# Educational Resilience as a Quadripartite Responsibility: Indigenous Peoples Participating in Higher Education via Distance Education

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## Abstract

Considerations of educational resilience are often linked to student participation, retention, and outcomes in distance higher education, in spite of adversity, equity issues, or 'invisible fences' that students may face. This paper further develops the quadripartite model of educational resilience (Willems, 2010; Willems & Reupert, forthcoming); that is, educational resilience as the shared responsibility of students, educators, institutions, and communities—as a means to help assess and promote educational resilience and minimise student attrition in a specific cohort of distance learners, namely indigenous peoples. Through this lens the experiences of an online indigenous distance learner are explored.

**Keywords:**  educational resilience; attrition; distance education; higher education; holistic approach; indigenous peoples; connectedness

## Introduction

Considerations of educational resilience are often linked to successful student participation, retention, and outcomes in higher education, in spite of the challenges—the 'invisible fences' (O'Rourke, 2008), or environmental risks (Masten & Obradović, 2006)—experienced. The inverse may also be erroneously assumed—in cases of attrition in distance education, a student has somehow lacked the resilient qualities or characteristics necessary for the successful completion of distance learning.

Framing resilience in terms of either a personal attribute or deficit without considering the context and communities within which that distance learner is embedded is flawed, as an individual's responses cannot be dissociated from the context within which they are located. This paper builds on the notion that educational resilience in distance higher education is the quadripartite responsibility of the key stakeholders. This involves not only the student, but also their educators, the institution, and the student's broader social community (Willems, 2010; Willems & Reupert, forthcoming).

## Indigenous peoples

Indigenous peoples are collectively underrepresented in higher education in many nations of the world (Gray & Beresford, 2008), including Australia (Bradley, Noonan, Nugent, & Scales, 2008). According to the Department of Education, Science and Training (2001, p. 4), indigenous

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peoples are defined as the "inhabitants of land where their forebears have lived for hundreds of generations, [are] distinguished by heritage, culture and language [and] have also been colonised by other groups". Indigenous peoples from around the world include the First Nations peoples of Canada and the Māori of New Zealand. In an Australian context, the Commonwealth of Australia identifies an indigenous person as either Aboriginal or Torres Strait Islander (Australian Bureau of Statistics, 2010). To be considered an Aboriginal/Torres Strait Islander, an individual must be of Aboriginal/Torres Strait Islander descent, identify as an Aboriginal/Torres Strait Islander, and be accepted by the community as an Aboriginal/Torres Strait Islander. While
15 percent of the New Zealand population is identified as indigenous (Department of Education, Science and Training, 2001), indigenous peoples in Australia account for only 2.5 percent of the total population (Indigenous Higher Education Advisory Council, 2006). Further, while
90 percent of the Australian population inhabit 2.2 percent of the continent (predominantly along the east and south-west coastal fringes), 90 percent of indigenous Australians live in areas that cover 23 percent of the continent, encompassing regional or remote areas (Australian Bureau of Statistics, 2003). Although referred to as a single collective, Australian indigenous peoples are a heterogeneous group comprising many distinctively diverse and different peoples (Department of Education, Science and Training, 2001). As the Queensland School Curriculum Council (2001, p. 2) notes:

> Aboriginal histories, cultures, languages and societies are distinct from Torres Strait Islander histories, cultures, languages and societies, and each group needs to be recognised accordingly. Diversity exists both within and across these groups in terms of social, cultural, geographic and economic circumstances.

Indigenous peoples are often exposed to multiple equity issues and equity overlap (Willems, 2010). They are frequently marginalised in terms of power, wealth, and access to quality education. They tend to have a higher birth rate than the rest of the population, are more likely to be living in poverty, and access to education is considered to be the key element to improving their lives (Department of Education, Science and Training, 2001), including their health. With the federal government's widening participation agenda currently highlighting particular groups of 'underrepresented' students in Australian higher education (indigenous Australians; students from low socio-economic backgrounds; and regional and remote students) (Bradley et al., 2008), issues relating to equity overlap become obvious when looking at the demographic characteristics of indigenous compared with non-indigenous students (Australian Council for Educational Research, 2011, pp. 2–3). Indigenous students are more likely to be female, of low socio-economic status, of mature age (the mean age is 28 years), responsible for the care of dependent others, first in the family to participate in higher education, and more likely to come from regional or remote areas of the nation.

