



POSTCOLONIAL STUDIES IN EDUCATION

Assessing the Evidence in Indigenous Education Research

Implications for Policy
and Practice

Edited by
Nikki Moodie
Kevin Lowe
Roselyn Dixon
Karen Trimmer

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Postcolonial Studies in Education

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Studies utilising the perspectives of postcolonial theory have become established and increasingly widespread in the last few decades. This series embraces and broadly employs the postcolonial approach. As a site of struggle, education has constituted a key vehicle for the 'colonization of the mind'. The 'post' in postcolonialism is both temporal, in the sense of emphasizing the processes of decolonization, and analytical in the sense of probing and contesting the aftermath of colonialism and the imperialism which succeeded it, utilising materialist and discourse analysis. Postcolonial theory is particularly apt for exploring the implications of educational colonialism, decolonization, experimentation, revisioning, contradiction and ambiguity not only for the former colonies, but also for the former colonial powers. This series views education as an important vehicle for both the inculcation and unlearning of colonial ideologies. It complements the diversity that exists in postcolonial studies of political economy, literature, sociology and the interdisciplinary domain of cultural studies. Education is here being viewed in its broadest contexts, and is not confined to institutionalized learning. The aim of this series is to identify and help establish new areas of educational inquiry in postcolonial studies.

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Preface

Every year since 2009, the prime minister of Australia has released a *Closing the Gap* report. Ostensibly tasked with announcing the Commonwealth's progress towards better outcomes for Aboriginal and Torres Strait Islander people, the failure—year on year—to achieve improvement in Indigenous well-being is accompanied by a parade of hand-wringing and empty promises to do better. Occasionally, politicians even talk about partnerships with Indigenous people. Parallel to the government's annual sedimentation of Indigenous hopelessness runs a vibrant and diverse Indigenous body politic; evidence of how far apart settler state rhetoric is from the resurgence of Aboriginal and Torres Strait Islander cultures and knowledge across the country. Despite centuries of oppression, violent and institutional racism, hyper-incarceration, and dispossession, First Nations peoples continue to survive the ongoing attempted elimination by the state, to pass on our stories, teach our children their cultures and songs, and revive and renew our knowledge and languages.

What then is the role of schools and education systems in this Indigenous renaissance? Despite decades of Indigenous education policy at state and federal level outcomes for Aboriginal and Torres Strait Islander students have barely shifted, and certainly not to the point where we can confidently claim to enjoy equity in outcomes. The idea that evidence has a role to play in policy design is at best questionable, but

nonetheless, the possibility of *proof*, of scholarly expertise, and of ethical engagement continues to light a beacon for those who seek some guidance in this post-truth world. What then does the evidence say about how Indigenous children and young people are faring at school? Are we in a position to move beyond rhetoric to claim some ground as to the state of knowledge in this field? We believe so.

This volume intends to offer a small contribution to knowledge on empirical research in the broad area of Aboriginal and Torres Strait Islander schooling in Australia. In confining this volume to the analysis of published research that reports on empirical data we recognise that our theoretical advances may be limited, as is our engagement with the rich and diverse literature on Indigenous philosophies in this country and others. Despite these limitations, we have sought to orient our work to the assessment of *what might be proved* on the basis of research that has been conducted with, for—and occasionally simply on—Aboriginal and Torres Strait Islander people. We offer a critical assessment of this research with the aim of better hearing the voices of First Nations people that have been recorded, archived, held, and sometimes forgotten, in research already published in the field of Indigenous schooling and education.

Our task is urgent. Our children are still being taken away. Young people are going to jail ever faster. With few extraordinary exceptions, our languages are fading away. Schools still won't teach us to read either our own languages or the settlers'. Despite being a signatory to the United Nations Declarations on the Rights of Indigenous Peoples, there is no serious consideration of what this could mean to legislate or implement in Australia. Our calls for treaty and recognition fall on deaf ears.

This volume focuses on Indigenous aspirations and we hope supports much-needed conversations about the quality of research, policy, and practice in Indigenous schooling in Australia. This team of Indigenous and non-Indigenous scholars have, in the spirit of genuine collaboration and deep commitment to break through the myopia of governments, attempted to make way for the genuine voices of many thousands of









students, families, communities, and supportive educators who for too long have told the same truth: that schools are not meeting the aspirations of Indigenous people. We offer our work to readers in the hope you might walk with us, towards a different future.












maaru yananga, go well








Kensington, Australia

Kevin Lowe

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List of Acronyms

ABRACADABRA	A Balanced Reading Approach for Children Always Designed to Achieve Best Results for All
ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
AECG	Aboriginal Education Consultative Group
AEO	Aboriginal Education Officer
AIHW	Australian Institute of Health and Welfare
COAG	Council of Australian Governments
DPMC	Department of Prime Minister and Cabinet
ITA	Indigenous teacher assistants
ITE	Initial teacher education
NAPLAN	National Assessment Program—Literacy and Numeracy
PISA	Programme for International Student Assessment
PL	Professional learning
SR	Systematic review
TIMSS	Trends in International Mathematics and Science Study

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1

The Aboriginal Voices Project: What Matters, and Who Counts, in Indigenous Education

Nikki Moodie , Cathie Burgess , Kevin Lowe ,
and Greg Vass 

Introduction

Between 2017 and 2020, the Aboriginal Voices (AV) project conducted 10 systematic reviews—examining over 13,000 publications—in the field of Indigenous education. Our team crossed 10 Australian universities and involved 13 researchers, each focused on the critical issue of hearing how the voices of Aboriginal and Torres Strait Islander people have been included in the scholarly literature on education and schooling. The AV project is one of few studies to apply a systematic meta-analysis of empirical research in the field of education, let alone Indigenous

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education in Australia. Whilst the method has its limits, it is useful to assess and synthesise empirical studies. This allows researchers and practitioners to develop practice guidelines, policy settings or learning opportunities based on real evidence.

By 2020, the AV project had published ten systematic reviews in two special issues of leading education journals. The first collection of reviews in *Australian Education Researcher* consisted of six topics, curriculum, school and community engagement, racism, pedagogy, remote education and professional learning. The second collection published in the *Asia-Pacific Journal of Teacher Education* covered literacy, numeracy, leadership and cultural programmes. Together, these ten areas represent key concerns for Indigenous families and communities, schools, governments and researchers. As a result of our meta-analysis, we can draw reliable conclusions about:

- What counts as *knowledge*?
- What counts as *success*?
- What counts as *evidence*?

In this book, we present all the reviews together for the first time, rewritten, updated and focused on interpreting our findings for families, schools, researchers and policy makers.

These questions prioritise Indigenous peoples' needs, safety and knowledges, as an issue of social justice. They must be resolved in Indigenous peoples' favour, to meet their aspirations, and acknowledge the rights afforded to them under national and international law. These questions also allow us to reflect on *whose voices count* in Indigenous education research, policy and practice. While systematic reviews of empirical

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literature may not always offer in-depth theoretical analyses, they do allow us to compare findings and where possible, enable research to be replicated and confirmed. This provides insight into the types of programmes that are funded and evaluated, the type of participants that researchers collect data from, and the nature of policy and programme interventions in various fields. In short, the Aboriginal Voices project allows us to see where and how the voices of Indigenous students and families are reflected in the research.

