funding is provided at the aggregate level only, and it is left to each institution to decide what type of enabling program to run and whether or not to target specific groups of students. In the year this survey was conducted (2015), a total of 48 enabling programs were offered by 27 out of 38 of Australia's higher education institutions. Of these, 14 institutions ran programs specifically for Indigenous students. There was no apparent relationship between institutional profile in regards to Indigenous students and whether or not an Indigenous-specific enabling program was offered. Eight of the fourteen universities running these programs had Indigenous enrolments above the sector's average; six were below. The converse was also true, with several institutions with high levels of Indigenous student enrolments not providing an Indigenous-specific enabling pathway. With the exception of one institution with the primary organisational purpose of delivering education to Indigenous students, the decision on whether or not to offer an Indigenous enabling program appeared to be based on other criteria, such as historical circumstances or internal advocacy.

In line with the aim of widening access and participation to higher education, the target audience for the programs was generally quite large. As one university stated 'The course is suitable for recent school leavers and mature age students who have not previously studied at university' (Edith Cowan University n.d.). Confirmation of indigeneity was approached in different ways. Some universities simply asked for a confirmatory statement (i.e. 'Are you of Aboriginal or Torres Strait Islander origin?'). Others approached the issue more formally:

> While Aboriginal and Torres Strait Islander identity is unique and sacred to every person, future students applying for entry into all Nura Gili Indigenous Programmes are required to provide proof of their Aboriginal or Torres Strait Islander heritage. [We will accept] a letter of confirmation of Aboriginal or Torres Strait Islander descent provided by an Indigenous community organisation [or] a statutory declaration. (University of New South Wales n.d.)

The programs' stated aims typically explicated two key goals. The first goal was academic, namely, to develop the requisite scholarly skills to succeed in higher education or, as one university put it, to 'develop the academic skills necessary to succeed at university level [and] develop different learning methods and skills, including problem-based learning' (University of Newcastle n.d.). The second objective was attitudinal; that is, the programs sought to provide a culturally safe environment in which the students could develop confidence and a sense of belonging in a higher education environment. As one university manager outlined, 'The student will be encouraged to explore their own reactions to the stresses of University life and to develop strategies for managing their involvement in study so as to maximise their success' (University of Canberra n.d.). However, in many cases the avowed goals of the enabling program extended beyond the individual towards

wider, socio-cultural ambitions. For example, the program notes for a pre-medicine enabling program as one university explained:

> There are an estimated 204 doctors in Australia who are Aboriginal and/or Torres Strait Islander, with another 310 in training. To provide the Indigenous population with access to an Indigenous medical practitioner, at a similar level of availability as non-Indigenous doctors to the non-Indigenous population, would require around 1,000 doctors. The Indigenous Entry into Medicine Scheme at the University of New South Wales (UNSW) aims to play a significant part in redressing the existing imbalance. (The University of New South Wales 2015)

Across the enabling programs nationally, course content was delivered via a mixture of classroom and online teaching. In line with the goal of building a sense of belonging in a university environment, there was a strong preference for classroom delivery, either across a semester or in block-teaching mode. For some higher education institutions this provides a significant challenge. For example, Australia's Northern Territory (NT) has an Indigenous population approaching 30% of its total population, by far the highest of any state or territory (Australian Bureau of Statistics 2014). There were two higher education institutions located in the NT, jointly delivering an Indigenous enabling program in multi-mode delivery: face to face workshops followed by online work, completed at home. The course is available in only two locations across a territory almost 1.5 million square kilometres in area and with the lowest population density of any state or territory of Australia. To address this challenge, the institutions provide funding to cover travel and accommodation costs for eligible students, if they are required to travel from their permanent home to undertake their studies. Other institutions also provided scholarships to help students financially while they are studying in the enabling program.

Post-enabling pathways tend to be generic, rather than specific. As one university advised '[The enabling course] gives you the minimum entry requirements to most [of our] degrees, upon successful completion you will be ready to apply for admission to a wide range of [our] diploma and degree courses' (Charles Darwin University n.d.). The diversity of post-enabling outcomes reflected not only the design and delivery of the enabling program itself but also the course offerings and pedagogical design of the higher education institution. For example, in 2012, the University of Western Australia adopted a new course structure, creating four generic undergraduate degrees (arts, commerce, design, science), with specialisation (e.g. law, medicine, nursing, etc.) occurring at the subsequent, postgraduate level. Consequently, students completing an Indigenous enabling program were eligible for entry into any undergraduate degree and from there, any postgraduate degree. However, most other universities provided qualified articulation into general course programs. Elsewhere, some provided alternative streams within the enabling program, such as the University of New South Wales which offered Pre-Business, Pre-Education, Pre-Law, Pre-Medicine and Pre-Social Work programs.

Table 14.1 Higher education Indigenous student population: undergraduate

| Year | Total Indigenous students enrolled in undergraduate courses | Number of Indigenous students who had previously undertaken enabling courses | | | Indigenous students articulating from VET courses |
		Indigenous-specific enabling course	Generic enabling course	Total[a]	
2009	2903	154	102	257 (8.9%)	263 (9.1%)
2010	3216	203	114	322 (10.0%)	321 (10.0%)
2011	3453	194	138	418 (12.1%)	338 (9.8%)
2012	3709	176	128	476 (12.8%)	320 (8.6%)

Source: Australian Government Department of Education and Training project data
[a]Total is greater than the sum of sub-counts as institutions <5 students suppressed from sub counts (data suppressed for privacy/confidentiality reasons)

Post-Enabling Higher Education Success of Indigenous Students

While high levels of attrition are to a degree acceptable – perhaps even desirable – in the enabling program itself (cf. Hodges et al. 2013), the efficacy of an enabling program can be measured to a high degree by the performance of the student in their subsequent studies. To measure this performance, data were obtained from the Australian Government Department of Education and Training, relating to the 2009–2012 academic years. These data provided detailed retention and success rates of Indigenous students in Australia's higher education institutions and further identified which of these students had been enrolled in an enabling program either the year or semester immediately prior to enrolment in the bachelor degree course. The breakdown for each of the years was as follows.

