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# The Components of Best-Practice Indigenous Education: A Comparative Review

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Currently in Australia there is much activity and expenditure in a field broadly defined as 'Indigenous education'. However, there is little by way of rigorous research that has compared and evaluated different approaches. This article draws together the existing international evidence to develop a set of best-practice components for Indigenous education. The author intends for these components to provide practical guidance for program developers who may currently be developing programs without the benefit of an existing evidence base, while also acknowledging the need to expand the evidence base and continue to refine this set of components to maximise their utility.

■ **Keywords:** Indigenous education, education policy, best practice, international comparison

Education is central to the economic, physical, social and cultural wellbeing of all people and communities, and Aboriginal and Torres Strait Islander peoples are no exception to this. Indeed, a good education for every Aboriginal and Torres Strait Islander child in Australia would see improvements not only in tangible education-related outcomes such as literacy, numeracy or job readiness, but also in health, self-esteem and social status.

But what is 'good' education for Aboriginal and Torres Strait Islander peoples and how might such a thing be achieved? This article sets out to highlight potential components of Indigenous education that are, according to the international evidence, the most effective in improving educational outcomes. A comparative literature review was conducted across four 'settler' countries (Canada, United States, New Zealand and Australia) to develop a set of best-practice components based on the existing evidence.

One of the great dilemmas of Indigenous education has been that progress of Indigenous students in educational outcomes has occurred so haltingly, if at all, despite the concern, effort and expense that has been aimed at achieving this result (Schwab, 1995). This comparative lack of success can be attributed to a range of factors, including misguided or wrongheaded educational philosophies, a lack of political will and poor teaching standards (Schwab, 1995). Indigenous education programs in Australia are overwhelmingly designed with good intentions and with laudable goals, but with little reference to the evidence

base or to the 'big picture' of competing programs and the actual needs of Indigenous people (Lea, 2010; Mellor & Corrigan, 2004). Deficit theorising, in which lower achievement is associated with intrinsic deficits of the student or the student's cultural background rather than considering the role of schools, teachers, institutional racism and so on, has also led to a focus on the 'failure' of Indigenous students in a western educational context rather than reforms to the education system (Gray & Beresford, 2008; Mellor & Corrigan, 2004). Having said this, this article should not be interpreted as an attack on educators, who have often been at the vanguard of reforms in Indigenous education. Indigenous people themselves have also been responsible for much of the reform and innovation where it has occurred.

Examples exist in Australia and overseas of successful programs that have not been rigorously evaluated, but also of successful programs that have been rigorously evaluated but not widely emulated (Demmert, 2001; Lea, 2010; Mellor & Corrigan, 2004). Basing Indigenous educational policies, philosophies, programs and techniques on evi-

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dence, best-practice, evaluation and measurement is crucial to overcoming these problems and finding a successful way forward in Indigenous education.

### Indigenous Education in Context

This article utilises a broad definition of the term 'Indigenous education' that adheres to McConaghy's (2000, p. 3) formulation that Indigenous education covers the entire range of educational sites from early childhood education through primary and secondary schooling and on to tertiary education and vocational training. This article has taken into account a similarly wide-ranging variety of educational programs and sites. Furthermore, the components are not limited to either theoretical or practical approaches but cover both of these areas as well as a range of educational philosophies and methods.

The meaning and purpose of education is different for Indigenous and non-Indigenous people in Australia. Indigenous students face additional barriers to positive educational outcomes that stem from historical dispossession and oppression. Factors such as adverse socioeconomic conditions, poor housing conditions, unemployment, family violence and child abuse all contribute to poorer outcomes for Indigenous students when compared to non-Indigenous students (although of course these factors also negatively affect non-Indigenous students; Beresford, 2003). Schwab (1998) has looked at what education means for Indigenous people in remote communities and the ways in which Indigenous people appropriate the aspects of western education that they need and ignore other aspects that do not suit them or are not relevant to them. In this way, western education is constructed, negotiated and interpreted according to their needs and desires. Fordham and Schwab (2007, p. iii) have noted that 'Indigenous people consider education an avenue towards employment, a means of developing the skills and knowledge to deal with the dominant culture, or one mechanism for ensuring the continuing vitality of Indigenous culture'. Many Indigenous people appear more concerned about the relevance of education and training to what they are currently doing than gaining a qualification to assist some future employment aspiration (Fordham & Schwab, 2007, pp. 33–35). These alternative contexts need to be borne in mind when reading this article.

In the conduct of this research and in making recommendations based on this research, the author have been informed by Nakata's (2007) work on the 'cultural interface'. Universities in settler countries were established as an essential part of the colonising process and functioned to actively enforce imperialist and colonialist worldviews (Smith, 1999, p. 65). They have played a critical role in assimilating indigenous people and denying their language, knowledge and cultures (Smith, 1999, p. 64). Nakata (2007, p. 8) states that despite shifts in attitudes towards Indigenous people, 'knowledge production about

Indigenous people still works within a wider set of social relations ... that continue to confine the lives of Indigenous people' (p. 8). The western worldview is still seen as 'natural' and Indigenous worldviews are dismissed as an 'other'. There is a need to acknowledge and question the way research has historically been conducted in this country and a concurrent requirement to engage Indigenous perspectives. This article attempts to do so. The author urges practitioners in the Indigenous education field to make use of these same methodological processes when employing the recommendations of this article in their own education programs and initiatives.

### Components of Best Practice in Indigenous Education

Underpinning international policies and programs in Indigenous education are some common approaches that have emerged across settler countries dealing with these challenges. The following section isolates and expands upon the key, best-practice components that have been identified in Indigenous education programs across Australia, Canada, the United States and New Zealand. It should be noted that they are quite interrelated concepts that cross over in many respects and should not be read as one-off or isolated 'solutions' but should instead be employed holistically in conjunction with one another. An ideal approach to Indigenous education development would integrate as many of the components outlined below as possible.

### Bilingual or 'Immersion' Indigenous Education

The United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP; UN General Assembly, 2007) affirmed the right of Indigenous peoples to education in their own language. Bilingual education, also known as immersion teaching, can have multiple positive effects: it confers all the benefits of having a second language; it revitalises Aboriginal languages and cultures; and it improves general academic outcomes in a range of subjects including, perhaps counter intuitively, English itself. Bilingual education can be part of a 'best of both worlds' approach whereby both western and Indigenous knowledge and languages are taught and valued equally.