The project reviewed empirical research that claimed to show evidence responding to one of the biggest challenges faced by education systems in Australia—why and how has the system continued to fail Indigenous students. Our conclusion, based on these reviews, offers a critical reflection on that fundamental issue of *who counts* in Indigenous education. We consider the limitations and utility of adopting the systematic review method, one that is more familiar to health researchers. What it does do well is ensure that researchers *disclose* biases, sample sizes, ethics, positioning and characteristics of researchers, theories and methods, and coding and analysis strategies (Cochrane Collaboration, 2011). The method enables a very particular type of ruler to run over the research on Indigenous students' experience of schooling. We wanted to listen to and reflect on what parents and communities said in the research, and then check what evidence was offered about any programmes or approaches that improved outcomes for their young people (Lowe et al., 2019b). We found that while some approaches have good evidence, others illuminate a disconnect between the research and practice. More significantly, we found that Indigenous voices are often not heard or counted by teachers, school leaders or policymakers.

Secondly, we describe competing claims in the research about *what counts as success*. Research in the fields of remote education (Guenther et al., 2019), pedagogy (Burgess et al., 2019), curriculum (Harrison et al., 2019) and literacy (Gutierrez et al., 2019) highlights how two—often incommensurate—visions of Indigenous students' school success exist. Here, Indigenous families and communities talk about success in terms that might be understood as *civic inclusion and participation*. Schools and governments instead talk about *jobs*. Whilst not necessarily mutually exclusive, they highlight radically different ontological positions. The

former (success-as-inclusion) sees students as already constituted by family, culture and community, bearing considerable responsibility for self and others. From this perspective, schools bear the responsibility of preparing students for a fulsome participation in a society that includes both Indigenous and settler peoples. In contrast, schools and governments tend to see *being part of society* as only a fortuitous side-effect of having paid, full-time work. Success in this latter imagining is restricted to employment, and personhood is limited to employability, namely an individual's capacity to achieve private ownership of land (Rowe & Tuck, 2017, p. 9). This incommensurability of Indigenous aspirations and settler imaginings of "success" have emerged as a small but essential body of work describing the shaping of student subjectivities (Osborne et al., 2017, p. 2) and the erasure of Indigenous difference (Povinelli, 2001).

Finally, the AV project draws conclusions about *what counts as evidence*. The project sought to recognise the burden of research that consistently asks Indigenous students, parents and communities 'what works?' After decades of research, what definitive answers can we give Indigenous families, and the schools and teachers they entrust their children to? Indigenous people across Australia have consistently said: teach our complete history, see your place in that history, employ Indigenous people and talk to community (Behrendt et al., 2012; Schwab, 1995). So, rather than add to the burden of extractive research, the AV project sought to hear the voices of Indigenous people through this meta-analysis and consolidate the latest empirical research to:

1. reduce exploitation of communities with small relative populations;
2. support the allocation of funding to communities, and their researchers in order to drive their own research priorities and
3. clarify public commentary and provide expert advice to policymakers.

The Aboriginal Voices project offers a consolidation of research that goes beyond an engagement with theory, operating from the position that there is an emerging burden of evidence regarding issues affecting the underachievement of Indigenous students in Australia (Lowe et al., 2019b). Often policy and practice appear to contravene this evidence,

such as in the adoption of attendance strategies that don't work (Guenther, 2019) or the lack of anti-racism measures in schools (Moodie et al., 2019), thus functioning to actively harm Indigenous students. In hearing the experiences of Indigenous students, families and communities, we hope to demonstrate consistency in their ongoing calls to support more robust praxis for both education workers and researchers in the field.

Findings

Key findings across the ten topic areas highlight a disconnect between practice and outcomes. This means that what teachers think they were doing and what was actually happening in the classroom or in their relationships with Indigenous students were often different things. Occasionally, the research assumes that particular practices lead to particular outcomes, without disentangling contributing or confounding factors (Burgess et al., 2019; Gutierrez et al., 2019). Overall though, the empirical research did not appear to be oriented towards Indigenous student outcomes, but rather focussed on 'engagement and support' or reviewing programmes without mapping how these improved or hindered Indigenous student outcomes.

These insights allow the AV project to explore how assumptions about Indigenous student needs translation into research design and evidence, which informs teaching practice and the relational possibilities between Indigenous and non-Indigenous people, knowledges and pedagogy. The voices of Aboriginal and Torres Strait Islander people in the research offer countervailing insights, and it is these voices we aim to centre in our analysis: voices that offer a nuanced critique on the position of Indigenous knowledges, and reflections on the purpose of learning for young people who are already citizens (Harrison et al., 2019); voices that provide deep insights on what it means to trust teachers and schools (Lowe et al., 2019a); voices that reveal the disconnect between what teachers do and what they think they do (Burgess et al., 2019); and voices that allow us to see how thin and partial the research base can be (Miller & Armour, 2019; Vass et al., 2019).

What Counts as Knowledge?

Central to understanding the variability of Indigenous achievement in schooling is the uneven representation of Indigenous perspectives in curriculum and resistance to embedding Indigenous ways of working. The impossibility of epistemic equity for Indigenous people and knowledges and colonial systems has long been an area of concern for scholars (Martin, 2003; Osborne, 2016; Povinelli, 2001), and the findings of the AV project reinforce this long-standing work on the impact of unequal power and unequal representation in schooling systems. Whilst this denotes the incommensurability of education policy and Indigenous aspirations (Osborne, 2016; Tuck & Yang, 2012), the findings of the AV project demonstrate the possibilities of curriculum designed by and for Indigenous peoples in reshaping relationships between teachers and students, and families and schools.

National and state approaches to literacy highlight decades of policy failure (Department of Prime Minister and Cabinet, 2020; Yunupingu, 1995). Research by Gutierrez et al. (2019) demonstrates that while programmes that focused on teaching the mechanical and code-breaking aspects of literacy often demonstrate good outcomes, they simultaneously betray government and school leaders' deficit assumptions about Indigenous learners. This manifests in a reluctance to involve local communities, ignoring what Indigenous students need to know and be able to do to navigate both worlds. Hence, literacy programmes often do a good job of teaching about *language*, but not necessarily a good job of developing *literacy* skills for a broader participation in life. Literacy and numeracy needs are therefore conflated in problematic ways with the Closing the Gap targets (DPMC, 2020), and consequently, teaching practice assimilates Indigenous students to the settler language, rather than valuing and working with the language assets that students arrive at school with.

Curriculum is a contested area attracting national attention about what should and should not be taught. In the Australian curriculum, the Aboriginal and Torres Strait Islander cross-curriculum priority is represented as an add-on, a potential engagement strategy, and/or is simply

ill-defined and often misinterpreted. As representational practice, the cultural politics of curriculum (Vass, 2018) reveals the unequal and racialised power relations that shape Indigenous and non-Indigenous subjectivities through schooling (Hogarth, 2018). What counts as knowledge often does not align with Indigenous notions of relational, place-based understandings of what knowledge is. These knowledges tend to disrupt western narratives of individualism, personal achievement and self-sufficiency in favour of other ways of connecting to the world and each other (Harrison et al., 2019). Indigenous knowledges are thus seen as less rigorous and less relevant than settler knowledges (Scantlebury et al., 2002). In the systematic review on curriculum, Harrison et al. (2019) find that curriculum models based on a “funds of knowledge” approach challenge deficit assumptions by recognising that students bring with them, historically and culturally embedded knowledges that are in fact the foundation for their wellbeing and healthy functioning in any society (p. 243).