Volume

As Table 14.1 shows, enabling programs are an important pathway for Indigenous students. To illustrate this, a comparison is provided showing the count of Indigenous students articulating via VET qualifications in the same years. On average, VET transitions more students to higher education than any other alternative pathway (other than Year 12 studies). Across the four years, the enabling sub-population was, on average, almost 20% larger than the VET population for Indigenous students. This was a significant difference, given that VET providers are more ubiquitous, both in number and location. It is also noteworthy that this was a trend that was

Table 14.2 Enabling-pathway students as a proportion of overall group's population in higher education

Equity Group	Total undergraduate enrolments 2009-2012	Number of students who had previously undertaken enabling courses	%
Indigenous	13,281	1242	9.4
Disability	35,274	2320	6.6
Regional and Remote	184,234	11,562	6.3
Low-SES	147,139	8951	6.1
Non-English-speaking background	29,769	1474	5.0
Women enrolled in non-traditional areas of study	23,906	755	3.2

Source: Australian Government Department of Education and Training project data

unique to Indigenous students since in general, more equity-group students access higher education through VET than enabling courses. For example, in the same period, 8951 students from low socio-economic backgrounds utilised the enabling pathway, compared to 19,597 via VET. Similarly, 11,562 students from regional or remote locations transitioned via enabling, compared to 19,290 via VET. The same trend was true for students with disabilities, students from non-English speaking backgrounds and women enrolled in non-traditional areas of study. Thus, despite their relative scarcity in available-enrolment number terms, enabling programs are an important means of transitioning Indigenous students into higher education, and the role they play – compared to other pathways – is greater than for other groups of students.

Table 14.1 also indicates how many students transitioned through an Indigenous-specific, compared to a generic, enabling program. This analysis is a qualified assumption as, generally speaking, universities recognise only their own enabling program for articulation into further higher education studies. Even though Indigenous-specific enabling programs were available at only 14 institutions (i.e. approximately 36% of institutions), institutions with Indigenous-specific programs were responsible for transitioning 50% more Indigenous students in the four-year period reported, than generic programs.

The importance of the enabling pathway for Indigenous participation in higher education is highlighted further in Table 14.2. More than any other equity group, a larger percentage of Indigenous students in the four-year period analysed utilised this pathway. In the four-year period examined, almost one in ten Indigenous students enrolled in an undergraduate degree had transitioned via an enabling program.

Retention and Success Rates

Retention rates were calculated as the number of students who commenced a bachelor course in year (x) and continued in year (x+1) as a proportion of students who commenced a bachelor course in year (x) and did not complete the course in year (x). Success rates were calculated as the proportion of actual student load (EFTSL) for units of study that were passed, divided by all units of study attempted (passed + failed + withdrawn).

To examine the statistical significance of the difference in retention rates between the enabling (i.e. intervention) and overall (i.e. control) groups, Departmental data were converted into a series of tables to calculate effect sizes and statistical significance. Essentially, each table compared the aggregate retention/success rates for those enrolled in undergraduate degrees who had previously undertaken an enabling program, versus the overall group population; and then identified whether the difference between the two populations was statistically significant or not. The formulas used to calculate the effect sizes and statistical confidence intervals at the 95% level were based on the formulas outlined by Altman (1990). An odd-ratio test was used: for example, a positive odds retention ratio of 2 in the intervention group suggested these students were twice as likely to be retained as students in the control group.

This statistical analysis should be considered high-level, as it was only possible to control for one variable, namely, the basis of admission into the bachelor course. There are multiple other factors that impact upon academic achievement such as the educational background of a student's parents (Rich 2000). More importantly, the pre-tertiary academic achievement of the student is perhaps the most significant factor of all (cf. Gemici et al. 2014, 2013). In the Australian higher education sector, prior academic achievement is most commonly measured by the Australian Tertiary Admission Rank (ATAR), which is a calculation derived from student performance in Year 12 assessments. However, since a major goal of recognising enabling programs as a pathway to higher education is to provide an alternative pathway to students who do not have an ATAR, this rank was a variable for which we could not control.

Notwithstanding these caveats, the statistical analysis indicated a positive correlation between prior enrolment in an enabling program and subsequent retention in the bachelor degree program, for Indigenous students (see Table 14.3).

Over the four years, Indigenous students were between 1.13 and 1.59 times more likely to be retained after the first year of study if they had a prior enrolment in an enabling pathway. From a statistical perspective, these results were significant in two out of the four years. These findings indicate that enabling programs may be better at developing the confidence and resilience required by Indigenous students to persevere with higher education, than many other pathways to higher education.

Conversely, the analysis indicated a slight negative correlation between prior enrolment in an enabling program and subsequent success rates in the bachelor degree program, for Indigenous students; however, the findings were not statistically

Table 14.3 Comparative retention and success rates of Indigenous students using an enabling pathway

	Retention rates (odds ratio)	Success rates (odds ratio)
Year	Enabling pathways compared to all Indigenous	Enabling pathways compared to all Indigenous
2009	1.42*	0.93
2010	1.59*	0.91
2011	1.13	0.80
2012	1.24	0.97

Source: Australian Government Department of Education and Training project data
*Asterisk denotes a statistically significant result

significant in any of the years. In summary, the following statements reflect the findings:

- In two of the four years analysed, undergraduate retention rates were significantly better for Indigenous students who had previously enrolled in an enabling program, than for other Indigenous students.
- In subsequent undergraduate studies, there was no significant difference between the success rates of Indigenous students who had previously enrolled in an enabling program, than for other Indigenous students.

The analysis was also undertaken to compare the retention and success rates of the students coming through the Indigenous-specific versus the generic enabling programs. It was hypothesised that better retention and success rates might be experienced by those students coming through the Indigenous-specific programs. However, due to the complexities of comparing data at the disaggregated (i.e. institutional) level, compounded with a significant number of null counts for institutions reporting fewer than five students in any given year (in these instances, data are suppressed for privacy/confidentiality reasons), it was not possible to report any meaningful findings in this regard. Therefore, the assumption that Indigenous students may benefit more from being enrolled in a program specific to their needs requires testing.

Findings and Implications

Enabling programs play a distinct, important and growing role in providing an alternative pathway to higher education for Indigenous students. The proportion of Indigenous undergraduate students who utilise this pathway is larger than that of any other equity group recognised in Australian higher education policy. Furthermore, Indigenous-specific enabling programs are almost unique in the sector in providing a tailored program for a distinct group of students. Consistent with the Behrendt Review (Behrendt et al. 2012), we found that enabling programs are central to the subsequent undergraduate participation of Indigenous students, and are

indeed the most prominent means by which these students access university. Ongoing Indigenous under-representation suggests a need to continue and expand support for enabling programs. However, as Liddle (2016) has noted, there is also a need to move from getting students 'through the door' towards a greater focus on cultural change and support for student success and retention.