Examples from overseas have shown strong evidence for the value of bilingual education in Indigenous settings. Stiles (as cited in Bell, 2004, p. 40), found that Indigenous language programs in Canada, New Zealand and Hawaii 'were associated with decreased dropout rates, improved test scores, and an increased sense of heritage and identity'. Holm and Holm (1995) and Rosier and Farella's studies (1976), found that improved academic outcomes resulted from bilingual programs where English language literacy

instruction was taught subsequent to Indigenous language and literacy.

Lipka (2002) conducted a survey of four programs in North America and Hawaii (including the previously mentioned Holm & Holm study) that incorporate Indigenous language and culture and concluded that the inclusion of Indigenous culture and language in educational programs serving these Indigenous students can improve academic and other educational outcomes; while acknowledging that research into the effectiveness of such approaches was still in its infancy. Some of the positive identifiable outcomes from across these four programs included an increase in students' Indigenous language skills, confidence, pride and self-esteem, but also in maths and English skills (Lipka, 2002).

The 2005–2006 Annual Report of the National Advisory Council on Indian Education refers to the evidence of the success of native language schools and classes in the United States:

Immersion schools yield two dramatically positive results:

1. The schools successfully teach Native language fluency ... thus preserving the language; and
2. The tribal students in immersion programs perform substantially better academically ... than native students who have not gone through such programs (National Advisory Council on Indian Education, 2006, p. 5).

Similarly, a report commissioned by the New Zealand Ministry of Education (May, Hill, & Tiakiwai, 2004), which investigated best practice research literature on bilingual education, concluded that there are unequivocal educational advantages associated with an additive approach to bilingualism; that is, an approach that has the full commitment of the school and staff. The report cautions that taking a subtractive view of bilingualism, ('one that presupposes that bilingualism is a problem and/or an obstacle to be overcome'; May et al., 2004, p. 1) will lead to negative cognitive, social and educational consequences. Furthermore, the report finds that nonbilingual programs are less effective than bilingual programs for bilingual students (May et al., 2004, p. 1), especially if they take a subtractive approach in attempting to 'ween' the student off a second language and onto English. New Zealand Ministry of Education statistics support the case for the effectiveness of Māori-medium education. Wang and Harkess (2007, p. 1–2) found that students at Māori-medium schools were more likely to achieve academically to the same level or higher than their Māori peers at English-medium schools.

In Australia, the National Aboriginal and Torres Strait Islander Education Policy (1989) includes a goal '[t]o develop programs to support the maintenance and continued use of Aboriginal and Torres Strait Islander languages'. The *Indigenous Languages Programmes in Australian Schools: A Way Forward* report (DEEWR, 2008),

mapped the current state of Indigenous language teaching in Australia. In 2006, over 16,000 Indigenous students and 13,000 non-Indigenous students located in 260 Australian schools were involved in studying more than 80 different Indigenous languages in Indigenous language programs (DEEWR, 2008, p. 56). About 28% of these programs were 'first language maintenance' programs, which include bilingual programs (DEEWR, 2008, p. 57).

Despite this widespread teaching of Indigenous languages in Australia across several States and Territories, the 'battleground' for bilingual education in this country has become the Northern Territory. The Northern Territory instituted bilingual education programs in 1973 as the federal government began to emphasise Aboriginal self-determination (Nicholls, 2005, p. 160). Indigenous languages and English began to be taught simultaneously at a minority of Aboriginal primary schools (Nicholls, 2005, p. 160). These programs were closed down in 1998 amid suggestions of declining standards in English at these schools, despite 'no 'hard', empirical or statistical evidence comparing the results of bilingual and 'nonbilingual' schools [having been] proffered to support the government's claim' (Nicholls, 2005, p. 161). The programs were soon reinstated after support from the community and a favourable government review (Simpson, Caffery, & McConnell, 2009). However, the Northern Territory Government again abandoned bilingual education programs in 2008 (Simpson et al., 2009), despite the findings of the Northern Territory Department of Employment, Education and Training's own *Indigenous Languages and Culture in Northern Territory Schools Report 2004–2005*, which confirmed better educational outcomes for students participating in bilingual education programs than for students in nonbilingual schools. The report specifically recommended supporting a greater focus on Indigenous languages and culture (DEET, 2005). The Northern Territory Government's attack on bilingual education is also antithetical to Indigenous rights to self-determination, including 'the right to an appropriate education, the right to have a say in one's children's education, and the right to maintain Indigenous languages' (Simpson et al., 2009, p. 37).

Simpson et al. (2009) recently conducted a major study of bilingual education in the Northern Territory. In response to the Northern Territory Government abandoning bilingual education programs in 2008, Simpson et al. (2009) argue that:

Australian policy-makers are now choosing to ignore the positive features of school-based Indigenous language programs and return to a strict 'English-only' policy reminiscent of the assimilationist era 50 or 60 years ago. The 2008 decision to abandon bilingual education programs in the Northern Territory represents a change of policy which is not based on the available evidence. (p. 13)

In the light of the National Assessment Program Literacy and Numeracy (NAPLAN) Report, which showed particularly poor results for Indigenous students in general and specifically for Indigenous students in remote parts of the Northern Territory, Helen Hughes (of the conservative think tank the Centre for Independent Studies) has called for an end to 'separate, damaging Indigenous curriculums', which she feels are taught at the expense of the mainstream curriculum. Hughes has argued for bilingual schools to teach ESL classes by relying on phonetics and grammar-based teaching methods. This 'subtractive' approach swims against the tide of evidence that demonstrates the effectiveness of 'additive' approaches to bilingual teaching (Hughes, 2010). Simpson et al.'s (2009, p. 37) research into the 'dismantling' of the Northern Territory bilingual program suggests that the reasons for the poor educational outcomes of students in bilingual schools are actually the result of a complex mix of factors, including hearing loss, poverty, truancy, lack of good ESL and EFL teaching and the failure by governments to spend equitably on Indigenous communities, rather than being a symptom of the bilingual education itself. Nevertheless, Hughes goes on to make the unsupported assertion that:

Many Indigenous communities, observing how handicapped they were by their declining ability to communicate in English, led the movement away from teaching children only in Indigenous languages in the earlier years. They want schooling to be in English so that their children can communicate in the modern world. Parents are willing to take responsibility for teaching their languages and culture at home so they can concentrate on English at school. (Hughes & Hughes, 2010, p. 12)

In fact, Indigenous community support in the Northern Territory has been expressed in *favour* of bilingual education, in contravention to Hughes's claims (Devlin, 2009; Sealey, 2009).