It is perhaps unsurprising that the systematic reviews on pedagogy by Burgess et al. (2019), community engagement by Lowe et al. (2019a), and teacher professional learning by Vass et al. (2019) all also draw attention to the role and import of moving towards schooling efforts that open up pathways to ask critical questions about knowledge making practices.

What Counts as Success?

The vision from the settler colonial state, its agents and apparatus, is that success at school equates to *participation in the economy as a future employee* (Apple, 2006). Counter to this runs the vision that emphasises how success is synonymous with *participation in society as an extant citizen*—as an agent of cultures that have survived and agentic regardless of age or achievement (Australian Institute of Family Studies, 2014). The role and influence of the schools in raising young people with responsibilities to people and Country take precedence over an emphasis on jobs and economic mobility (Guenther et al., 2013). This means that culturally specific land and stewardship, values regarding the knowledge held and role played by teachers, and an appreciation of history that acknowledges the

power that individuals play in shaping our shared experiences, are critical. As Harrison et al. (2019, p. 242) note, “Aboriginal and western curricula are largely irreconcilable because of the ways in which concepts such as success are defined and applied in Aboriginal and western contexts”, then schooling success depends in large part on student and family perceptions of what education is for (Harrison et al., 2019, p. 243).

In the systematic review on pedagogy, Burgess et al. (2019) find a correlation between Indigenous student numbers and the prevalence of defensive teaching practices in schools, thus signalling a focus on behaviour management rather than learning. Not only does this reduce opportunities for culturally relevant curriculum and pedagogy, it belies the extent to which schools invest in Indigenous success or are able to give effect to Indigenous students and families educational aspirations. Burgess et al. (2019) found that many of the pedagogical interventions focussed more on changing non-Indigenous teachers’ attitudes and behaviours rather than improving Indigenous student outcomes. These findings reinforce the value of recognising different standpoints on the purpose of education (Guenther et al., 2013); and therefore, prioritising Indigenous peoples’ definition of successful schooling.

Counterposed against Indigenous values of students-as-already-citizens and success-as-inclusion in Indigenous and non-Indigenous communities are long-term economic priorities of settler colonial societies enacted through schooling as preparation for the job market. Whilst the illusion of full-time employment still holds potency for many policymakers, educational systems remain geared to a representation of citizenship that prioritises those modes of production defined by individual entrepreneurship (Apple, 2006). In this rendering, schools bear responsibility for preparing citizens who work, not citizens who belong or indeed already belong. The incommensurability of Indigenous aspirations and settler colonial imaginings of success therefore become rendered as behavioural problems to be managed (Burgess et al., 2019; Rowe & Tuck, 2017; Purdie & Buckley, 2010). In the Lowe et al. (2019a, b) review on effect of culture and language on Indigenous students and families, the central role of identity built on strong culture and language programmes that are valued more broadly in the school community is critical to not only engaging

Aboriginal students in their learning but foreshadowing their success on their own terms as well as in the western sense of the term.

What Counts as Evidence?

Whilst mapping the quality of empirical research led to the exclusion of important theoretical work, and other empirical research that did not meet current reporting benchmarks (e.g. Cochrane Collaboration, 2011), our approach did enable some insight into the quality of research used to inform policy and practice in Indigenous education. For example, in the field of Indigenous numeracy, many researchers make strong claims for the importance of relationships between schools and communities, but “few captured data indicating how this is fostered” (Miller & Armour, 2019, p. 13). Miller and Armour (2019) identify only two important longitudinal studies that assess changes in Indigenous numeracy over time. Burgess et al. (2019) note that in the field of pedagogy, while the overall quality of evidence appears veracious, in those studies where strong evidence of improved outcomes emerge, Indigenous students are only a subset of a larger sample. In the case of literacy, Gutierrez et al. (2019) also report that those studies that suggest success typically retain deficit views of Indigenous learners and communities. This suggests that effective teaching and learning activities fall short of being intellectually challenging or rigorous.

This line of thinking sits alongside the reviews on racism (Moodie et al., 2019) and teacher professional learning (Vass et al., 2019). In the former, it was evident that the schooling sector and education researchers are aware of and acknowledge the ongoing impact of racism. The evidence shows that racism matters, impacting many Indigenous learners’ schooling experiences. However, this understanding has not yet seriously addressed issues of representation, institutional/systemic discrimination or theorising of race/Whiteness in ways that meaningfully address the ongoing harm of discrimination. In this instance then, the evidence about race/racism is marginalised or dismissed in ways that ensures the maintenance of the status quo, where non-Indigenous decision-makers continue to implement untested remedies to ‘fix’ schooling for ‘problem’ Indigenous learners.

Collectively, this has the effect of producing the circular claim that, for example, literacy and numeracy programmes work for Indigenous students because this is what has been tested. In reality, these programmes are the *only* ones being evaluated using strategies that comply with evidence hierarchies recognised by decision-makers (Centre for Education Statistics & Evaluation, 2020). Such studies don't reflect the needs of Indigenous students or collect and analyse data in alignment with Indigenous methodologies (Smith, 2012). Similarly, Burgess et al. (2019) note that many studies did not establish the construct validity of 'pedagogy' and use the term without definition. Whilst recognising theoretical diversity and the necessity of critique, this does create some difficulty comparing studies that ostensibly explore the same phenomenon.

Methodological Limitations

Although the systematic review method is useful for conducting meta-analyses, we note that it is not always able to specifically include research from Othered perspectives. The method was originally designed to assess large numbers of quantitative studies and provides a robust framework for analysing specific elements of research design. However, in the search for rigour, we are conscious that this method represents qualitative and Indigenous research in particular ways. Established strategies for comparative work tend not to include a specific mechanism for including Indigenous methodologies, ethics or narratives and this is evident in the Long and Godfrey (2004) appraisal checklist. We consider this an important next step in the refinement of this type of research and add a deeper consideration of these questions in Chap. 2.

In the process of conducting our review we found huge diversity in research design, which speaks to the strength of innovation in the field. However, many of those publications were excluded when they did not identify details of that research design, such as describing how many people were included in the sample, the authors' positionality or the specific type of data collection and analysis techniques. Acknowledging that the 'evidence movement' has a sizeable critique, we nonetheless agree that guidelines such as those established by the Cochrane Collaboration

(2011), JBI (2017) or the COREQ checklist (Tong et al., 2007) offer useful strategies not only for writing up research, but also for comparing and synthesising large bodies of literature.

Who Counts?

The findings of the AV project encourage a critical reflection on Indigenous agency and power in education research and practice. As a rhetorical device, and to invoke Indigenous methodologies (Walter & Andersen, 2013), the question of ‘who counts?’ is deliberately disruptive to prejudicial assumptions about the validity of Indigenous perspectives as well as deficit design in empirical research. Centring Indigenous voices is one way this project has attempted to revise how Indigenous methodologies are applied. But this question extends to deeper issues in the research on curriculum, numeracy, literacy, racism, remote education, leadership and engagement. When Harrison et al. (2019) and Guenther et al. (2019) discuss curriculum and remoteness, both call into question the ways in which Indigenous students are not seen as citizens or are otherwise represented as uneducable.