In analysing the impact of enabling programs on subsequent undergraduate retention, we found that enabling programs are clearly correlated with above-average Indigenous undergraduate retention. These results suggest that enabling programs are developing the requisite attributes of resilience and confidence for the students to persevere in subsequent higher education studies. However, it is less clear whether the academic scaffolding provided in these programs is preparing students to successfully complete their undergraduate subjects and progress in their studies in a timely manner. The reasons for the greater impact of enabling programs on undergraduate retention rather than success remain unclear. It might be that the design of enabling programs is well-constructed in terms of developing resilience in Indigenous students, but less so in developing core academic skills. Equally, since enabling programs are targeting the most academically disadvantaged group of Indigenous students, who have the greatest obstacles to overcome, their subsequent unit completion rates could be expected to be similar to, or even lower than, other students. This is an assumption that needs to be explored through further research, but is supported by the evidenced correlation between socio-economic status and academic performance (cf. Palmer et al. 2011). It may also be that, by taking a holistic approach to curriculum, enabling programs offer Indigenous students support and skills that realise benefits that extend beyond the Academy. Nonetheless, universities themselves need to remain focused on improving academic preparedness, even though enabling programs are clearly developing perseverance which itself ensures that many students complete their degree despite sub-optimal success rates. This need is particularly important when the programs are taxpayer-funded and the associated accountabilities are taken into consideration.

Our study suggests that the overall numbers of Indigenous students participating in higher education in Australia limit the extent and value of descriptive analyses. This in itself is an important, though concerning, finding. If Indigenous students achieved parity of enrolments at the undergraduate level, this would represent, approximately, an additional 9000 Indigenous students enrolling each year. If current enabling loads were maintained, almost 900 of these students would be transitioning via an enabling program. Our analysis broadly supports a positive correlation between the enabling program pathway and subsequent retention in higher education studies, suggesting a need to support and expand the provision of enabling programs. Clearly, data based on more robust enrolment levels would provide an even stronger basis for advocating greater student load towards Indigenous enabling programs.

Although our findings found little statistical difference between Indigenous-specific and generic enabling programs, further research on these different approaches is clearly required. The prevalence of Indigenous-specific enabling programs reflects an approach to support that extends beyond the improvement of

specific academic skills or the development of attributes to promote a general sense of 'belonging' in a university setting. Beyond that, Indigenous-specific enabling programs are designed to provide a culturally safe and contextual environment in which Indigenous students can be more fully supported in the critical transition stage to higher education. The extent to which these objectives are being met is unclear from our research. Similarly, there is a need for further research to be undertaken that considers how Indigenous students in general in enabling programs are being supported. Do these Indigenous students receive comparable levels and types of support and, if so, in what ways? Such options could be crucial for certain institutions without the capacity to provide an Indigenous-specific program of their own. Many of the differences between Indigenous-specific and generic enabling programs remain unclear and under-researched.

Further research is also required into factors that improve or reduce odds of success for Indigenous students completing higher education studies. It is clear that support does and should not cease once the student has completed the enabling program. Ongoing academic, cultural and social support is required to assist students throughout their course. More research is required into the reasons behind the apparent lack of differences in the success rates of Indigenous students who did/did not undertake an enabling program. While this study has been important in providing the aggregate picture, policy-makers and practitioners require greater insight into disaggregated factors. These factors include whether the delivery of Indigenous programs varies significantly at the institutional level, including which demographics of students benefit more or less from enrolment. Further study could also be undertaken into whether the improved retention rates arising from the enabling programs translate to improved completion rates, even when lower success rates may expand the time in which this occurs. We know that on the whole, Indigenous students have lower completion rates than other student groups (cf. Department of Education 2015). However, we need to analyse more whether these completion rates vary significantly depending on the initial pathway the student took into higher education.

The findings of this study support the argument for greater investment into enabling programs, particularly for Indigenous students. There is a demonstrable link between participation in enabling programs and subsequent participation in higher education. There is also a clear link between enabling program enrolments and improved retention rates in subsequent higher education studies. While it is less clear whether academic success is improved as a result of this participation, there is no evidence that it is lowered to any significant degree. Furthermore, it must be remembered that, by definition, enabling programs enrol students who have experienced significant educational disadvantage, and therefore measuring their academic success against higher achieving Indigenous students who transitioned directly into undergraduate studies is in some respects incommensurable. Given the benefits experienced by Indigenous students enrolled in enabling programs, the issue of supply needs to be considered more closely by policy-makers. Currently, enabling programs represent less than 1.5% of all student load in Australian universities and the proportion of enabling load taken by Indigenous students, in both specific and

generic enabling programs, is much less than that. Based on the data used for this study, we would estimate that Indigenous enabling student load is around 0.25% of the total higher education student load. The current logic for allocating enabling load to Australian higher education providers is based on a mixture of historical actions, government policy imperatives and internal organisational strategic decision-making processes. It is also seen as only one of a number of options in providing alternative pathways to higher education. However, the reality is that most of the alternatives to enabling programs require a significant financial contribution by the student, which is a determining factor for many as to whether or not to attempt higher education studies. The findings from this study reinforce the unique role played by enabling programs in opening a meaningful pathway to higher education for many Indigenous students.