Bell (2004) sounds some cautionary notes in relation to Canadian bilingual education that are equally relevant to Australia. He warns that bilingual program successes in Hawaii and New Zealand have been difficult to replicate in North America perhaps because of differing contexts: in North America, as in Australia, vastly greater numbers of language and cultural groups combined with fewer fluent language speakers from each group has made the task of developing successful bilingual education programs all the more difficult for educators (Bell, 2004, p. 40). Complicating matters, Standard English materials may also be of little use in these communities where nonstandard forms of English are commonly used (Bell, 2004, p. 317).

Nevertheless, the research evidence demonstrates the effectiveness of a bilingual approach to Indigenous education in improving a range of educational and personal outcomes for Indigenous students. Indigenous language programs have been associated with decreased dropout rates, and an increased sense of heritage, identity, confi-

dence, pride and self-esteem. Improved academic outcomes in a range of subjects, including English, also result from bilingual teaching. Importantly, the evidence shows that immersive learning in an Indigenous language does not need to be to the detriment of a student's English language skills, and can in fact improve these English language skills. Bilingual education should be a key component of a successful Indigenous education curriculum.

## Culturally-Responsive Education

In Australia, as in other settler countries with Indigenous minorities, two opposing views have long existed on the best way to educate Indigenous people: either from an Indigenous cultural perspective or through western approaches and knowledge. However, the research evidence suggests that presenting Indigenous education as a choice between a 'culturally-responsive' education and a western education is a false dichotomy; both systems can work in harmony and indeed enhance the educational outcomes of each other. The development of culturally-responsive education initiatives, particularly those driven by local communities, also presents an opportunity for Indigenous peoples to counter a historical legacy of educational dispossession. May and Aikman (2003, p. 141) argue that such initiatives can enhance the educational outcomes of Indigenous students, while contesting the 'normalisation and valorisation of European languages and cultures, and their representation within education'.

Several meta-analyses have been undertaken in the Native American context that have attempted to evaluate the effectiveness of culturally-responsive teachings as part of Indigenous education (Apthorp, D'Amato, & Richardson, 2003; Bell, 2004; Demmert, 2001; Lipka, 2002; United States [US] Department of Health and Human Services, 2003). In Canada, Bell's (2004) case study of best practice in Aboriginal schooling highlights the need to balance a rigorous academic program with culturally relevant learning experiences. Demmert (2001, p. 9) finds that strong evidence that Indigenous language and cultural programs are associated with 'improved academic performance, decreased dropout rates, improved school attendance rates, decreased clinical symptoms, and improved personal behavior'. Demmert (2001, p. 42) himself comes to the same conclusion, noting the importance of Indigenous language and cultural programs in motivating Indigenous students, raising their self-esteem and positive attitudes, and supporting improved academic performance. Apthorp et al.'s (2003, p. 15) review of factors that affect the success of educational outcomes of Native American students concludes that 'cultural congruence seems to be an important factor in academic success', while conceding that it the exact role it plays and the combination of factors that are at play are largely unknown. The US Department of Health and Human Services (2003) surveyed a range of evidence that suggests that the

inclusion of Indigenous cultural and language programs in the curriculum 'is a way to provide social, historical, and emotional links that aid in children's achievement in school' (see also Allen, 1997; Ball & Pence, 1999; Jordan, 1995; Rinehart et al., 2002; Watahomigie & McCarty, 1994).

The Kamehameha Early Education Program (KEEP) program, a primary-school program for underachieving Native Hawaiian children developed in the 1970s, is perhaps the best-documented example of a successful culturally-responsive education program. Rigorous evaluation of the program was able to demonstrate that culturally-responsive ways of teaching were associated with both increased student engagement and pride, and increased academic performance (Apthorp et al., 2003; Demmert, 2001; Lipka, 2002). The success of this program has led to it being used as model for similar programs in other Indigenous education settings (Apthorp et al., 2003).

A New Zealand Ministry of Education (2010) analysis of best-practice in Indigenous education found that cultural insensitivity to Māori students has led to a persistent inequality in educational outcomes for these students. This insensitivity, while usually not conscious or malicious, has been wide-ranging and includes:

low inclusion of Māori themes and topics in English-medium education, fewer teacher-student interactions, less positive feedback, more negative comments targeted to Māori learners, under-assessment of capability, widespread targeting of Māori learners with ineffective or even counter-productive teaching strategies (such as the 'learning styles' approach), failure to uphold mana Māori in education, inadvertent teacher racism, peer racism, mispronounced names and so on.

Bishop, Berryman, Cavanagh, Teddy (2007) have outlined a remedy to this legacy of inequality in New Zealand. Their prescription aims to centre the learning process on the culture of the child rather than that of the teacher, legitimising the worldview of the student and the culture in which they reside and filtering learning through the prism of the child's cultural experiences rather than those of the teacher (Bishop et al., 2007). The New South Wales Aboriginal Education Consultative Group Incorporated, and New South Wales Department of Education and Training (2004) have echoed this recommendation, calling for a series of measures in schools that will fortify Aboriginal identity and sense of belonging through increased respect and more welcoming attitudes towards Indigenous students.

In Australia, one of the goals of the National Aboriginal and Torres Strait Islander Education Policy is '[t]o provide all Australians students with an understanding of and respect for Aboriginal and Torres Strait Islander traditional and contemporary cultures' (DEET, 1989). Many Australian schools have introduced Indigenous cultural

programs and curricula, including Indigenous language programs. Some of these programs have been created specifically for Indigenous students, while others are designed to improve the Indigenous knowledge and understanding of both Indigenous and non-Indigenous students (Steering Committee for the Review of Government Service Provision [SCRGSP], 2009). Additionally, independent Aboriginal schools have been providing culturally-responsive education to Indigenous students in Australia since the self-determination wave of the 1970s.

The 'What Works?' Australian Government report is the result of an evaluation of 83 Strategic Results Projects (SRPs) of the 'Indigenous Education Strategic Initiatives Programme'. These projects were designed to explore how to improve Indigenous students' learning outcomes and generate success in Indigenous education relatively quickly through dedicated resources and effort (McRae et al., 2000). While evaluations were not carried out in a 'scientific' manner, the evaluations pointed very strongly to a set of three 'success factors' in Indigenous education programs, one of which is 'cultural recognition, acknowledgment and support'. McRae et al. (2000) echo the views of Bishop et al. (2007) in outlining a central cultural clash between Indigenous and western cultures that must be harmonised in order to provide effective culturally-responsive education. Their findings recommend that aspects of Indigenous culture must be recognised, supported and integrated in the processes of training and education through methods such as nurturing cross-cultural relationships, flexibility in dealing with Indigenous students, localisation of program design to local contexts, recognising and teaching indigenous languages, the presence of cultural references (such as Indigenous artwork), culturally relevant curricula, and the 'cultural friendliness' of staff and institutions (McRae et al., 2000).