Perhaps one of the most important points raised is by Lowe et al. (2019a, b) in their paper on engagement. It is something of an accepted critique that school-led engagement strategies primarily aim to reduce student resistance and increasing student compliance by encouraging families to adopt enforcement behaviours at home. These authors, however, suggest that Indigenous families conversely understand engagement as a means by which to deliver the transfer of decision-making power to them. In this synthesis, it would be inaccurate to view engagement as a continuum ranging from information-provision through to shared leadership. For Indigenous families, either engagement is authentic—enabling new partnerships, pedagogies and curriculum based on the transfer of real decision-making power and the creation of stable partnership structures—or it is simply not engagement. Either families are partners bearing decision-making authority, or they are not. Osborne discusses the scale of change that would need to occur for “the current power-laden methods of cursory consultation on pre-existing institutional priorities”

to lead to new ways of working that recognised Indigenous rights (Osborne et al., 2017, p. 258). Osborne suggests this work would lead to fundamental changes in the very definitions of ideas like *education* and *employment* (Osborne et al., 2017, p. 258).

Engagement is therefore not only justified by other possibilities of success, but because it is an equitable state of Indigenous-settler relations. Engagement is power-sharing and integral to delivering internationally recognised rights of Indigenous peoples in the design and management of their education systems (United Nations, 2007). Our reviews suggest that to engage is to enter ethical and just relations with Indigenous peoples; a more fulsome recognition of international rights, legal standing and educational entitlements as sovereign peoples (McMillan & Rigney, 2016). Whose needs count, whose partnership matters (Trimmer et al., 2019, p. 13) and whose safety is prioritised (Moodie et al., 2019) are urgent questions that must be resolved in Indigenous peoples' favour, if outcomes for Indigenous children are to improve.

In the Leadership review, Trimmer et al. (2019) noted that school principals who actively engaged in a relational leadership approach with their local Aboriginal community were able to identify improvements in Aboriginal student outcomes (Riley & Webster, 2016). Moreover, the development of dynamic and flexible educational policy and organisational structures to support Aboriginal community engagement, student retention and academic and social outcomes was considered a key to shifting power from school-led educational reform to community-led improvements. However, these shifts are undermined by government policy that moves towards decentralisation and deregulation of school governance. Bureaucratic accountability is seen to negatively impact on principals being able to meet the learning needs of students and the local community and engage in 'both ways' leadership.

In important fields like pedagogy and numeracy, the voices of Indigenous students, families and communities are often excluded from the research (Burgess et al., 2019, p. 313). Miller and Armour (2019) find that most of the research on numeracy was conducted on teachers' cognition and content knowledge, and often examined only teachers' perceptions of Indigenous students' learning. Empirical research on numeracy tends not to be designed from Indigenous methodologies,

conducted by Indigenous researchers, or include Indigenous students; and, it certainly does not assess change in student numeracy over time. Similarly, the location of empirical studies tends not to disclose that “the fastest growing population of Aboriginal students, those in urban areas, rarely appear in the literature” (Burgess et al., 2019 p. 313) or simply that differences in remote and non-remote Indigenous educational needs and practices (Guenther et al., 2019; Lowe et al., 2020) are more visible.

Conclusion

We know that racist discourses about Indigenous peoples’ intelligence have long dominated in Australia, and education systems have been a primary vehicle for the reproduction of those discourses (Burrige & Chodkiewicz, 2012). Indeed, the purpose of colonial schooling systems has never been to articulate a fuller expression of Indigenous peoples’ rights, and teachers are rarely supported to embed successful and rights-based practices (Vass et al., 2019). The assimilatory function of schools can still be seen in the surveillance of students and families (Llewellyn et al., 2018), streaming children towards prison, domestic and/or manual labour (Gillan et al., 2017, p. 5) and ongoing challenges in adopting culturally responsive teaching (Llewellyn et al., 2018; Vass et al., 2019). Discourses of ‘engagement’ appear as euphemism for attendance and behaviour management (Purdie & Buckley, 2010) and rarely involve deliberative processes that support the transfer of decision-making power or collaborative decision-making (Cavaye, 2004) to community. When we ask whose voices count in policy and whose are heard in schools, it is plainly not the voices of Aboriginal and Torres Strait Islander people.

The Aboriginal Voices project has helped us reflect on the quality of empirical research, particularly where that work is used to justify policy interventions in the fields of literacy, numeracy and attendance (Burgess et al., 2019; Guenther, 2019; Gutierrez et al., 2019; Miller & Armour, 2019). We can more clearly point to the benefits of including Indigenous perspectives in the curriculum (Guenther et al., 2019; Harrison et al., 2019) in decision-making (Trimmer et al., 2019), and of recognising the different aspirations and purposes of schooling that Indigenous students

and family hope for (Guenther et al., 2019; Moodie et al., 2019). The project has highlighted what is working well; teachers supported to engage in robust professional learning, families and communities meaningfully involved in the life of schools and decision-making, and the evidence base on how these improve Indigenous student outcomes. The systematic review method allowed us to pause and review what has gone before, to consolidate our advice to families and teachers and to think again about the orientation of scholarly research and practice. We offer this work in the spirit that future research more effectively engages Aboriginal and Torres Strait Islander students and their family's voices across Country.

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2

Developing a Systematic Methodology to Explore Research in Indigenous Education

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Introduction

The studies described in this book are the culmination of research undertaken by a small group of academics who prior to late 2016, were endeavouring to research across a range of concerns seen to impact of the educational opportunities of Aboriginal and Torres Strait Islander students. The eclectic team who formed the backbone of this *Aboriginal Voices* project had in common, a concern that our own research and that of many of our colleagues appeared to have so little traction in affecting the many educational environments in which Aboriginal and Torres

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Strait Islander school students are found. Our concerns centred on the suspected paucity of ‘quality’ research that addressed the root causes of schools’ inability to affect sustainable change in the outcomes of Indigenous students,¹ of not being representative of students’ and families’ educational and cultural aspirations, or not having provided Indigenous people with an understanding of education’s role in the broader, complex socio-political issues underpinning these intractable concerns. What was disturbing was that as researchers we were unable to lay out a broader narrative with a coherent explanation of the levels of intergenerational underachievement that blight the educational opportunities of many Australian Indigenous students.

These concerns spurred a collective realisation that a collaborative effort was required to undertake a systems-wide re-evaluation of Australian educational research to elucidate answers to two disarmingly simple questions: ‘What are the issues affecting the underachievement of Indigenous students in Australia?’ and ‘How can research inform solutions to the complex and inter-related issues needing to be addressed to improve Indigenous students’ educational experiences and outcomes?’ The Systematic Review project sprung from this realisation that we were unable draw on a body of evidence that mapped out the range of issues and their possible solutions.

¹The term ‘Indigenous’ is used in this chapter in an effort to capture the broader Australian focus of this inquiry. The authors acknowledge the local contexts of Aboriginal and Torres Strait Islander communities, and the fact that even these terms are homogenised names that do not acknowledge over 500 language nations and dialects that make up the first peoples of this country.

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Having agreed to this undertaking, three key challenges immediately demanded attention. The first was to build a body of research that could challenge powerful but often ill-informed policy and practice discourses, to identify programme sustainable successes and their preconditions. The second challenge to ensure research efficacy centred on adopting a robust and systematically applied review methodology that facilitated a systems-wide investigation of a dozen years of Australian research. The third challenge focused on a developing a collective agreement that each review needed to not only represent the broad interests of Aboriginal and Torres Strait Islander students and the families, but speak directly to policy makers, schools and teachers about their long-held experiences of education and the issues that they had for too long they voiced about their levels of dissatisfaction with the schooling of their children.

Prior to the commencement of research, the researchers agreed to embrace an evaluative systematic review methodology to structure the task of locating and evaluating the research across the reviews. This approach facilitated both the conduct of each review, enabling the aggregation of findings from across all ten studies, to achieve the degree of understanding we all had sought in this fraught space. Figure 2.1 identifies the overall scope of the project and how the ten inter-related review topics focused on building a rich body of research that would underpin our understanding of the issues affecting the educational opportunities of Indigenous students.