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Chapter 15
'Red Dirt' Schools and Pathways into Higher Education

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Introduction

One of the predominant themes that pervades much of the literature on remote education is one about Indigenous 'disadvantage'. It has been defined specifically as 'the difference (or gap) in outcomes for Indigenous Australians when compared with non-Indigenous Australians' (Steering Committee for the Review of Government Service Provision 2012, p. xiv). The concept then extends to 'closing the gap' (Council of Australian Governments 2009) in a general sense and in a more specific educational context (What Works: The Work Program 2012). Combining 'Indigenous disadvantage' with 'remote' adds a different meaning – those who live in remote communities are doubly 'disadvantaged' because of their geographic location and their race, and indeed some indexes of socio-economic advantage place disproportionate weight on location and race. For example, the Australian

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Table 15.1 Comparison of metropolitan and very remote non-indigenous and indigenous students' year 3 reading results, 2015

	Non-Indigenous students at or above the national minimum standard[a]	Indigenous students at or above the national minimum standard[a]	Non-Indigenous school attendance rates[b]	Indigenous attendance rates[b]
Metropolitan	95.9%	86.3%	93.3%	86.5%
Very remote	93.4%	46.6%	91.5%	67.4%

Source: [a](Australian Curriculum Assessment and Reporting Authority 2015) [b](Turnbull 2016)

Curriculum Assessment and Reporting Authority (ACARA) do this with its My School variable, the Index of Community Socio-Educational Advantage, which counts Indigenous status twice:

ICSEA (student) = SEA (student) + student Indigenous status + SEA (school cohort) + Percent Indigenous student enrolment + Remoteness (ACARA 2013, p. 10)

We as authors see a number of risks associated with this kind of labelling (Guenther et al. 2014a, 2015a) on the basis of race and remoteness; what has meaning from a metropolitan perspective may not have equivalence in the 'red dirt' context of communities in remote Australia. However, we will take these measures as a given in order to set the scene for the chapter. The data for very remote students (see Table 15.1) shows that while results for non-Indigenous students are about the same as metropolitan students, the results for very remote Indigenous students fall well below both the non-Indigenous results and their counterparts in metropolitan schools, both in terms of attendance rates and academic performance.

Smyth (2010) argues, based mainly on a discussion of the Australian context of social inclusion/exclusion, that the voices of those who are supposed to be the beneficiaries or targets of service delivery and yet who are marginalised are rarely heard:

The underlying tone of the approach of governments is largely hortative and punitive, within a thinly veiled deficit and victim-blaming mentality. The emphasis is on the rhetoric and practices of 'targetology' and 'deliverology' and the notion that if we continue to measure things, then somehow situations will improve. (p. 125)

In the process, Smyth argues that the objects of disadvantage are often blamed for their failure to aspire or their lack of motivation to achieve. Therefore, interventions, particularly those designed *for* Indigenous students, are then designed to deal with the problem – the person who is disadvantaged – in a way that attempts to fit the person to the educational context. This is then done to remove 'obstacles to success' such as absenteeism and out-of-school support (O'Keefe et al. 2012) or improve 'school readiness' of individuals, without a concomitant approach that improves readiness of schools and support services (McTurk et al. 2008). This should of course not deny the reality of general disadvantages many Indigenous people face whether they be related to health, such as a higher propensity for middle

ear infections (DiGiacomo et al. 2013), or trauma as a result of experiencing violence (Bath 2011), but these are not necessarily educational disadvantages. The point is that perhaps 'the most disturbing impediment to success for the Indigenous child' is the 'Eurocentric' nature of the education system itself (Andersen 2011, p. 96).

Participation and achievement data for the higher education sector is a little harder to obtain for very remote Indigenous students, though the data that is available paints a similar picture to that presented in Table 15.1. Nationally, Indigenous people make up 1.1% of the student population (Department of Education and Training 2016) compared to 3.0% of the total population, and remote students make up about 0.9% of the student population compared to 2.3% of the total population. Further, while there has been growth in the numbers, the share of 'remote' students in the overall higher education population has declined in recent years (Smith et al. 2015).

Given the above, the aim of this chapter is to explore what can be done at school to achieve higher participation and completion rates for very remote Indigenous students. The discussion draws from work conducted by a team of researchers from the Remote Education Systems (RES) project within the Cooperative Research Centre for Remote Economic Participation (CRC-REP). While this research was mainly focused on education for schooling, the findings point to principles and practices that might be applied to other sectors. The focus of the study was not on student experiences, and this could be seen as a significant limitation for the purposes of this article. However, while we interviewed non-remote and non-Indigenous people, a strength of this study was that we have been able to quite clearly distinguish between the voices of those who are local and those who are not (see Guenther 2015). As we look forward in time, we consider how current strategies, designed to improve outcomes, might create opportunities – and at the same time risks – in the quest for more equitable outcomes in the higher education sector.

Literature

Educational Success and Failure in Remote Schools

It may be tempting to view the data presented in the introduction as an indication of the failure of remote education for Indigenous students. There are many contemporary voices who concur with this assessment. They tend to have a simple solution for what they see as a simple problem. The problem generally sits with either teachers, parents, attendance, curriculum, or teaching.

> Ultimately, the buck stops with parents. There's no excuse for not sending your kids to school (Mundine 2016); … the problem is the quality of the schools, particularly the curriculum and the teaching methods. (Anderson 2012, p. 4); This is the formula upon which our reform in Cape York is premised: Committed Teacher + Effective Instruction = Quality Teaching. (Pearson 2011, p. 53); School failure is the problem. (Hughes and Hughes 2012, p. 1).

But is it really that simple? Billions of dollars have been put into attendance strategies, national partnerships, closing the gap initiatives and school-based programs, and by and large, none of these policies, strategies or initiatives has worked. This is evidenced by the latest prime minister's 'Closing the Gap' report (Turnbull 2016) and the series of Overcoming Indigenous Disadvantage reports (Steering Committee for the Review of Government Service Provision 2014) that are generated to monitor progress. While the data does not lie, it tells only small parts of the truth about success and failure. An astute reader of the above quotes would ask 'what assumptions lie behind these statements?' Those assumptions are rarely articulated, but they reflect a way of looking at the world, mostly from positions of power and drawing on Western ways of thinking about the purpose of education (Zipin et al. 2015).

Theoretical Perspectives and Views of Success

One of the dominant theories that prevails in the discourse about educational success is human capital theory (Becker 1993), which argues that people will acquire knowledge because there is a return on their investment. The problem for school systems which accept this as the truth is that their clients in remote communities (particularly students) do not necessarily believe that there is a return on their investment worth pursuing (attendance) and so choose to disengage. Alternatively, theories of 'cultural capital' (Bourdieu 1983) shed light on why it is that knowledge as it is reproduced in education systems does not have the transformative impact it is often purported to have (Oakes et al. 2013). Yosso (2005) argues (from a critical race theory perspective) that for marginalised American 'Communities of Color', the required capitals are based 'on a very narrow range of assets and characteristics' such that disadvantage is then represented through a lens that fails to give voice to those who are ascribed as disadvantaged. The same dynamic often happens in Australian remote communities.