The influential Indigenous commentator Noel Pearson (2009) has argued that culturally-responsive education is complicit in promoting substandard educational programs, is an excuse for underachievement, and, more broadly, that the 'appropriateness' or otherwise of an educational program or curriculum is reliant on a subjective judgement. Pearson outlines an argument for what he considers to be equality in education that both allows for cultural maintenance and equips Aboriginal children with the skills to 'orbit' between western and Indigenous worlds. However, he also warns against 'eschew[ing] Shakespeare in favour of popular culture' (Pearson, 2009, p. 60), and pushes for a 'high-culture orientation' that would educate Indigenous children in 'physics and chemistry and biology and higher mathematics' (Pearson, 2010). There is a potential incompatibility between Pearson's bias towards Western education, taught in an orthodox manner, and his parallel calls for 'a relentless pursuit of a cultural education and the maintenance of

excellence in our culture' (Pearson, 2010). Proponents of culturally-responsive education would no doubt argue that, far from 'being a justification for sub-standard achievement and expectations' (Pearson 2009, p. 99) it is precisely in the interests of maintaining the highest possible standards across all subjects (including 'higher' subjects such as mathematics) that Indigenous students are taught in a culturally-responsive manner; that instruction is in fact more effective when the cultural background of the student is taken into account. There seems to be no evidence to support the claim that culturally-responsive education is used as a substitute for 'higher' subjects or a 'soft' option for students from whom little is expected. In fact, culturally-responsive education would seem perfectly-suited to Pearson's goal of 're-establish[ing] the social mechanisms of cultural and language transmission, and to establish modern, multi-literate modes of transmission' (Pearson, 2009, p. 69).

Counter to the evidence supporting the positive effect of culturally-responsive education on student academic achievement, one Australian study that examined the relationship between the quality of teaching and student achievement (Amosa, Ladwig, Griffiths, & Gore, 2007) found — to the researchers' surprise — that the cultural significance of pedagogy did *not* in fact contribute to reductions in achievement gaps between Indigenous and non-Indigenous students. The following section on Indigenous measuring processes offers an exploration of why this might be the case, reasoning that the inadequate assessment of culturally-inclusive practices or a failure to link them to mainstream achievement measures reduces the probability that they will significantly impact on students' overall academic achievement.

Mainstream education may not always be compatible with the learning styles and cultural background of Indigenous students. The literature shows that Indigenous language and cultural programs — and student identification with such programs — have been associated with a range of positive outcomes. There are a variety of elements that make for successful culturally-responsive Indigenous education, including the attitude and accommodation of cultural-responsiveness by school authorities, partnering with parents, elders, and the community in general to nurture and facilitate cultural perspectives, creative incorporation of Indigenous practises and ways of learning into the classroom, acknowledgement and valuing of Indigenous worldviews, and the attitude and knowledge of teachers. To date, there appear to be few empirical evaluations of culturally-responsive Indigenous education programs in Australia (despite such programs having operated since at least the 1970s), but evidence from overseas strongly suggests that it should be incorporated into education for both Indigenous and non-Indigenous students in Australia, and indeed many policymakers and educators have already taken the lead in doing so.

## Indigenous Measuring Processes

In line with the general evidence for cultural-responsiveness and awareness in Indigenous education, there is also a growing recognition that Indigenous education needs to employ a range of measurement tools that are culturally-sensitive; that is, tools that are inherently sensitive to Indigenous cultural perspectives and ways of learning.

Bell's (2004) survey of successful Indigenous education programs in Canada found that the strategic and flexible use of assessment tools was crucial to the overall success of education programs. Bell also notes the reluctance of some Indigenous education authorities to submit to mainstream assessment procedures that may be culturally biased and could therefore result in unfair comparisons. The Canadian Council on Learning developed the Holistic Lifelong Learning Measurement Framework after concluding that conventional measurement approaches have ignored Indigenous perspectives, needs and aspirations, and ways of learning (Canadian Council on Learning, 2009). The Holistic Lifelong Learning Measurement Framework focuses on educational success *as Indigenous communities define it*: as a lifelong, holistic concept. The framework incorporates learning indicators related to language, culture, the natural world, and the community, as well as focusing on the health, social and economic factors that can influence the educational outcomes of Indigenous people (Canadian Council on Learning, 2009).

Other authors have also highlighted inherent cultural biases in mainstream assessment tools. The US Department of Health and Human Services (2003) has characterised the issue as 'a mismatch between the learning styles of [American Indian and Alaska Native (AI/AN)] children and tests intended to determine their knowledge' (p. 24). Evidence has shown that mainstream assessment tools fail to match the way that Indigenous students learn, or to take their culture and language into account (Banks & Neisworth, 1995; Bordeaux, 1995; Estrin & Nelson-Barber, 1995; Harris, 1985). Demmert and Towner (2003) offer the following considerations, readily transferable to an Australian Indigenous context, which should be taken into account when assessing Native American students:

1. The language of the home and the language of instruction;
2. The context and perspective from which questions are asked;
3. Compatibility between the background knowledge of the student and the questions asked of the student;
4. The values and priorities of the community(ies) from which the students come;
5. The ability of the assessor to create an atmosphere in which the students feel safe and comfortable; and

6. The vocabulary of the student and whether he or she understands the meaning of the words used in the assessment tool. (Demmert & Towner, 2003, p. 21)

In Australia, little attention has been paid to developing culturally-sensitive measurement and assessment tools for Indigenous students. Klenowski (2009) suggests that the comparatively poorer performance of Indigenous students in international and national comparative testing could be in some part due to a cultural bias in the content or design of the tests, or as a result of the different social and cultural contexts of Indigenous students, arguing that '[t]he content and mode of the assessment tasks or tests may be outside Indigenous students' experiences and may limit their engagement with the tasks as they position them as not knowledgeable in this assessment context' (Klenowski, 2009, p. 85). The Coolabah Dynamic Assessment (CDA) was developed and has been used to identify previously unrecognised high academic potential in Australian Indigenous students that had been overlooked, missed or dismissed by conventional assessment methods (Chaffey & Bailey, 2003). The CDA was developed in recognition of the fact that 'too often ... Indigenous kids were not turning up on standard IQ tests. It seemed obvious that there had to be a reason for this, and that reason wasn't that they were not intelligent enough' (Principals Australia, 2010). It attempts to tackle sociocultural barriers that can inhibit the achievement of Indigenous students on standard assessments (Principals Australia, 2010).