Educational equity for indigenous Australians remains a continuing concern in Australia. While there has been gradual improvement in access, participation, and outcomes across the various sectors of Australian education since the 1960s, the discrepancy between indigenous and non-indigenous participation is most marked in the areas of secondary school completions and in commencements in higher education (Gray & Beresford, 2008). The Department of Education, Employment and Workplace Relations (2010) reported that while there had been an increase in indigenous Australians participating in higher education in 2010 compared with previous years, this still only represented 0.9 percent of all student enrolments in higher education (11,088 students). Further, these indigenous student enrolment statistics do not have parity with indigenous people making up 2.5 percent of the Australian population (Indigenous Higher Education Advisory Council, 2006). Indigenous students are not only significantly underrepresented in higher education, they are also collectively less likely to be successful in terms of participation, retention, and outcomes (O'Rourke, 2008; Devlin, 2009). According to Kauffman (2003), fewer indigenous Australians hold post-school qualifications than their

indigenous counterparts in both the United States and Canada. He suggests that Australia has, in fact, the worst indigenous educational outcomes of any comparable Western society. Gray and Beresford (2008) call this gap between Australian indigenous and non-indigenous students a 'wicked problem'.

Due to the "rapid migration of technology across geographic and socioeconomic boundaries" (Masten & Plowman, 2003, p. 75), today's distance education is the means by which under-represented (disadvantaged) groups of students such as indigenous students may participate in higher education (Universities Australia, 2008). However, exact figures for indigenous students participating in higher education via distance (or off-campus) learning are hard to find.

There are many variants of distance education, and one form that many institutions of higher education offer in Australia for indigenous students is 'block-mode' tuition. The Australian Council for Educational Research (2011, p. 3) estimates that while the "majority of indigenous students are enrolled in full-time, on-campus courses like most school leavers", approximately 33 percent are enrolled via block mode. Block-mode tuition is a form of mixed-mode tuition that couples residential on-campus intensives with lengthier off-campus periods (Milton & Vozzo, 2010). The off-campus component in block-mode tuition is often delivered by means such as online learning via the university's learning management system and co-creation tools (Reedy, 2011). While the Australian Council for Educational Research (2011) recently reported that block-mode tuition is considered to be beneficial for those indigenous students who are from regional and remote areas, are of mature age, or have community and/or family responsibilities, a study by Barraket and Scott (2001) identified that indigenous students who were female, of mature age, from low socio-economic status backgrounds, from regional or remote backgrounds, and studying using block-mode tuition were more disadvantaged than others, due to the compounding factors of poor information and communication technology (ICT) literacy, lack of access to technology, lack of technological supports, and a lack of personal confidence. These findings are supported by Reedy (2011), who discerned that while interest in learning with technology was high, there were very real challenges for the completion of the online assessment tasks due to the compounding factors of access, lifestyle, and attitude factors. Gray and Beresford (2008, p. 219) argue that these complex and interrelated social challenges can have an impact on the participation, retention, and resilience of indigenous students across the Australian education sector. A coordinated approach across policy, practice, and research (Devlin, 2009) is therefore necessary to overcome the formidable challenge of this educational divide.

## Resilience

The term *resilience* has many definitions, depending on the context in which it is used. Historically, the term was first used by the physical sciences to refer to an element bouncing back to its original state or shape following the application of stress or exertion (Boyden & Cooper, 2007). The term was then adopted in medical science to imply the ability of the human body to recover from traumatic events such as accidents or surgery (Boyden & Cooper, 2007). In psychology and sociology, the concept of resilience initially focused on the ways in which children adapt positively to adversity (Black & Lobo, 2008), and it was subsequently applied to adults (Bonanno, 2005). Thus employed, resilience came to refer to the effective coping and adaptation of individuals, even when "faced with loss, hardship, or adversity" (Tugade & Fredrikson, 2004, p. 320). In this context, resilience is considered to be a social-emotional competency (Bernard, 2006), and a specific individual trait (Masten, 1994).

In education, resilience as a term has only recently been adopted (Willems & Reupert, forthcoming). Waxman, Padrón, and Gray (2004, p. 1) define those who have educational resilience as "students who succeed in school despite the presence of adverse conditions". In higher education contexts, educational resilience is often linked with consideration of student

attrition (see, for example, Devlin, 2009; Grebennikov & Skaines, 2009; Pechenkina & Anderson, 2011) and/or better than expected student participation, retention, and outcomes (Walker, 2000), in spite of adversity, equity issues, or 'invisible fences' (O'Rourke, 2008) that students may face. For indigenous students, educational resilience is related to overcoming the odds caused by coming from high-risk backgrounds (Masten & Obradović, 2008).