Defining a Methodology for the Aboriginal Voices Project

A systematic review provides an opportunity to identify the body of research evidence specific to an inquiry, to purposefully interrogate their findings using pre-defined criteria and to the analysis of findings to shed light on the inquiry question, while also understanding the conditions upon which these findings are seen to be viable (Boaz et al., 2002). At the centre of each review was a clear purpose and a research question that identified the 'who' was the review focused on, the 'where' and the 'what' of was being researched, a task guided by the PICo strategy (Santos et al.,

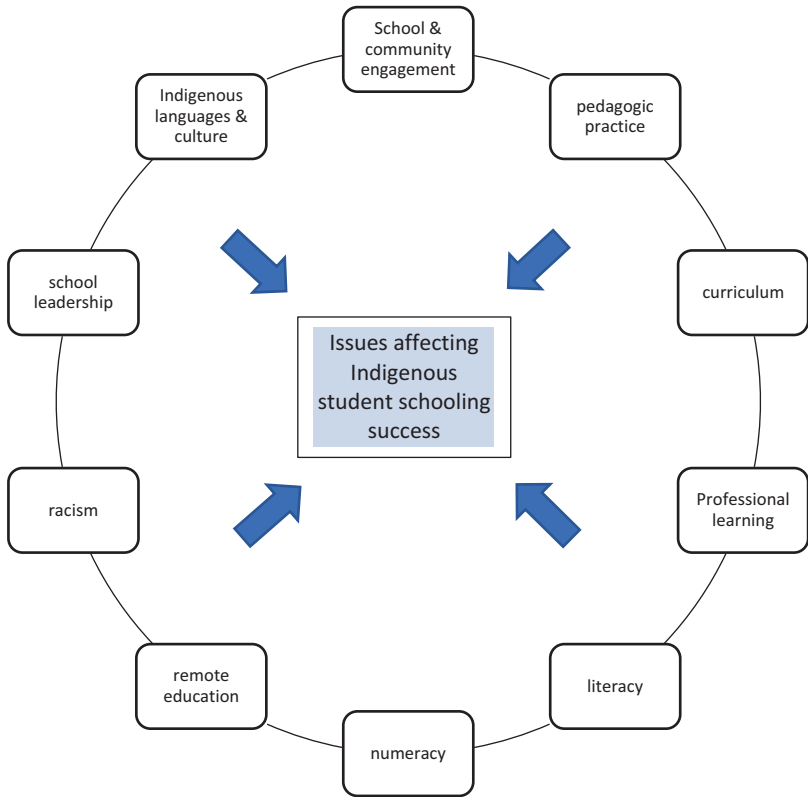


Fig. 2.1 The ten review topics in the Aboriginal Voices systematic reviews project

2007). Having developed a robust inquiry question, the second task lay in establishing clear and defensible research protocols. Russell et al. (2009) argued that the review’s overall veracity rests on the development of protocols that are strictly adhered to, that are comprehensive in their scope, that define the parameters of the review, and aid in the synthesis of the review’s findings.

The research methodology used across of the ten reviews drew on the structured approaches as set out in the manuals developed by Cochrane (Higgins & Green, 2011) and Campbell Collaborations (n.d.), the Joanna Briggs Institute (2014) and Petticrew and Roberts (2006), who had established specific requirements for undertaking a Systematic

Review in Social Sciences and set out structures that enabled the synthesis of research across the qualitative, quantitative and mixed methods paradigms.

From the outset, the review team agreed that the adoption of overarching inquiry questions and the specific review questions needed to speak directly to the identified challenges that Indigenous communities' have had in their engagement with the schooling of their children. To this end, the team agreed that they needed to apply an Indigenous lens across their work to ensure that each of the ten systematic inquiries could speak for Indigenous voices who had originally informed the studies under review. In particular it was identified that there were three key pinch points that needed to be managed—namely the inquiry question, the protocols and the synthesis and interpretation of evidence.

Applying an Indigenous Critical Lens to a Systematic Review Methodology

While these systematic reviews needed to closely adhere to this type of investigation within the social sciences, it equally needed to be theoretically orientated such that it not only resonated with Indigenous peoples' experiences schooling but promoted their voices, which have for decades unequivocally demanded transformative change in how education is conceived and delivered.

The particular innovation of these reviews has been that they combined a systematic review methodology designed for use in the social sciences (Petticrew & Roberts, 2006) with the critical Indigenous methodology as outlined by Smith (2000) and Brayboy et al. (2012). This structured approach ensured a replicable and comprehensive method to identify the relevant literature, with an agreed understanding of the critical processes that needed in applying an Indigenous lens to the inquiries.

To ensure that the inquiry was relevant to all stakeholders' needs, the research team agreed its primary focus needed to reflect real and current concerns impacting Indigenous students' success, identify gaps in systems and teacher understanding of communities, and identify solutions to the complex issues impacting current educational policy and practice. For

this to be achieved, it was critical to conceptualise a critical Indigenous methodology that could both inform the development of the research question and the analysis and synthesis of the research data. Smith (2012) and Rigney (1997), among others, argued that the research undertaken with or about Indigenous people needs to be grounded in the notions of recognition, socio-political and cultural sovereignty, of relationality and responsibility, Indigenous spirituality, community healing and a responsibility to the interests of Indigenous families and their communities (Meyer, 2008; Tuck, 2009). Research undertaken with and for Indigenous people must start from the assumption that the research emanates from an understanding of each communities' colonial experiences and their socio-cultural and political aspirations (Hickling-Hudson & Ahlquist, 2003) for the purpose of affecting a reorientation of education away from its long-held assimilatory trajectory. To support our collective adhesion to this over-riding purpose, we took onboard a critical Indigenous research approach to the inquiries and positioned the task towards identifying how the body of research informing the reviews held the evidence of the lived experiences of generations of Indigenous families and their voices for change.

This task of 'meaning making' from the discursive voices of thousands of Indigenous participants whose voices underpinned the over 13,000 studies reviewed across the two-year project. If this was to occur, each team of writers needed to adopt a reflexive relationship with the voices of past participants and understand the contexts in which the research was conducted. This particular feature of critical relationality draws the researcher into re-engaging with the voices trapped within the original research so as to bring meaning to Indigenous people's experiences and to ensure that it is to them that this research must resonate (Martin, 2017). Wilson (2001) argued that the construct of knowledge and how it is to be understood is central to research that is supportive of substantive and transformative change. Dawson et al. (2017, p. 4) argued that there was a particular utility for the researchers to adopt the key principles of this methodology, 'by utilising an Indigenous method or framework, [to] affect the incorporation of Indigenous knowledge, history, and experiences into their research process'. In adopting this critical methodology, it re-focused our analysis to determine whether the research

methodologies and protocols and analyses were representative of the identities, needs and aspirations of their Indigenous participants. Further, this methodology facilitated an examination of the research findings to test whether they were representative of Indigenous people's experiences, histories and whether researchers understood the acts of agency and resistance. Foley (2003) argues that it is this capacity which underpins the depth of insight needed to represent the views of Indigenous people and to challenge the policies and practices that are seen to subjugate Indigenous peoples. Having adopted this integrated methodology, the team then agreed to the following five stage approach in conducting the research.