We argue that success, then, is not about outcomes in these contexts as much as it is about processes. Moreover, the key process to be concerned about in remote education is about willing engagement. Where young people willingly engage, they will see the value (as opposed to cost) of participating and they will see that their voices are recognised. We see evidence of this in data: communities with strong histories of employment and training also achieve better outcomes in terms of academic performance and attendance (Guenther et al. 2014b). We are careful not to generalise the experiences of all. For example, while in urban contexts experiences of racism may produce some kind of 'transformational resistance' (Pechenkina 2016), a different dynamic is at play in many remote communities we have worked in. There may be resistance, but it is perhaps more a passive resistance (Osborne and Guenther 2013) than a transformative one. We have previously argued that the dynamics of success and failure in remote schools are to some extent explained by complexity theory (Bat and Guenther 2013). We suggested that too often system

drivers attempt to treat remote education as simple with predictable outcomes arising from so-called best practice inputs. Many policy initiatives work on this assumption. For example, the Australian Government's Remote School Attendance Strategy (RSAS) assumes that getting 'kids to school' (Scullion 2013) will inevitably lead to better outcomes. Other prominent advisors adopt similar thinking: if you withhold welfare, then parents will send their kids to school (Mundine 2014).

Pathways and Aspirations in Remote Communities

The 'pathway' metaphor has been in existence for more than 20 years (Dawkins 1989; National Board of Employment Education and Training 1992), and it is particularly relevant for secondary schools and vocational education and training (VET). The metaphor was designed to demonstrate how individuals could navigate easily through a training system either into work or into higher education. It is still widely used today in relation to remote community members' access to employment and higher education (e.g. Bandias et al. 2013; Cuervo et al. 2015). The problem is that the metaphor now has a life of its own, so much so that it has become part of the vernacular and has produced other metaphors like 'barriers' and 'road blocks', which even local people in remote communities use to express a concept that is just a metaphor without substance. The substance on which it is based is not grounded in the realities of the local context in remote communities where non-Indigenous people seem to be able to bypass the recognised pathway to gain employment (Guenther and McRae-Williams 2014; McRae-Williams and Guenther 2012, 2014). The externally imagined pathway is little more than a myth in remote communities. Does this mean that people in remote communities have no aspirations? Not at all. It may be that aspirations of young people are different and, as McRae-Williams suggests, aligned with *their* ways of knowing, being and valuing (McRae-Williams 2014) rather than externally imposed ways of knowing, being and valuing.

Outsiders may perceive that aspiration is lacking. However, if the same outsiders were to engage in a conversation about what is important, axiologically, ontologically and epistemologically for Aṉangu, in Pitjantjatjara language, it could be that the local person would go away scratching his head thinking the outsider has not got a clue. Philosophies are complex for outsiders to a given culture, and it is perhaps why so many have attempted to position their writing so that their own philosophies are taken into consideration (Arbon 2008; Ford 2010; Nakata 2007; Rigney 1999). The 'pathway' metaphor is conceptually linked to a different set of philosophies that superficially may offer some explanation for imagined futures, but it may be that for many people from remote communities, it does not resonate with what is important for them. We would concur with Kinnane et al. (2014) that 'you can't be what you can't see'. If we were to consider an aspirational response to the issue of increased participation in higher education, we need to be mindful that externally imagined outcomes, and externally imagined pathways from communities to higher education institutions, may not have relevance.

Boarding Schools as a Shortcut in the Pathway

For many remote students, boarding school is an important 'step' in the educational pathway. For some, this is due to limited or non-existent secondary education provision in their home community. For others, it is about accessing additional resources – educational, financial, physical or human (Stewart 2015). There are several types of boarding facilities that students access in Australia, the most common being boarding schools, residential colleges, family group homes and youth hostels. Recent support for programs such as the Australian Indigenous Education Foundation (AIEF), which provides Indigenous students with scholarships to attend prestigious boarding schools, has been reflected in media and policy discussions. The general logic behind this model is that by accessing high-quality education, students will be given the tools and confidence to take full advantage of the opportunities before them (AIEF 2015) – quickly. The 2015 Northern Territory Indigenous Education Strategy indicates that focusing on boarding in urban and regional locations, rather than in remote secondary schooling, will be the driving force in the coming years. While assumptions underpinning such policy and funding decisions have received little critical analysis, emerging literature in this field suggests a strong link to the belief that the dominant culture in Australia is seen as possessing the most social and cultural capital (Benveniste et al. 2014), as alluded to in earlier sections. By placing students in an urban environment, in a structured and well-resourced boarding facility with access to mainstream schooling, boarding school may provide a 'short cut' to higher education for remote students. Being educated with these resources is expected to teach students the skills needed for participation in further educational pathways. It may suggest that students will also have the opportunity to 'see' and aspire to the potential benefits of such pathways (Kinnane et al. 2014), by seeing the outcomes first hand. Although it may appear that boarding will provide a fast-tracked step for remote students, from the limited quantitative data available, coupled with emerging qualitative data, it is evident that large proportions of remote students are not retained by their boarding school (Mander et al. 2015). Boarding is not the quick and easy solution that it appears. Although students are able to attend school away from family and community 'distractions', they must still be highly motivated, or have highly motivated families, to engage with boarding on an ongoing basis.

Remote Education Systems Project Overview

The Remote Education Systems (RES) project was a five-year project conducted through the CRC-REP. Its aim was to uncover ways to improve educational outcomes for remote students and their families. It ran from 2011 to 2016 and is the largest project on remote education ever conducted in Australia. There is no space here to give full details about the project, and readers should refer to the CRC-REP

website, and the more than 70 outputs it has produced, for further information (Cooperative Research Centre for Remote Economic Participation 2015).

Methods

The methodology used in the RES research was underpinned by a number of foundational (paradigmatic) assumptions. Our philosophical position coming into this research drew on a blend of constructivist/interpretivist and participatory paradigms (Lincoln et al. 2011). We acknowledge our position as non-Aboriginal or Torres Strait Islander researchers in community contexts where Indigenous stakeholders are the primary users in the education system. This in itself creates a tension for us as researchers, where our goals include the promotion of local Indigenous voices (Guenther et al. 2015b). We acknowledge the risks associated with attempting to portray remote Indigenous standpoints, as indicated by our research questions (RQs) below. In practical terms, what we did to promote Aboriginal voices was to let them speak for themselves. In particular, we encouraged and facilitated a number of presentations and papers where remote Aboriginal stakeholders were able to express their own standpoints (see, e.g. Osborne et al. 2013).