Distance education has often been connected with social equity (Bates, 2005). It originated as the means by which students who were unable to attend classes in person could still access and participate in formal education (Gunawardena & McIsaac, 2004). Distance education has thus provided an opportunity for those who might experience educational disadvantage in terms of their geographic, ethnic, physical, or socio-economic capabilities, or their carer or income-earning responsibilities, to participate. Kemp (2002) argues that an understanding of educational resilience in distance education will help the development and promotion of protective mechanisms to foster the learner's effective negotiation of their learning journey.

## Towards educational resilience as a holistic and quadripartite responsibility

A lingering challenge with considerations of educational resilience, however, is that it can still be viewed as an individualistic attribute or deficit, removed from the context within which the learning occurs. When resilience is deemed lacking (indicated, for example, by non-participation or non-completion), this in turn may be construed as a personal deficit—the student may not "have what it takes" (Masten, 1994). This perspective can place the onus on the individual to become resilient, rather than examining whether the broader context in which distance learning occurs fosters resilience (Willems & Reupert, forthcoming). At a practical level, for example, while it is positive that institutions of higher and distance education provide solutions such as short courses for students to develop resiliency skills, it is but one part of the bigger picture. Factors affecting educational resilience (participation, retention, and outcomes) for indigenous students in distance higher education in Australia are often beyond the control of the students themselves. As Friedli (2009) has argued, this overemphasis on the individual disguises the fact that individual issues have a social basis, that multiple factors are at play, and that any discussion of educational resilience needs to factor in the learner's social, economic, and cultural context in order to gain a more holistic picture.

If attrition is a concern in distance education, then this holistic understanding of educational resilience is critical to understanding student retention, not only for distance learners as a group in general, but specifically for indigenous peoples, who are deemed doubly 'at risk' due to the overlap of equity considerations (Willems, 2010). Previously, Goodwin (2007) has suggested that three key stakeholder groups need to be considered when working towards fostering educational (academic) resilience: students, instructors, and institutions. In addition, Simpson (2003) has argued the importance of the student's community as a key ingredient in fostering student retention in distance education, especially the support of family and friends. Encompassing these facets, the quadripartite model of educational resilience (Willems, 2010; Willems & Reupert, forthcoming) encompasses four key stakeholder groups: the individual student, the educator/supervisor, the institution, and the broader social community (Figure 1). Each has a responsibility when it comes to fostering educational resilience.
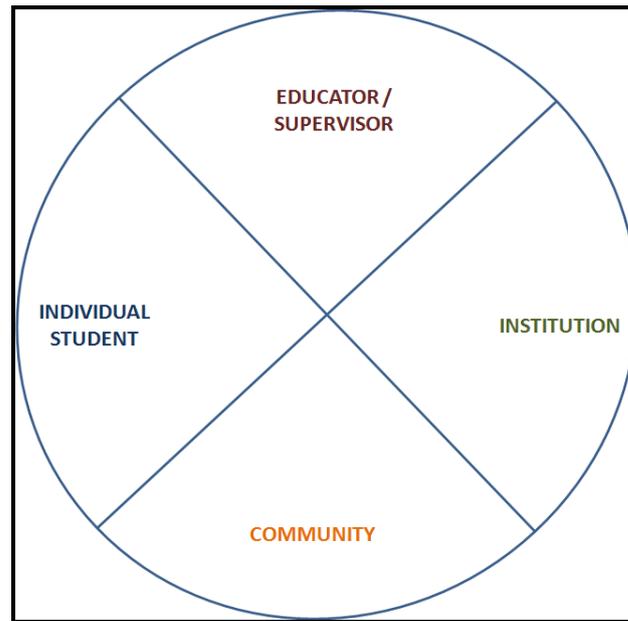
**Figure 1** Resilience as a quadripartite responsibility (Willems, 2010; Willems & Reupert, forthcoming)

Thus, rather than focusing on whether students are deemed to be resilient, the quadripartite model of educational resilience helps us to focus on the broader context in which learning takes place, as learning does not occur in a vacuum. Further, as educational resilience is "a capacity that develops over time in the context of person-environment interactions" (Egeland, Carlson, & Sroufe, 1993, p. 517), the quadripartite model serves as a framework to consider how this holistic capacity-building approach may be developed.