Five Stages in an Aboriginal Voices Systematic Review

The five stages in this review followed the stages outlined in Fig. 2.2.

The five stages in this review (see Fig. 2.2) were established to guide authors in developing and implementing the systematic review methodology. The PRISMA (2009) checklist informed the development of the five key stages in this review (Fig 2.2), whilst the PRISMA flow diagram (Fig. 2.4) (Moher et al., 2009; Khan et al. 2003) shows the applied sequence in filtering and identifying the final studies for review. The example PRISMA flow diagram (see Fig. 2.4) not only informed the key strategies of the review, but also evidenced the replicable, sequential pattern of filtering strategies used for the inclusion/exclusion of studies and the recording of each phase of this process.

Stage 1: Framing the Question and Developing the Protocol

For each Indigenous education topic covered by the Aboriginal Voices team, a question and associated protocol or 'roadmap' was developed. The team agreed on protocols which were consistent across each topic review. The protocols, which were developed in consultation with the team members, flowed out of the overall systematic review question from which the ten reviews emanated (Lowe et al. 2019).

The questions were developed to conform with the PICO mnemonic (Petticrew & Roberts, 2006) and guided by the Cochrane Collaboration's

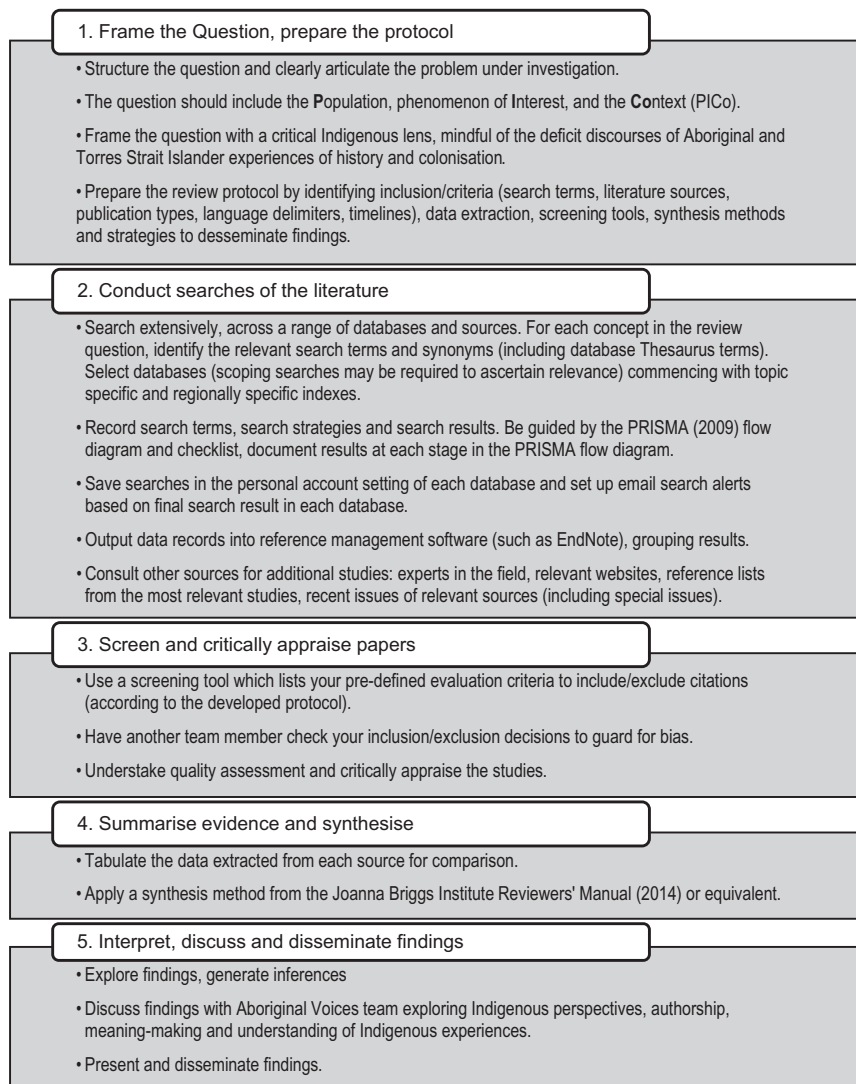


Fig. 2.2 Five stages in an Aboriginal Voices systematic review. Note. PRISMA flow diagram appears as Fig. 1 in 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement' by D. Moher, A. Liberati, J. Tetzlaff, D.G. Altman & The PRISMA Group, 2009, *PLoS Med*, 6(7): e1000097. The *Joanna Briggs Institute Reviewers' Manual* (2014) from the Joanna Briggs Institute, Adelaide

<p>e.g. Inquiry Question: School and community engagement</p> <p><i>What issues affect the development of Aboriginal community and school collaboration and what impact have these had on schools and <u>Aboriginal students, families and their communities</u></i></p>	<p>Area of Interest '...issues affect the development of Aboriginal community and school collaboration and what impact have these had.'</p> <p>Context 'Schools'</p> <p>Phenomenon of Interest '... Aboriginal students, families and their communities'</p>
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Fig. 2.3 Example of PICo elements

(Higgin & Green, 2011) methods to ensure that each question clearly identifies the elements of the review. This ensured that the research database inquiries could specifically target each of the three primary PICo elements identified in the inquiry question. It is the PICo framework that focuses our attention to the inquiries research population, the phenomenon of interest being investigated and the specific context to which the research was relevant were set in place by the overarching question and the protocols. In this case, the phenomenon of interest was consistently Aboriginal and Torres Strait Islander people and students, the context was K–12 schools (and transitioning into and out of school), while the area of interest changed in relation to each particular inquiry (Stern et al., 2014). Figure 2.3 provides an example of the PICo model was used in the investigation of the paper on the impact of school and community engagement on Aboriginal students and their communities. Each of the three PICo elements initially required a separate database investigation. And then these were aggregated into a final Boolean search to locate those studies that met all three requirements.

Research Protocols

This systematic review methodology involves the development of strategies to conduct broad searches with the aim to retrieve the full range of research studies that satisfied the question for each topic. The development and application of the protocols ensure (1) that decisions made during the review process are not arbitrary and (2) that the inclusion or

exclusion of studies occurred only within the guidelines set by the protocols. The protocol delineated the methods to be used in the review, by defining the inquiry question, selection of data sources, the stipulation of the inclusion and exclusion criteria, the search strategies, data extraction, methods for the quality assessment of the studies, data synthesis that met the criteria and the dissemination strategy (Petticrew & Roberts, 2006). After discussion, it was agreed that the protocols for the Aboriginal Voices project would be as follows:

1. That each review would be inclusive of qualitative, quantitative or mixed methods research.
2. That the key research question/s illuminate what the research has found about the experiences and aspiration of schools, teachers, Aboriginal students or their families.
3. The common criteria for each review in the Aboriginal Voices project were as follows:
 - (a) That population reported on in the study findings clearly identified Australian Aboriginal or Torres Strait Islander peoples.
 - (b) That the research and its findings must be on issues that are germane to the phenomenon of interest in the inquiry question.
 - (c) That the publication language was in English.
 - (d) The time-period for the publication was 2006 to 2017. It was agreed that this could be modified if the research team advised that their review would be limited if they could not incorporate earlier studies. This needed to be argued on the prevalence of studies and/or critical contextual events that occurred outside this timeframe but shown to impact on each inquiry's veracity.
 - (e) That the research context was Australian schools (from pre-school to senior secondary) and/or their communities.
 - (f) The studies had to be either peer-reviewed articles, government reports or other grey literature and or theses.
 - (g) That the studies needed to meet an agreed quality criterion.