Research Questions

Four research questions (RQs) underpinned the research. Our focus in this chapter is mostly on RQ1, but readers should be aware that the research covers a broader range of topics which are not discussed here. For a more complete analysis of our qualitative data, refer to the project's *Overview of Remote Education Systems Qualitative Results* (Guenther 2015).

- RQ1 What is education for in remote Australia and what can/should it achieve?
- RQ2 What defines 'successful' educational outcomes from remote Indigenous standpoints?
- RQ3 How does teaching need to change in order to achieve 'success' as defined by these Indigenous standpoints?
- RQ4 What would an effective education system in remote Australia look like?

Qualitative data were collected during the period from mid-2012 through to the end of 2014. Sites for interviews and focus groups included Alice Springs, Adelaide, Yulara, Yuendumu, Lajamanu, Wadeye, Darwin, Perth, Broome and two online focus groups with participants coming in from across all Australian states except Tasmania. Data collected from the physical sites included participants from several communities across remote parts of Australia. We interviewed teachers, assistant teachers, school leaders, community members, policy-makers, bureaucrats, university lecturers and researchers, vocational education and training (VET) and higher

education students, youth workers, child care workers, education union members and representatives from non-government organisations (NGOs). We deliberately chose not to include students directly in interviews even though they were very much the object of our research. This is partly because as a team, we did not have the specialist skills required for this focus; but more importantly, we felt that the views of adults who had a full experience of school and what lies beyond were better qualified to respond to our questions. For example, a 15-year-old student may find it very hard to articulate what education is for (RQ1) when they had not experienced an outcome of education. The same applies to RQ2; and it follows logically that the remaining questions would be challenging. Quantitative data were collected primarily from two sources: the Australian Bureau of Statistics Census and the *My School* website. With the former, we used the Tablebuilder Pro online tool to analyse variables for very remote statistical geographies. In the following sections we introduce some pertinent findings from the research. It is not an exhaustive analysis of data, but we will use it to illustrate some key points about remote schooling and transitions into higher education.

Findings: What Is Education for?

Table 15.2 summarises the qualitative findings of RQ1. The table is sorted in the descending order of priority based on remote Aboriginal respondents' views. The number of references coded refers to the number of times concepts associated with the categorisations in the first column are mentioned. The last column in the table shows where a chi-squared test shows a significant difference between remote Aboriginal responses and others. A number of points stand out from the data. First, the issue of employment or economic participation is ranked fourth behind language, land and culture, identity and being 'strong in both worlds'. Second, even though our non-remote stakeholders generally understood the remote context, they were less likely to identify 'language, land and culture' as a purpose. A third point to note relates to the category of 'choice and opportunity', which was identified more by non-remote stakeholders than remote participants. In effect, this categorisation expresses something of the hope that education will provide individual agency, a future chosen pathway and an equitable basis for decision-making about careers. Why this was identified less by remote Aboriginal respondents is not clear. Finally, of significance for the pursuit of increased participation in higher education is the relatively low weight given to 'further learning and skills'. This low ranking is a pointer to perceptions about the importance of higher education as a pathway from school and is something we will return to later.

Table 15.2 Qualitative perceptions about what education is for in remote communities

		Number of references coded			Per cent of references		
What is education for?	Sources coded	Remote aboriginal (n = 347)	Non-remote (n = 378)	All sources (n = 725)	Remote aboriginal	Non-remote	Chi-squared*
Language, land and culture	30	64	40	104	18.4%	10.6%	P < .05
Identity	34	50	51	101	14.4%	13.5%	
Strong in both worlds	34	40	30	70	11.5%	7.9%	
Employment and economic participation	26	35	48	83	10.1%	12.7%	
Meaningful engagement in the world	29	28	33	61	8.1%	8.7%	
Community leadership and participation	19	25	26	51	7.2%	6.9%	
Learning	24	25	18	43	7.2%	4.8%	
Choice and opportunity	21	20	40	60	5.8%	10.6%	P < .05
Holistic	19	18	17	35	5.2%	4.5%	
Further learning and skills	17	11	18	29	3.2%	4.8%	
Socialisation to schooling	16	11	18	29	3.2%	4.8%	
Fun	11	9	9	18	2.6%	2.4%	
Sport	4	6	4	10	1.7%	1.1%	
Not sure what for	14	4	20	24	1.2%	5.3%	
Power	5	1	6	7	0.3%	1.6%	
Total references		347	378	725	100.0%	100.0%	

*Chi-squared test is used to determine whether there is a statistically significant difference between the number of responses for remote Aboriginal and non-remote stakeholders. Where the column shows a value of $P < .05$, it indicates that the probability of the remote Aboriginal and non-remote responses being the same is less than 5%

Findings: How Aspirations Are Built in Remote Community Schools

If the above table highlights what people in communities want from education, how then might aspirations be built? Visible opportunities feature strongly in RES data where respondents described their post-school aspirations. These include 'red dirt' local community opportunities such as teaching in the school, health work in the local clinic, ranger work across the region and work in the church. In recent

interviews conducted by one of the authors (Osborne forthcoming-a), parents in the south of the Northern Territory expect schools to orient their children to social and work-based experiences in and out of the community, and that these experiences should strengthen their capacity for engagement with work in the local community and across the region.

Anangu educators (see literature review above) and community contributors to RES data remind non-local educators and school principals of their limited capacity for building aspiration in very remote communities, as it is 'Anangu that give the future to their children' (Burton and Osborne 2014, p. 36). Senior educator Makinti Minutjukur (Minutjukur and Osborne 2014) describes the critical role her father played in providing a role model and also urging her to pursue schooling in the senior years despite the absence of peers on the same pathway. Similarly, Rueben Burton (Burton and Osborne 2014) describes actively modelling how he engages in unfamiliar social contexts to build confidence in his children. Natalie O'Toole, an early childhood educator at Wingellina School (WA), describes her father's central role in building her own aspirations: 'Every day I think about my father and the influence he is on me' (Osborne forthcoming-b, p. 193).

Remote school principals and educators are not placed as central to building aspiration amongst young people in these narratives, but they play a role in seeking venues for family and community members to be active in schooling processes. The evidence from RES research strongly supports the view that parents and family members are the primary source of aspiration (Minutjukur et al. 2014).