# Educational resilience and indigenous distance learners

This holistic framework addresses the question of how capacity can be built for the educational resilience of indigenous students participating in flexible, distance, online, or blended formal education. To address the importance of various factors relating to each of these four stakeholder groups in distance education, the experiences of Denise[1]—a geographically remote indigenous distance learner—will be shared to make key points. The concerns emerging from Denise's responses will be used to help reinforce the factors for consideration.

Denise was part of a research cohort of 35 online distance learners (Willems, 2005; Willems, 2010) who participated in ethics-approved, qualitative case-study research, and who shared their experiences in online distance education. Her demographic profile is as follows. Denise is an Aboriginal student enrolled in an undergraduate course in health sciences, which she completes predominantly via distance education with the addition of some on-campus block study. She lives in a relatively remote area of far-west New South Wales, and is thus a great distance from any university campus. She is a single student of mature age, and from a low socio-economic background. She left school after completing Year 10, and then worked for many years in various jobs. Denise acknowledges her limited academic and information literacy skills. She is not only the first in the family to commence higher education, but is also the first in her extended indigenous community to do so. In addition to representing the three under-represented groups noted for national concern in Australia—low socio-economic status, indigenous, and remote students (Bradley et al., 2008)—Denise also represents the 'typical' demographic of indigenous

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[1] 'Denise' is a pseudonym

students in higher education in Australia: female, low socio-economic status, of mature age, first in the family to participate in higher education, and from a remote area (Australian Council for Educational Research, 2011). Additionally, indigenous students in higher education are typically enrolled in health, welfare, and education courses (Jumbunna Centre for Australian Indigenous Studies, Education and Research & Wammara Aboriginal Education Centre, 1997).

## Resilient indigenous distance learners

When it comes to fostering educational resilience for indigenous distance learners, issues include overcoming low educational attainment and accompanying academic literacy and information literacy skills, access, costs, being the first in the family to participate in higher education, and social isolation.

Reedy (2011) determined that the personal impediments of indigenous learners in higher education included access. Access involves not simply acceptance and admission to a programme of study, but also access to the technology of learning—especially in the case of flexible, distance, online, or blended learning, where education is delivered by means of technology.

> Denise applied for entry to higher education as a student of mature age in order to break the chains of labouring positions. However, she did not expect to get a place when she first applied for her course, due to her educational background. She was surprised to learn that she had been accepted. One of the academic challenges that Denise faced in entering higher education was that she lacked the academic skills to participate, and did not have opportunities to learn these in the lead-up to commencing her learning. Her rudimentary educational background necessitated her spending more than the suggested length of time on each aspect of her course. Without study skills, she felt that she constantly lagged behind the other students in her cohort.

Fostering students' academic skills is an aspect for all stakeholders in the quadripartite process. Educators can scaffold skills into their course design, as it cannot be assumed that participating students from similar disadvantaged backgrounds will have this knowledge. Technological (information literacy) skills also warrant attention.

> Denise felt she lacked the technological literacy skills to participate because she had had little experience with computer technology prior to commencing her studies. At the time of her acceptance, she could not type and had very few computer skills apart from rudimentary skills gleaned through work and her Hotmail account. In an attempt to better prepare herself and get 'study ready', Denise enrolled in some Adult Education courses in a nearby town. She commented about her surprise during the course when she became a mentor to other new students, by instructing and demonstrating the procedures that she had learnt. However, Denise's self-instigated pre-learning was costly—it involved not only the cost of the courses, but also the expense of driving kilometres to get to the nearest large town with Adult Education facilities. Further, in spite of the investment of time and resources that were hard to spare at the time, Denise shared that she did not learn how to complete simple computer functions such as 'cut and paste' until after the end of her first year of study.

The simple, time-saving skills, which many take for granted, would make a huge difference for students such as Denise. This is but one example of many of the information literacy skills that could be scaffolded into a course.

O'Rourke (2008) notes that being the first in the family to participate in higher education is akin to being a cultural pioneer venturing into new places and spaces. Being the first in the family to participate in higher education was also a challenge for Denise:

> Denise is the first in her family to participate in higher education. No one in either her extended family network or her group of friends has ever attempted any form of post-secondary education. There was no one that she could turn to in her community to ask questions when she got stuck.