Although there is a strong argument for culturally-sensitive measurement and assessment tools, common standards of measurement should not be ignored or dismissed for Indigenous students. Dismissing Indigenous students' failing in standardised testing is akin to accepting Indigenous failure instead of challenging these students to achieve to the same standard as non-Indigenous students. Just as the 'either/or' argument with regard to western education versus culturally-sensitive Indigenous education has been exposed as a false dichotomy, there is also a case for using both culturally-sensitive *and* mainstream measurement and assessment components in assessing Indigenous students if they are to achieve the same educational outcomes as any other students.

### High Quality, Committed Teaching Staff

Effective teaching in Indigenous education is dependent on the quality and commitment of teaching staff to the instruction of Indigenous students. While the same can be said of any student, the research shows that this is essential for Indigenous students. The research evidence shows that effective teachers are those who remain in schools for long periods of time and who have high levels of focus and energy. Successful schools take a holistic approach to Indigenous education, creating a common vision across teaching staff, students, families and the

local community, and providing culturally-sensitive curricula and teaching methods.

The National Partnership Agreement on Improving Teacher Quality, developed by the Council of Australian Governments (COAG) in 2009, includes measures aimed at closing the gap between educational outcomes for Indigenous and non-Indigenous students. Two measures of teacher quality that are identified in the Agreement (SCRGSP, 2009, p. 610) are:

- Teacher and school leader quality at Indigenous schools
- The numbers of high quality teachers and school leaders attracted to and retained in Indigenous schools.

Stability and retention of teaching staff enables long-term educational planning, evaluation and optimisation, the reinforcement of teaching methods and attitudes, and successful partnering with the local community. This is a particularly salient problem in remote Indigenous communities in Australia where it can be hard to attract teaching staff and then to retain these staff. The Northern Territory's education policy attributes great importance to the challenge of creating incentives for 'attracting, recruiting, rewarding, supporting, housing, retaining and career building for quality people who want to teach in the NT's remote Indigenous communities' (Northern Territory Department of Education and Training, 2009). Sarra (2008) has echoed this call for the development of creative schemes to attract and retain teachers in remote communities.

The research literature provides clear evidence for a correlation between the presence of a range of personal qualities and abilities in teachers and positive academic outcomes for Indigenous students. Those teachers who have a strong focus, dedication, and genuinely care about the success of the students are more likely to engage Indigenous students in learning (Bell, 2004; Bishop et al., 2007; Demmert, 2001; Mellor & Corrigan, 2004; US Department of Health and Human Services, 2003). McRae et al. (2000) found that the belief from educators that 'something could and should be done' had great significance in student outcomes. Some authors have also noted the positive effect that warm, friendly, informal teaching can have on Indigenous students (Demmert, 2001; McRae et al., 2000; Mellor & Corrigan, 2004; Walton, 1999).

A key component in effective, high quality instruction of Indigenous students is creating high expectations and challenging students to high levels of achievement. High teacher expectations of Indigenous students' ability have a strong effect on their educational outcomes (Bell, 2004; Bishop et al., 2007; McBride & McKee, 2001; McRae et al., 2000; NSW AECG & NSW DET, 2004) and conversely, low expectations can result in student attrition (Dingman, Mroczka, & Brady, 1995). This is a theme that has been emphasised by Chris Sarra and the Stronger Smarter Institute. In a practical sense, this means rejecting deficit theorising and focusing on possible improvements to



teachers and teacher attitudes, rather than accepting the failure of Indigenous students or blaming a student's family or social context for failure. As Sarra (as cited in Leech, 2007, p. 34) bluntly states, 'I always say that there are only three things that teachers have to have when they teach Indigenous children: high expectations, high expectations, high expectations.'

Some evidence exists that Indigenous students are most effectively taught by Indigenous teachers (McBride & McKee, 2001) or, if this isn't possible, by non-Indigenous teachers who have received thorough training in Indigenous cultural practices and languages (Alberta Education, 2007; Bell, 2004; Swisher, 1994; US Department of Education as cited in US Department of Health and Human Services, 2003; Yagi, 1985). The 2008 Social Justice Report also argues that Indigenous staff are the most important component in supporting Indigenous culture in an education setting (Aboriginal and Torres Strait Islander Social Justice Commissioner [ATSISJC], 2008, p. 122). Australia has been particularly unsuccessful at training and retaining Indigenous teachers. Indigenous teachers only represent 1% of all teachers while making up 2.5% of the general population (ATSISJC, 2008). Some authors have linked this deficit to the institutionalised 'whiteness' of Australian educational bodies. Reid et al. (2004, p. 305) argue that the 'impenetrable whiteness of schooling' means that whiteness and white teachers have been normalised in the educational environment, while 'Indigenous "Others" [have had to conform to] the dominant notion of "Teacher"'. This, they feel, has discouraged the entry of greater numbers of Indigenous people into the teaching profession.

The quality and attitude of teachers is crucial to the educational success of Indigenous students. Schools and education departments must ensure that such teachers are nurtured and retained for as long as possible. The high expectations of teaching staff are also clearly related to positive educational outcomes for Indigenous students. Indigenous teachers can both relate to and act as positive role models for Indigenous students.

### **Emphasis on Education 'Fundamentals'**

The successful teaching of the foundational educational principles of literacy and numeracy is essential for Indigenous students, regardless of whether the student is enrolled in bicultural or mainstream schooling. At an even more basic level, attendance has been identified as the first step to improving overall Indigenous educational outcomes.

From a review of North American literature, Demmert (2001) concludes that attendance is one of the factors that contributes to Indigenous students' overall success in schools. The 'What Works?' evaluation (McRae et al., 2000) also found that 'adequate levels of participation' were an essential component of successful Indigenous education programs in Australia. Zubrick et al. (as cited in

SCRGSP, 2009, p. 64) reported that the Western Australian Aboriginal Child Health Survey also found a direct relationship between the number of days absent from school and academic performance.