Discussion

Simple Solutions for Complex Problems

As noted earlier in the literature, complexity theory may help us understand the dynamics of education in remote contexts. The theory has its origins in systems science (Flood and Carson 1993). A system, by definition, is a collection of elements that behave as a whole. Complex systems can be contrasted with complicated, simple and chaotic systems. We have argued previously that among the many models that exist to explain complexity, the Cynefin framework (Snowden 2011) is useful (see Bat and Guenther 2013). Simple systems are ordered with predictable cause-and-effect outcomes. Complicated systems do have a relationship between cause and effect but require expert analysis because of the number of possibilities available. In complex systems, the cause-and-effect processes are intertwined with nonlinear and unpredictable relationships.

If it is true that remote education is a complex system, then simple solutions with predictable outcomes will fail. Rather, solutions would first take into account that uncertainty and unpredictability. Second, in proposing solutions, all the system elements would be engaged. For school leaders, this means working with staff at the school, families and students, cultural leaders or elders, policy-makers, employment

services and training providers. Third, leaders would practise processes of collective enquiry. Finally, leaders would narrate and re-narrate a shared vision over time (Boal and Schultz 2007).

How does knowing about complexity affect our approach to improving participation in higher education? Put simply, if attempts to increase higher education participation are driven by the relatively simple assumptions about education pathways in urban communities, on the basis of the above, we contend that they will not work. Strategies must take into account the context and its assumptions. As we have shown above, the foundational assumptions about what education is for, in remote communities, are not necessarily the same as we might expect in urban communities.

Strategic Solutions Offered for Remote Communities and Their Risks

Below are some examples of strategies that use relatively simple logic to achieve what, on the surface, appear to be simple outcomes. Each of these strategies is considered from the perspective of improving higher education participation.

Attendance Strategies

The logic of increasing attendance to achieve better outcomes is reflected in some of the earlier statements we noted in the literature. The logic suggests that when children go to school, they will learn more and be retained for longer, thereby giving them access to established higher education pathways. The problem here is that, based on our research findings, attendance is not a good predictor of outcomes in remote schools (Guenther 2013). Further, our analysis of My School data suggests attendance strategies have had little impact; and earlier evaluations of the School Enrolment and Attendance Measure (SEAM) show that it has not worked particularly well, either, in remote communities (Wright et al. 2012). If attendance is used as a strategy, it must be coupled with other strategies to clarify what the purpose of schooling is. Making visible the 'pathways' (as in 'being what you can see' in Kinnane et al. 2014) is also required. The evidence – or lack thereof – suggests pursuing attendance strategies will not guarantee improved outcomes (academic and retention) in the long term.

Early Years' Interventions

In many jurisdictions, significant investment has been made in early childhood programs aimed at pathways to, and success in, education for Indigenous children. Early learning programs seek to increase children's school readiness through exposure to school routines, learning games, family involvement and positive

parenting guidance. Programs include Families as First Teachers, the Home Interaction Program for Parents and Youngsters (HIPPY), Let's Start, and Families and Schools Together (FAST). Much of the impetus for these initiatives comes from research that suggests the largest return for investment in children's interventions comes from the early years (e.g. Heckman and Masterov 2007).

However, a focus on early years runs the risk of disempowering parents when the focus is on the child and not the parent at the same time (e.g. child care centres which may tend to substitute parent care with expert child carers). Further, while there is evidence for the effectiveness of the kind of programs listed above, the problem is that they tend to work with families who want to get something out of the program and therefore have limited impact on the most vulnerable families. Beyond these concerns, funding that is directed at one area of concern (in this case, the early years) is then not matched with funding to other areas; there is a trade-off in the application of available resources. The patterns of disengagement from schooling in remote communities are such that the drop-off in attendance and engagement begins most notably from about Year 7. Therefore, attention needs to be paid to this age group as well.

Boarding Strategies

As discussed previously, boarding strategies are increasingly supported through policies. Reports thus far suggest that the assumption behind the support is that students will gain human, cultural and social capital which allows them to move 'between two worlds' (Benveniste et al. 2014). By accessing boarding school, students will also presumably have the opportunity to view and aspire to future pathways which they may not be able to 'see' in the remote context. However, as we suggested, once one scratches the surface of the boarding model, it becomes evident that this is an equally complex space and requires careful consideration and implementation, rather than simple solutions. Many students move between remote schools and boarding a number of times across their secondary years, sometimes accessing several different boarding providers. This makes tracking and evaluation of outcomes difficult. Follow-up of students and their eventual outcomes, whether in higher education, employment or otherwise, is necessary before evaluating the impact of boarding. While there are cases where students have moved seamlessly from secondary education to higher education via a boarding pathway, for the majority of remote students this is not the case. What contributes to the experiences of these students and their 'success' needs further consideration.

VET Strategies

Earlier, we questioned the validity of the pathway metaphor, which is so widely used in vocational education and training (VET) strategies. The idea is that anyone can progress from Certificate levels through to higher education. In remote

communities that rarely happens. The problem is not that students do not enrol or start courses; it is rather that they do not complete. Attrition rates of 100% have been observed for some training programs in remote communities and across all remote Australia; attrition is on average about 90% (Guenther and McRae-Williams 2015). Not only is VET not working as a transition vehicle, but also it is not working as a training vehicle in remote communities, and it is not assisting people who are currently unemployed to gain employment. One of the challenges for VET and higher education is to convince community members that gaining a qualification is worthwhile. This requires collaboration not only between service providers but also with community members.

Increasing Remote Participation in Higher Education

The Case for Increased Remote Participation

Before suggesting what it might take to increase participation in higher education, we do not want to take the 'good' of that outcome as a given. In the first instance, while in urban areas there is strong demand for graduate and postgraduate qualifications, the same is not necessarily true for remote communities, as we argued earlier in the literature. Indeed, as our data shows (see Table 15.2), school-based education is not necessarily perceived by local people as a stepping stone for entry into higher education or a pathway into a high-skill career. Rather, it is about helping people maintain connection to language, land, culture and their local identity.

That said, there is a strong case for pursuing strategies that increase remote participation in higher education. It is in part, as we see in our data (Table 15.2), about 'being strong in both worlds' – having capacities that allow young people to pursue their dreams, regardless of where they come from or who they are. Philosophically, we would argue that education at all levels should be about building hope, increasing human capacity, enhancing social cohesion and improving well-being. There is a need for a transformative agenda in education (Oakes et al. 2013). There are also equity issues and human rights imperatives. In order for a nation to be a just and fair society, all people should have the same opportunities for education. Among other things, a university education gives voice to those who did not have voice – back into their community, and from their community.