Some indigenous students may feel less competent or worthy than the general student population. Others may feel shame if their attendance in higher education is not supported by their community or family group (Gray & Beresford, 2008). In contrast:

> Despite having left school at the end of Year 10, being the only member of her extended family to attempt tertiary education, and coming from a rural community in which tertiary education is a rarity, Denise is rightfully proud of her achievements.

## Resilient indigenous distance learners and educator responsibilities

Issues for educators, instructors, and/or supervisors in promoting educational resilience in distance higher education include connectedness, providing timely communications, flexibility, considerations in the learning design (including learning styles), and scaffolding the necessary skills, as previously noted.

An emphasis on connectedness is important to many indigenous students. Gibb (2006) notes that indigenous students like to make strong and deep connections with their educators, and this aspect of social community needs to be emphasised in their distance educators. In turn, educators need to work towards positive connections to help foster resilience:

> Denise wants institutions and educators to understand that there may not be peers or mentors available in the community to support or encourage distance learners, and this disadvantage is compounded when you don't get support and communication from your lecturers online. She wants a responsive relationship with her teachers and tutors.

Beyond connectedness, Milton and Vozzo (2010) identify a number of areas in which educators need to foster educational resilience among indigenous students in terms of the learning design in the context of open, flexible, blended, and distance learning. For example, as previously noted, academic literacy might be a huge barrier, and this needs to be scaffolded into the course design to develop academic literacy. Care must also be taken to ensure that culturally inclusive language is used, and some authors point to the need for more multilingual and first-language approaches to education, rather than the provision of education. Accessibility is also an issue, as there can be an overlap between indigeneity and disabilities. Indigenous learning styles are another aspect to be factored into the design and delivery of teaching and learning in higher distance education. In a study on Australian indigenous students, Barnes (2000) noted specific differences between how indigenous Australians and the broader student population prefer to learn. Milton and Vozzo (2010, p. 15) noted that indigenous students are more group oriented; are less concerned with personal achievement; prefer to learn in a holistic way (global learning) by having an overview, then major headings prior to detail; prefer to have visual media, such as diagrams, to help explain written text (visual learning); prefer to learn in practical settings; prefer to participate in oral rather than written examinations; and place great emphasis on their relationships with their educators and peers.

## Resilient indigenous distance learners and institutional responsibilities

Research by Pechenkina and Anderson (2011, p. 17) found that the official institutional support structures provided for indigenous students can be an impediment to educational resilience. To help minimise university barriers, institutions have to be vigilant, as there is much that they can contribute in the fostering of educational resilience. Some key factors for consideration include: provision of first-language instruction, considerations for low socio-economic status students

(costs), accessibility, and the provision of additional support structures. One 'invisible fence' (O'Rourke, 2008) for indigenous peoples is that the language of instruction in higher education in Australian is English. According to the results of the 2006 national census, 16 percent of indigenous Australians nominated a language other than English as their first language (Australian Bureau of Statistics, 2008), whereas the language of instruction is likely to be English.

Multiple accessibility issues relating to low socio-economic status, ICT access, and internet access are experienced:

> Denise comments that a number of assumptions were made about the distance learner's ability to access the required skills, hardware, and software they need to successfully complete their courses. She said that living rurally and having very little income made purchases of anything beyond basic study needs impossible, and that if one subject had required her to purchase other software, for example, she would not have been able to do so. She commented that people who have incomes do not understand what it is like to not have the income or the financial reserves to purchase necessary equipment.

> Denise felt that web pages should be kept simple. Engaging in distance education is daunting enough without being overwhelmed or confused by complex websites. She said that she still didn't know all the functions and possibilities of her webpage, but did learn enough to get by.

> Denise reminds universities to keep online documents available in basic software format (for example, Word), as other programs require additional software to run them, which in turn is expensive, and even if these programs are purchased, the student may not have enough memory capacity on their computer to install them. Finally, Denise believes that the costs of education are compounded by studying via distance education due to all this added expenditure. However, she also comments that if it were not for the opportunity to study via distance education, she would not have even attempted post-secondary study.

Shah and Widin (2010, p. 30) note that, despite the increasing use of ICT in the provision of formal education, access to ICT and the internet, plus the ability to effectively use the technology, continues to be a challenge, especially for those indigenous students who live in regional or remote locations. O'Rourke (2008, p. 5) cites one student, who stated:

> The uni forgets we don't all live in the city or in a town . . . It's harder financially because of the extra . . . costs and we can't just duck into uni to get a book from the library or drop in forms . . . They forget us lot.