Australia's Indigenous children have lower school enrolment rates and lower school attendance rates than non-Indigenous children (NSW AECG & NSW DET, 2004; SCRGSP, 2009, p. 63). The reasons for this are complex. One Australian study found that that poor attendance among Indigenous students is generally due to three factors: lack of parental insistence that children go to school in the morning; teacher quality; and bullying and teasing (DEWR, 2006). Groome and Hamilton (1995) list reasons for low indigenous attendance as disaffection with school, difficulties of attending due to poverty, high mobility, indigenous intergroup tensions, family pressures, sickness, and social obligations surrounding deaths. Racism and cultural miscommunication also seem to be a factor in inhibiting regular attendance and encouraging Indigenous students to drop out (Groome & Hamilton, 1995). Socioeconomic disadvantage and Indigenous culture and history have also been shown to affect attendance and retention rates of Indigenous students (Schwab, 1999). Some Indigenous communities have been subjected to provisions that quarantine the welfare payments of parents whose children do not attend school regularly (Gillard, 2009). The research evidence shows that the most effective approach to combating the complex problem of low attendance is to utilise intense, personalised 'case management' methods that investigate the reasons for poor attendance and support students and families in encouraging school attendance (McRae et al., 2000; Yagi, 1985).

International and Australian authors identify literacy as a foundational skill that is required for academic success, and especially so for Indigenous students (Bell, 2004; Demmert, 2001; McRae et al., 2000). Australian State and Commonwealth governments have prioritised improvement in literacy and numeracy skills in their Indigenous education policies. Despite this, there is currently a gap in the literature on the best methods to improve these basic skills — beyond the general best-practice components outlined here — and the impact of doing so.

### **Partnerships**

Parental involvement in children's education from an early age has been shown to have a significant effect on educational achievement (Desforges & Abouchaar, 2003). Parental and community support has also been shown to be a crucial element in raising academic expectations of students and ensuring adequate attendance levels.

Partnerships may be established between students, schools, families and communities, or even local businesses. Partnering between schools and the local community, parents and families gives communities a sense of 'ownership' over schools and their curriculum,

policies, and teaching methods (Mellor & Corrigan, 2004). Evidence shows that the involvement of Indigenous communities in educational decision-making improves educational outcomes for Indigenous students, as well as resulting in greater cultural recognition. Bell (2004) highlights three examples from North American schools where strong community and family involvement has been associated with improved educational outcomes, attendance rates, and student attitudes. Similar results were found in the Canadian province of Alberta where Alberta Education (2007, p. 14) concluded from a pilot study that family involvement in school increases Indigenous students' chances of educational success. McRae et al. (2000, p. 7) also found that Indigenous involvement in education decision-making in the 'What Works' projects in Australia was related to improved educational outcomes for students. Fordham and Schwab (2007) highlight the importance of building new forms of relationships between school and community that are based on recognising the complexity and diversity of Indigenous communities, establishing a cross cultural understanding of the purpose and value of education, and developing partnership agreements between schools and communities.

For the ATSIJC (2008), a true educational partnership is developed when all of the parties have a shared understanding about the purpose and curriculum of the school. This can also be one of the strongest ways to counteract ideas that are commonly held by Indigenous people hold that schools are intimidating, alien, or instruments of assimilation. International evidence has shown that a legacy of racism and negative experiences with mainstream educational institutions have lead many AI/AN parents to perceive that their culture and values are not respected or understood, or are incompatible with the mainstream education system (Deyhle, 1991; Robinson-Zañartu & Majel-Dixon, 1996). While many, if not all, Australian Indigenous parents hold the view that education is essential for their children, their cultural values, aspirations, and life experiences may not be conducive to articulating this desire and they may not feel comfortable engaging in interactions with local schools (ATSIJC, 2008; Schwab, 1996).

Partnerships between educators, local communities and families make a difference to the type and quality of education that Indigenous students receive. Partnerships, community involvement, and community ownership of the education process ensure that Indigenous people have a say in the education of members of their community, and ensure that the style and content of this education is responsive to their requirements.

## Conclusion

In researching this article, it became clear that Indigenous education program designers have been handicapped in establishing an evidential base for their programs by the

gaps in the literature and an inconsistent approach to program evaluation. This evaluation of best-practice components is intended to go some way towards countering this deficit by providing a review of current international best-practice in Indigenous education, with a particular focus on Australia, as well as acting as a practical guide for education practitioners. This research suggests that there is more work to be done to identify, understand, support and replicate those programs that are meeting the standards that incorporate the components identified here. Implementing innovative practices in this field, most particularly where programs match the standards set by these components, has the capacity to transform the field of Indigenous education and — more importantly — the outcomes for Aboriginal and Torres Strait Islander young people. Identifying and replicating education initiatives that support these aims and are working towards best-practice standards will require coordinated research in the form of rigorous program evaluation and the recording and showcasing of successful programs that will provide the means to replicate this success in Australia and internationally.

## References

- Aboriginal and Torres Strait Islander Social Justice Commissioner (ATSIJC). (2008). *Social justice report 2008*, (Tom Calma, Commissioner). Sydney, NSW, Australia: Human Rights and Equal Opportunity Commission.
- Alberta Education. (2007). *First nations, Métis and Inuit school-community learning environment project: Promising practices*. Edmonton, AB, Canada: Author.
- Amosa, W., Ladwig, J., Griffiths, T., & Gore, J. (2007, November). *Equity effects of quality teaching: Closing the gap*. Paper presented at the annual conference of the Australian Association for Research in Education, Fremantle.
- Apthorp, H., D'Amato, E., & Richardson, A. (2003). *Effective standards-based practices for Native American students: A review of research literature*. Aurora, CO: Mid-continent Research for Education and Learning.
- Banks, S.R., & Neisworth, J.T. (1995). Dynamic assessment in early intervention: Implications for serving American Indian/Alaska Native families. *Journal of American Indian Education*, 34(2), 27–43.
- Bell, D. (2004). *Sharing our success: Ten case studies in Aboriginal schooling*. Kelowna, BC, Canada: Society for the Advancement of Excellence in Education.
- Beresford, Q. (2003). Directions and best practice. In Q. Beresford & G. Partington (Eds.), *Reform and resistance in Aboriginal education: The Australian experience* (pp. 238–278). Perth, WA, Australia: University of Western Australia Press.
- Bishop, R., Berryman, M., Cavanagh, T., Teddy, L. (2007). *Te Kotahitanga Phase 3 Whanaungatanga: Establishing a culturally responsive pedagogy of relations in mainstream*