Stage 2: Conduct Searches of the Literature

From the outset, the cross-institutional team worked closely with librarian specialists from the affiliated universities to identify, scope and select relevant subscription and open access databases that covered the education and related social science literature, develop database search strategies for each system, advise on search syntax and conduct the database searches required for each review.

Preliminary investigations involved a series of scoping searches of the target databases, which were undertaken at the commencement of the searching stage for each review. This ascertained those databases that indexed relevant content to the inquiry, assess the functionality of each database interface and explore the thesaurus of indexed terms. Search terms were analysed, and search strategies developed for each system. These were based on the inquiry question, the phenomenon, the area of interest and context. These cascaded down to become the inclusion and exclusion criteria.

This important stage of searching requires an understanding of the particularities of each database thesaurus such that all possible synonyms, and broader and narrower term to ensure that each review captured the full range of terms in record titles, keywords, indexing and abstracts. As each systematic review was conducted, terms were mapped to the database thesaurus (where available) along with keywords/phrases, building a series of search result sets from each database system. Additionally, user guides and advanced searching guides were consulted to ensure that their particular syntax rules, such as the truncation of key terms were used to broaden search results by finding words with variant endings.

The search strategy involved combining many searches using Boolean operators. The resulting sets for the population, phenomenon and context were then cross matched using the Boolean AND operator to focus the search to ensure that the studies met the search requirements. Multidisciplinary databases such as Proquest Central, Web of Science and Scopus were searched last using an extensive search string (a combination of key words and phrases representing the concepts combined with Boolean operators) which was replicated in the command search function of each system. All searches were saved, the records downloaded

to a research management system (in most cases EndNote was used) and organised in groups or by databases. Research teams set up search alerts (via email) for new material matching the search criteria used for each database. Additionally, to ensure transparency, search terms and search strategies were carefully documented in a shared document, along with records of search results from each database.

Databases were searched in order of their relevance to the Australian education context, with those searched first being chosen as they primarily indexed Australian research. Typically, the databases were interrogated using an iterative and specific regional education database systems to case either generic international or disciplinary specific: A+ Education Australian Education Index (via Informit); AEI -ATSIS Australian Education Index Aboriginal and Torres Strait Islander Subset; Family: Australian Family & Society Abstracts Database (via Informit); Indigenous Collection (via Informit); to international subject specific ERIC: Educational Resources Information Center (via OVIDSP); PsycINFO (via OVIDSP) then to broader and large multidisciplinary databases PsycINFO (via OVIDSP); Proquest Central; Web of Science; Scopus; Dissertations & Theses Global (via Proquest); Libraries Australia union catalogue was also searched for government reports and theses.

Stage 3: Screen and Critically Appraise

Once the inclusion/exclusion criteria were applied, the researchers progressively screened the studies identified using the protocols to guide each phase of the inclusion/exclusion process (see Fig. 2.4).

The PRISMA (Moher et al., 2009) flow diagram (see Fig. 2.4) outlined the deliberate and structured guide used by the researchers to manage the step-by-step approach to methodically testing the studies against the inclusion/exclusion criteria. Having undertaken this task, the last element of this phase was to apply a filter to ensure that the research studies met the projects quality criteria. This phase required undertaking a quality assessment of the studies, assessing each of those remaining using a modified research quality scoring system The Quality of Evidence Framework (Table 2.1) adapted from models developed by Dixon-Woods

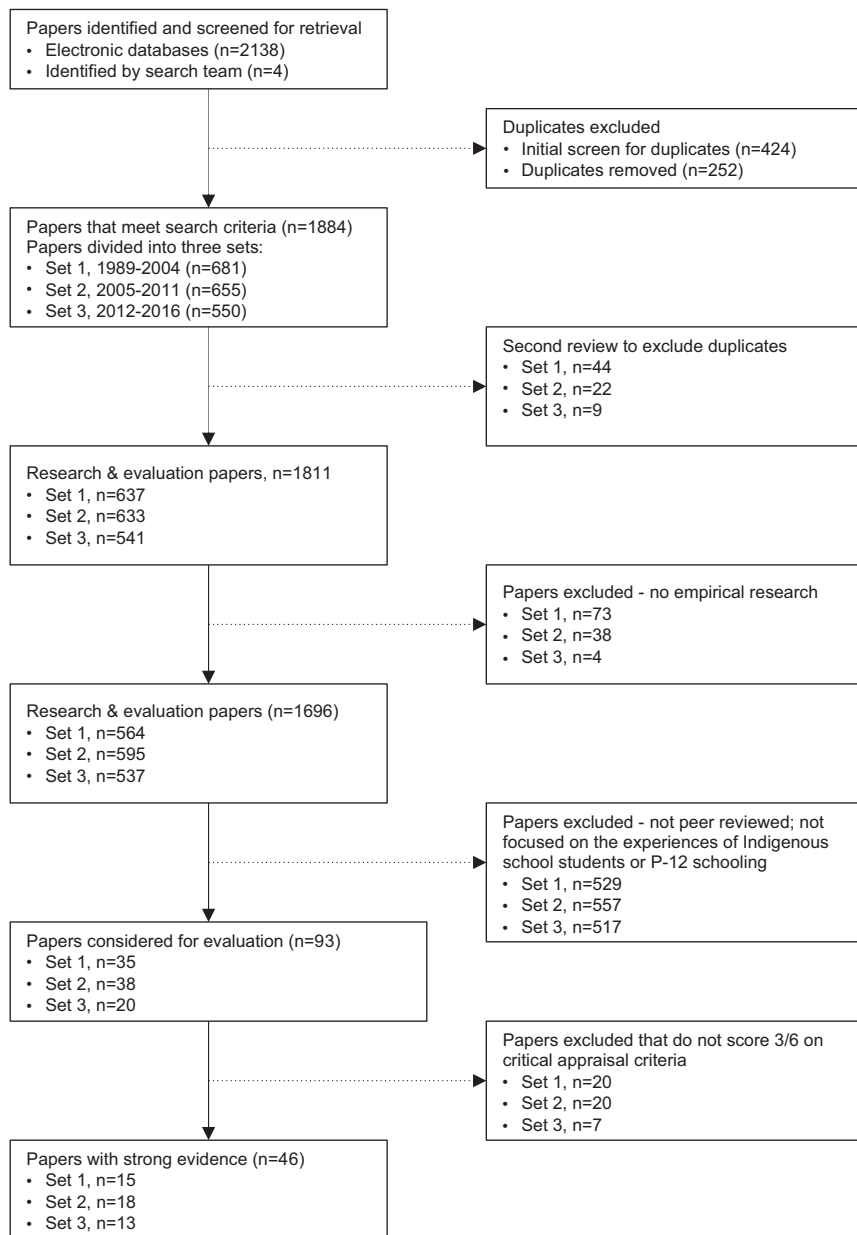


Fig. 2.4 Example of PRISMA flow diagram representing inclusion and exclusion process. Note. Adapted from Moodie et al. (2019)