Another institutional barrier that is an 'invisible fence' to the successful participation of indigenous learners is the perceived lack of support from the university in general (O'Rourke, 2008). While many indigenous units around the globe provide excellent support, they are but one part of the broader institutions. Perkins and Willems (2011) note that if indigenous support units exist within universities, they are often difficult to locate on university websites, especially for novice or visiting indigenous learners. They recommend providing direct and clearly visible links to these facilities on universities' home pages.

Staff-to-student ratio is another 'invisible fence'. In Australia, the staff-to-student ratio is now over 20:1 (Bradley et al., 2008) and, according to research, is a key contributor to the decline in student satisfaction (Shah & Widin, 2010). Whereas relationships are seen as a crucial key aspect of the learning journey for indigenous peoples, staff connectivity may be diminished for the sake of economic rationalism.

## Resilient indigenous distance learners and community responsibilities

> Due to the compounding issues of ICT, academic skills, the lack of online community with the overlay of the geographical distance from the university, Denise feels separated from her educators and the peers in her cohort.

The community aspect of the quadripartite model incorporates not only the distance learner's broader academic community, including their peers, who might also be geographically dispersed, but also the community in which the distance learner lives, encompassing their networks of family and friends. The first subgroup involves the learning community in which students learn (their peers). In addition to a connection with their educators, an indigenous student needs to feel deep connections with their peers (Gibb, 2006). This is crucial, as the distance learner's family might not be familiar with the "requirements and expectations of university study and may not offer appropriate support" (Shah & Widin, 2010, p. 31), whereas peers can help provide that support.

The second aspect of community is the broader sociocultural community in which the student is embedded. Alford and James (2007) note that indigenous learners face challenges relating to such issues as negative family influences and conflicting demands emanating from their family and broader community. These can either limit or prevent successful outcomes (Shah & Widin, 2010), as these community demands tend to take precedence over formal learning (Reedy, 2011). Further, O'Rourke (2008) found that there still exists a 'cultural stigma' within the indigenous community attached to indigenous learners participating in higher education. Perhaps this is more a reflection of regional and remote communities, as, according to statistics by the Australian Bureau of Statistics (2011), 8.7 percent of indigenous peoples living in cities hold a higher education degree, compared with 4.0 percent living in regional areas, and 2.7 percent of those living in remote areas.

> Denise feels isolated not only from her academic community, but also from her physical and social community—separated from her friends and family because she studies at home. It is a double isolation for her. She feels increasingly isolated from her friends and family because she spends a great deal of time trying to succeed in her studies. Her friends see that she is 'at home'—which they associate with family and leisure time—not understanding that she is an off-campus student with studying responsibilities akin to a workday. As she is the first in her entire community to participate in higher education, her family and friends do not understand what is required of her to study successfully. Her need to study has in turn led to her community to view her study as taking priority over them personally, and they are staying away from her. She finds this very difficult.

In summary, supportive community environments can provide very real encouragement to distance learners (Simpson, 2003), fostering educational resilience by enabling participation and success in higher education (Morgan, 2001).

## Conclusion

Educational resilience—successful participation, retention, and outcomes in distance higher education in spite of any adversity, equity issues, or 'invisible fences' distance learners face—is a key consideration in any education sector. For indigenous distance learners in higher education, with low participation levels per head of population and the potential for multiple equity overlap, the need to foster successful learning contexts is paramount. For these students, juggling the conflicting demands of community and the attempt to meet sometimes foreign educational and institutional expectations can in turn either limit or prevent their achievement of educational goals and career aspirations (Shah & Widin, 2010).

Following the argument by Friedli (2009) that a narrow focus on the resilience of individual students masks the social, economic, and cultural context in which learning takes place, this paper has promoted the quadripartite model of educational resilience (Willems, 2010; Willems & Reupert, forthcoming) as a framework to gain a more holistic understanding of the complexities of disadvantaged learners, and to foster successful outcomes for them. It may also contribute to consideration of building capacity across all stakeholder groups and/or provide the basis for further applied research. This, in turn, will contribute to calls for rigorous national research on how educational resilience might contribute to the participation and success of indigenous students (Devlin, 2009). For without such efforts, access, participation, and successful outcomes for indigenous peoples in participating in higher education via distance education—not simply in Australia, but around the globe—could remain a 'wicked problem'.

## Acknowledgements

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