- secondary school classrooms*. Wellington, New Zealand: Ministry of Education.
- Bordeaux, R. (1995). *Assessment for American Indian and Alaska native learners*. ERIC Digest, ED385424.
- Canadian Council on Learning. (2009). *The state of Aboriginal learning in Canada: A holistic approach to measuring success*. Retrieved from, [http://www.ccl-cca.ca/pdfs/StateAboriginalLearning/SAL-FINAL-Report\\_EN.PDF](http://www.ccl-cca.ca/pdfs/StateAboriginalLearning/SAL-FINAL-Report_EN.PDF)
- Chaffey, G.W., & Bailey, S.B. (2003). The use of dynamic testing to reveal high academic potential and underachievement in a culturally different population. *Gifted Education International*, 18, 124–138.
- Demmert, W.G. (2001). *Improving academic performance among Native American students — A review of the research literature*. Las Cruces, NM: ERIC Clearinghouse on Rural Education and Small Schools.
- Demmert, W., & Towner, J. (2003). A review of the research literature on the influences of culturally based education on the academic performance on Native American students. *Learning Disabilities Research & Practice*, 20(1), 16–23.
- Department of Education, Employment and Training (DEET). (1989). *National Aboriginal and Torres Strait Islander Education Policy*. Canberra, ACT, Australia: Author.
- Department of Employment, Education and Training (DEET). (2005). *Indigenous languages and culture in Northern Territory schools: Report 2004–2005*. Darwin, NT, Australia: Author.
- Department of Education, Employment and Workplace Relations (DEEWR). (2008). *Indigenous languages programmes in Australian schools*. Canberra, ACT, Australia: Author.
- Department of Employment and Workplace Relations (DEWR). (2006). *Halls Creek Engaging Families trial, February–July 2006 — evaluation report*. Canberra, ACT, Australia: Author.
- Desforages, C., & Abouchaar, A. (2003). *The impact of parental involvement, parental support and family education on pupil achievement and adjustment: A literature review*. Research report 443. London: Department for Education and Skills.
- Devlin, B. (2009). Bilingual education in the Northern Territory and the continuing debate over its effectiveness and value. *Bilingual education in the Northern Territory: Principles, policy and practice symposium*. Canberra, ACT: National Museum of Australia.
- Deyhle, D. (1991). Empowerment and cultural conflict: Navajo parents and the schooling of their children. *International Journal of Qualitative Studies in Education*, 4(4), 277–297.
- Dingman, S., Mroczka, M.A., & Brady, J.V. (1995). Predicting academic success for American Indian students. *Journal of American Indian Education*, 34(2), 10–17.
- Estrin, E. T., & Nelson-Barber, S. (1995). *Issues in cross-cultural assessment: American Indian and Alaska Native students*. San Francisco, CA: Far West Laboratory for Educational Research and Development.
- Fordham, A., & Schwab, R.G. (2007). *Education, training and Indigenous futures. CAEPR policy research: 1990–2007*. Canberra, ACT: Centre for Aboriginal economic policy research, Australian National University.
- Gillard, J. (2009, 28 September). *Speech: Indigenous leadership in education institute: Stronger Smarter Summit — Brisbane*. Media release. Canberra, ACT, Australia: Department of Education, Employment and Workplace Relations.
- Gray, J., & Beresford, Q. (2008). A ‘formidable challenge’: Australia’s quest for equity in Indigenous education. *Australian Journal of Education*, 52(2), 197–223.
- Groome, H., & Hamilton, A. (1995). *Meeting the educational needs of Aboriginal adolescents*. National Board of Employment, Education and Training, Commissioned Report No.35. Canberra, ACT: Australian Government Publishing Service.
- Harris, G.A. (1985). Considerations in assessing English language performance of Native American children. *Topics in Language Disorders*, 5(4), 42–52.
- Holm, A., & Holm, W. (1995). Navajo language education: Retrospect and prospects. *Bilingual Research Journal*, 19(1), 141–167.
- Hughes, H., & Hughes, M. (2010). *CIS policy monograph no. 110: Indigenous education 2010*. St. Leonards, NSW: The Centre for Independent Studies.
- Klenowski, V. (2009). Australian Indigenous students: addressing equity issues in assessment. *Teaching Education*, 20(1), 77–93.
- Lea, T. (2010). Indigenous education and training: What are we here for? In J. Altman & M. Hinkson (Eds.), *Culture crisis: Anthropology and politics in Aboriginal Australia* (pp. 196–208). Sydney, NSW, Australia: University of New South Wales Press.
- Leech, R. (2007). Stronger, smarter, Sarra. *Teacher*, 178, 32–41.
- Lipka, J. (2002). *Schooling for self-determination: Research on the effects of including Native language and culture in the schools*. Charleston, WV: ERIC Clearinghouse on Rural and Small Schools.
- May, S., & Aikman, S. (2003). Indigenous education: Addressing current issues and developments, *Comparative Education*, 39(2), 139–145.
- May, S., Hill, R., & Tiakiwai, S. (2004). *Bilingual/immersion education: Indicators of good practice. Final report to the Ministry of Education*. Wellington, New Zealand: Ministry of Education. Retrieved from [http://www.educationcounts.govt.nz/\\_data/assets/pdf\\_file/0009/6957/bilingual-education.pdf](http://www.educationcounts.govt.nz/_data/assets/pdf_file/0009/6957/bilingual-education.pdf)
- McBride, S.R., & McKee, W. (2001). Over representation of Aboriginal students reported with behavioural disorders. Victoria, BC, Canada: Aboriginal Education Branch and Special Programs Branch, Ministry of Education, British Columbia.