If we look forward and envisage systems that would address and counterbalance the competing demands of communities and universities, we might expect to see more adaptive structures within institutions that increasingly recognise and respond to the epistemological, ontological, axiological and cosmological diversities expressed in communities. We might also expect to see greater community voice speaking out for communities, facilitated by culturally responsive schooling both in communities and in boarding schools.

Emerging Cultures, Emerging Identities

As noted from RES data, in remote communities, many adults model work practices that are closely tied to service for, and within, the community, providing an important source of aspiration. Teacher training, an example of such service, has been a particularly successful and frequent further education pathway, as has health work. These pathways are congruent with local motivations and opportunities. More recently, 'Caring for Country' initiatives have provided another local field of employment and training. Providing similar congruence, it strengthens 'values of family obligation and obligation to country, strengthening local governance, reiterating cultural values and protocols, and increasing capacity to engage with the external world in areas such as employment, education and health' (Weir et al. 2011, p. 9). Participation in such employment and training opportunities allows for new identities to emerge. They map to and expand existing values and capabilities.

For new experiences of further education, opportunities are necessary. Such opportunities must map to local aspirations and recognise the life trajectories of learners. Opportunities for both adults returning to study after periods of unemployment and family obligations, and post-secondary entrants are required. While education providers such as Batchelor Institute emerged to provide these, other providers are also seeking to develop these (Smith et al. 2015). Looking forward, we expect to see courses capitalising on local knowledge, linguistic, cultural and natural resource management as a precursor to increased higher education participation.

Increased Local Ownership in Schools

RES data shows a relationship between rates of employment of non-qualified teaching staff and student achievement in terms of attendance rates and National Assessment Plan – Literacy and Numeracy (NAPLAN) scores (Guenther and Disbray 2015). This means that when locals are working in the front office, school grounds, classrooms or canteens, children are more likely to attend and to be more confident and successful engaging with school-based learning activities. There is also a strong relationship between per-student funding and outcomes. Extra resources invested strengthen local aspirations and build learning environments for improved outcomes. Additional resources that are leveraged to build local community engagement, employment and workforce development through certificate-level and tertiary training build the foundation of community voice and participation. We would, therefore, anticipate that schools and systems that invest in these foundations will produce graduates who go on to participate in higher education, very simply because the role models and resourcing make it possible.

Ceding Power and Enabling Local Capacity Development

'Power-sensitive' (Haraway 2004, p. 112) approaches to privileging community voices through governance and decision-making forums can also strengthen 'successful' remote schooling approaches. In order for 'power-sensitive' approaches to have 'teeth', they will need to have structures and accountabilities built around them to ensure that they are not 'power sensitive' in name only. For example, in the Northern Territory, the Indigenous Education Strategy expects schools to engage with community members (Northern Territory Department of Education 2015 see Element 4). But without corresponding accountability mechanisms in place, these expectations will more than likely evaporate under the pressure of other demands on remote schools. We would expect that at a minimum, school councils or boards with local representation would assist with a range of roles including the development of recruitment strategies (including local recruitment), community feedback arrangements and parent involvement strategies. As with other strategies suggested above, local capacity-building through governance builds ownership not just of schooling, but of the pathways that exist beyond. As such they are an important precursor to increasing higher education participation.

Balancing Risks with Benefits of Boarding Schools

As all the foregoing literature and discussion suggests, the pathways from school to university in remote communities are challenging, given the relatively low rates of year 12 completion and the relatively low level of academic performance as measured by NAPLAN. But even if these challenges were not present, it would not guarantee equity in terms of opportunity and participation in higher education institutions. We see it as highly unlikely that year 12 completion rates *within communities* will approach the completion rates of non-Indigenous people either from remote communities, or even from elsewhere, within the next generation. The simple reason for this is that as university aspirants leave communities for boarding school, only a portion of those will return to build capability back in communities. The 'brain drain' will inevitably impact on the social and human capital of those who remain – just as happens in rural communities around the world (Halsey 2009). As in other non-metropolitan contexts, consideration needs to be given to the role that schools have in 'selecting and sorting' students for out-migration (Corbett 2005, p. 52). The point is that remote schools can, and to a large extent already do, function to identify students who are capable of and aspire to university education. Boarding schools are equally complicit in this role. Looking forward then, we would expect that the impacts of strategies which seek to engage very remote young people in higher education will have been researched more comprehensively and the risks taken into account more fully.

Conclusions

One of the key points that should be evident from this chapter is that issues of remote participation in higher education need to be considered well before students arrive at university. The idea of pathways from school to university in remote communities is flawed. Even if there was something akin to a pathway, questions remain about how students get onto the path and perhaps, more importantly, whether they want to get onto the path. We have shown, from CRC-REP RES data about what remote community members believe education should be for, that the role of schools in preparing young people for higher education is not high on the list of many other important purposes. Of these purposes, connection to culture, language and country stand out. If these are important, we might not be surprised that in many remote communities, parents feel somewhat conflicted as they send their children off to boarding school. Based on the limited research undertaken on Australian boarding schools, we know that this is a concern.

We have also noted that there are problems with strategies designed to increase attendance at schools, and early years' strategies may well be counter-productive for youth retention and transitions to further and higher education. We have also noted the failure of VET as a pathway into higher education for remote young people.

Given the bleak picture painted, it might be useful to ask 'what could work?' The RES data shows that remote community members want education to be grounded in their 'red dirt'. They also see that aspiration for university cannot be 'taught'; rather, it has to be modelled from a young age. This is why we see tremendous importance in programs that support local parents to be more involved in remote schools. This involvement can be partly achieved through employment of teaching assistants and other staff, and the professional development of assistants who aspire to be teachers. It can also be partly achieved through governance structures that give voice to community members. Finally, we noted that there are risks as well as benefits of pursuing strategies that are designed to take young people out of communities on a pathway towards university. As we look forward to a time when participation is more equitable for remote students, we also look forward to a time when we know a lot more than we do now about the various impacts on parents, students and whole communities, and to understanding how those risks can be effectively mitigated so that the benefits of higher education for remote students can be more fully realised.

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