- McConaghy, C. (2000). *Rethinking Indigenous education: Culturalism, colonialism and the politics of knowing*. Flaxton, Queensland, Australia: Post Pressed.
- McRae, D., Ainsworth, G., Cumming, J., Hughes, P., Mackay, T., Price, K., ... & Zbar, V. (2000). *What works: Explorations in improving outcomes for Indigenous student*. Canberra, ACT, Australia: Australian Curriculum Studies Association.
- Mellor, S., & Corrigan, M. (2004). *Australian Education Review. The case for change: A review of contemporary research on Indigenous Australian outcomes*. Camberwell, VC, Australia: Australian Council for Academic Research.
- Ministry of Education New Zealand. (2010). Ka Hikitia — managing for success. *The Māori education strategy 2008–2012*. Wellington, New Zealand: Author. Retrieved from <http://www.minedu.govt.nz/theMinistry/PolicyAndStrategy/KaHikitia/KeyEvidence/Oviewerview.aspx>
- Nakata, M. (2007). The cultural interface. *The Australian Journal of Indigenous Education*, 36(S), 7–14.
- National Advisory Council on Indian Education. (2006). *Annual report FY 2005–2006*. Washington, DC: Department of Education. Retrieved from [http://www.ncai.org/ncai/advocacy/hr/docs/NACIE\\_05-06\\_Report.pdf](http://www.ncai.org/ncai/advocacy/hr/docs/NACIE_05-06_Report.pdf)
- New South Wales Aboriginal Education Consultative Group Incorporated, & New South Wales Department of Education and Training (NSW AECG & NSW DET). (2004). *The Report of the Review of Aboriginal Education: Yanigurra Muya: Ganggurrinyma Yaarri Guurulaw Yirringin.guray Freeing the spirit: Dreaming an equal future*. Darlinghurst, Australia: New South Wales Department of Education and Training.
- Nicholls, C. (2005). Death by a thousand cuts: Indigenous language bilingual education programmes in the Northern Territory of Australia, 1972–1998. *International Journal of Bilingual Education and Bilingualism*, 8(2), 160–177.
- Northern Territory Department of Education and Training. (2009). *Strategic plan: 2009–2012*. Darwin, Australia: Author. Retrieved from [http://www.det.nt.gov.au/\\_data/assets/pdf\\_file/0013/4126/DET\\_strategic\\_plan2009-2012.pdf](http://www.det.nt.gov.au/_data/assets/pdf_file/0013/4126/DET_strategic_plan2009-2012.pdf)
- Pearson, N. (2009). Radical hope: Education and equality in Australia. *Quarterly Essay*, 35, 1–106.
- Pearson, N. (2010). *Noel Pearson on excellence in education/Garma Dialogue* [Audio recording]. Garma 2010. Retrieved from [http://www.isx.org.au/data/resources/files/noel\\_pearson.mp3](http://www.isx.org.au/data/resources/files/noel_pearson.mp3)
- Principals Australia. (2010). *Dare to lead ... Partnerships build Success: Graham Chaffey and Coolabah dynamic assessment*. Canberra, ACT, Australia: Department of Education, Employment and Workplace Relations. Retrieved from [http://www.daretolead.edu.au/servlet/Web?s=169694&p=RegEvent\\_NSW\\_WIIGAAY\\_GrahamChaffey](http://www.daretolead.edu.au/servlet/Web?s=169694&p=RegEvent_NSW_WIIGAAY_GrahamChaffey)
- Reid, J., Santoro, N., Simpson, L., McConaghy, C., Crawford, L., & Bond, B. (2004). *Making spaces for Indigenous teachers in 'the impenetrable whiteness of schooling'*. In proceedings of the Australian Teacher Education Association Annual Conference, Bathurst.
- Robinson-Zañartu, C., & Majel-Dixon, J. (1996). Parent voices: American Indian relationships with schools. *Journal of American Indian Education*, 36(1), 33–54.
- Rosier, P., & Farella, M. (1976). Bilingual education at Rock Point — Some early results. *TESOL Quarterly*, 10(4), 379–388.
- Sarra, C. (2008). *The way forward: Indigenous children of the education revolution*. Paper presented at the National Press Club, Canberra, Australia. Retrieved from [http://www.abc.net.au/news/opinion/speeches/files/20080526\\_SARRA.pdf](http://www.abc.net.au/news/opinion/speeches/files/20080526_SARRA.pdf)
- Schwab, R.G. (1995). *Twenty years of policy recommendations for Indigenous education: Overview and research implications*, Discussion Paper No. 92/1995, Centre for Aboriginal Economic Policy Research. Canberra, ACT: Australian National University.
- Schwab, R.G. (1996). *Having it 'both ways': The continuing complexities of community controlled Indigenous education*. Discussion Paper No. 111/1996, Centre for Aboriginal Economic Policy Research. Canberra, ACT: Australian National University.
- Schwab, R.G. (1998). *Educational failure and educational success in an Aboriginal community*. Discussion Paper No. 161/1998, Centre for Aboriginal Economic Policy Research. Canberra, ACT: Australian National University.
- Schwab, R.G. (1999). *Why only one in three? The complex reasons for low Indigenous school retention*. Discussion Paper No. 116/1999. Centre for Aboriginal Economic Policy Research. Canberra, ACT: Australian National University.
- Steering Committee for the Review of Government Service Provision (SCRGSP). (2009). *Overcoming Indigenous disadvantage: Key indicators 2009*. Canberra, ACT, Australia: Productivity Commission.
- Sealey, M. (2009, July 9). In a word, Northern Territory bilingual axeing was wrong. *National Indigenous Times*.
- Simpson, J., Caffery, J., & McConnell, P. (2009). *Gaps in Australia's Indigenous language policy: Dismantling bilingual education in the Northern Territory*. AIATSIS Discussion Paper 24. Canberra, ACT: Australian Institute of Aboriginal and Torres Strait Islander Studies.
- Smith, L.T. (1999). *Decolonizing methodologies: research and Indigenous peoples*. London: Zed.
- Swisher, K. (1994, Winter). American Indian learning styles survey: An assessment of teachers knowledge. *Journal of Educational Issues of Language Minority Students*, 13, 59–77.
- UN General Assembly. (2007). *United Nations Declaration on the Rights of Indigenous Peoples*. Retrieved from <http://www.un.org/esa/socdev/unpfii/en/drip.html>

- US Department of Health and Human Services. (2003). A summary of research and publications on early childhood for *American Indian and Alaska Native children*. Washington, DC: Author.
- Walton, P.D. (1999). *An evaluation of First Nations education in North Okanagan-Shuswap School District 83: Towards a collective vision*. Victoria, BC, Canada: Ministry of Education, British Columbia.
- Wang, H., & Harkess, C. (2007). *Senior secondary students' achievement at Maori-medium schools: 200 –2006 fact sheet*. Wellington, New Zealand: Ministry of Education.
- Retrieved from [http://www.educationcounts.govt.nz/\\_\\_data/assets/pdf\\_file/0012/14601/mme\\_2004-2006\\_Fact\\_Sheet\\_Final.pdf](http://www.educationcounts.govt.nz/__data/assets/pdf_file/0012/14601/mme_2004-2006_Fact_Sheet_Final.pdf)
- Watahomigie, L.J., & McCarty, T.L. (1994). Bilingual/bicultural education at Peach Springs: A Hualapai way of schooling. *Peabody Journal of Education*, 69(2), 26–42.
- Yagi, K. (1985). *Indian education act project in the Portland public schools: 1984–85 evaluation report*. Portland, OR: Portland Public Schools Evaluation Department.

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