Table 2.1 Quality of evidence framework

Criteria	Methodology		
	Qualitative	Quantitative	Mixed methods
Design	Project design appropriate to methodology	Research design clearly described and appropriate methodology clearly described	Research design clearly described and appropriate methodology clearly described
Sources	Sources/sample of recruitment strategies	Data sources quantified	Data sources/sample recruitment strategy described
Theoretical frame	How are participants described and their views positioned? Study explicitly links to theoretical/philosophical position	How are questions framed to facilitate diverse locations and knowledges? Findings are generalisable to an identifiable population	How are participants described and their views positioned? Study connects to articulated theoretical constructs
Ethical implications of design or findings	Ethical considerations: researcher positionality identified. How is Indigenous knowing constructed?	Limitations of research are acknowledged. How is Indigenous knowing constructed?	Ethical considerations, researcher positionality identified. How is Indigenous knowing constructed?
Fidelity of method	Research findings respond to research questions	Study is replicable (based on information provided)	Response to articulated research questions, triangulation of sources/ findings is described
Contribution to the field	Research utility; implications discussed	Research utility/implications discussed	Research utility/implications discussed

Adapted from Coughlan et al. (2007), Dixon-Woods et al. (2007), Ryan et al. (2007), Long and Godfrey (2004)

et al. (2007), Ryan et al. (2007) and Long and Godfrey (2004). This model posed a series of questions against which each surviving study was appraised, using a scoring system across six 'quality' research criteria. Studies were graded on whether these criteria were met and the degree to which they were described. The scores for each of the studies were then aggregated to a total of 6, with those not scoring at least 3, being removed.

The very last phase prior to analysis required another team member checking the inclusion/exclusion decisions to guard for bias by looking at each step and viewing discarded studies to ensure they were correctly rejected or included. The final results for each phase were then recorded using the PRISMA flow diagram (PRISMA, 2009).

Stage 4: Summarise Evidence and Synthesise

The synthesis of the findings from these studies occurred across two levels. The first looked at how the findings were reported, while the second sought to ensure that the thematic analysis and synthesis were consistent with the primary purpose and focus of these reviews. The authors chose to use the Joanna Briggs Institute guidelines (2014), Pace et al. (2012), and Sandelowski et al., (2006) to guide the method of synthesis across each of the reviews.

Several approaches were suggested as having equal validity in reporting the research findings. Sandelowski et al. (2006) suggesting either a 'segregated' method, where the findings from the quantitative, qualitative and/or mixed methods approaches are reported separately, or an 'integrated' approach where the findings were synthesised using a holistic thematic analysis of the studies. This latter model was recommended in the Joanna Briggs Reviewers' Manual (2014, p. 9) as it facilitated the assimilation of data into a single point of synthesis of all the studies, with quantitative and mixed methods data being converted into a common set of themes, codified and then brought together within one cross-methods approach. Both methods were used in the reviews, but in both cases, the researchers identified a range of themes to provide a unique understanding of the outcomes and key issues within the inquiry (Bazeley, 2009).

Stage 5: Interpret, Discuss and Disseminate Findings

One of the key commitments of the Indigenous methodology was to ensure that the findings needed to both inform families of the complex issues that are seen to impact the educational opportunities afforded to their children, and to resonate with the lived experiences of Indigenous people. Consequently, the synthesis applied by the critical Indigenous methodology critiqued the findings from within the 'known' perspectives of Indigenous people, enabling the community to interrogate the discursive findings across these ten reviews to develop a richer and deeper understanding of the review findings, empowering them to establish a unique, transformative, counter dialogue with schools to challenge their institutionally supported marginalisation and the sponsored discourses of deficit that have settled into the 'business' of doing schooling for Indigenous students.

Hearing Aboriginal Voices: The Methodological Challenge

The selection of this methodology came with both inherent challenges and benefits that the researchers needed to accept and manage as they undertook the task of reviewing past research. The uniqueness of the chapters isn't so much that they applied a conservative systematic review approach to research re-evaluation, but that they overlaid it with a critical Indigenous lens through which they sought to conceptualise a new 're'-understanding of the research findings from the thousands of studies uncovered through the use of the PICo methodology. The systematic review methodology provided a structure from which the researchers could both interrogate the databases to canvas previous research and ensure a defensible process informed their inclusion or exclusion. The application of this Indigenous lens provided the very rationale for the research and to ask questions that would allow sense to be made of the experiences of these peoples' experiences of state sanctioned schooling for their children.

The foundational understanding underpinning the project and its enclosed ten inquiries was that they needed to represent the voices of students, their families and communities and teachers. It was their experiences and understanding that were represented in the studies that formed these evaluations. It was their concerns that sprung from the pages, beckoning the researcher to understand what was being told to them, and to work with in setting an agenda to challenge the state's unfinished business of assimilating the Indigenous mind. Though conservative in its review methodology, this project sought not to bring new voices to the table but locate and re-read those that had already shared in answering questions on the plight of Aboriginal and Torres Strait Islander students and their experiences of schooling.

Yet there was a cost in adopting this hybrid methodology, which was the exclusion of particular genres of research from the review. We held to this criteria as we sought to know if prior research could inform our understanding of not only *why* the reasons for the disastrous levels of school underachievement, but *whether* this same body of research could point to how schooling could better be structured to deliver an education that engaged and culturally nourished Indigenous students such that they succeed at school. However, in tying ourselves to this aim had the effect of limiting our opportunity to draw on the rich veins of sociological research genres that have been extensively used in Indigenous research. This point was made by Moodie et al. (2019), whose study on racism was forced to exclude those studies seen not to be evaluative even though they clearly shed light on how racism plays out in the lived experiences of Aboriginal students. On balance, the loss of these important repositories of Indigenous voices was only acceptable if it they were outweighed by the benefits of a methodology that facilitated drawing together the collective learning of these reviews into an encompassing comparative analysis that enabled research informed understand of how Australia has come to the current parlous state of education for Aboriginal and Torres Strait Islander children.

A second key challenge for this work, centred on our adoption of a critical Indigenous methodology that explicitly focused our analysis on 'hearing' and then understanding the voices of the many thousands of Indigenous participants who for so long, had freely offered to those able

to listen, their insider critique of their disciplining by schools. As in the first instant, it was vital to our overarching project was to meaningfully 'see' and then elevate those findings so that those echoes could once more talk back about these often-disastrous experiences of schooling. This task required vigilance in ensuring that a rigorous critique of the framing and analysis of the findings in each of the studies and the subsequent thematic analysis that has brought them together, first in each review, and now in a summative form to found in the latter chapters in this text.

Conclusion

The Aboriginal Voices systematic review project was an enterprise that sought to simultaneously research key issues in the education of Indigenous students and for the first time provide a deeper insight into the complex issues seen to affect the educational opportunities of students. The systematic reviews completed as part of the Aboriginal Voices project have applied a specific, carefully defined approach that can be applied to the task of undertaking an intensive review of the Australian educational research in these discrete studies.

However, while we were cognisant of the certain limitations of this particular literature review methodology, overall, the undertaking of these systematic reviews proved to have particular utility, as they have been seen as powerful tools to bringing collective insight to the vexing issue of why schools have largely failed to address the socio-cultural needs of Indigenous students. It was only through the rigorous application of the systematic review methodology, which enabled the identification of the Australian studies scanned for relevance, synthesised, interrogated and then challenged using a critical Indigenous lens to provide particular insight into Indigenous education in Australia to answer the overarching inquiry question: 'What are the issues affecting the underachievement of Aboriginal and Torres Strait Islander students in Australia and how can research inform solutions to the array of long-term issues that need to be addressed?'

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3

The Benefit of Indigenous Cultural Programs in Schools

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Introduction

For Indigenous Australians, the beginning of the new millennium in 2000 was a major marker of what they and many thousands of other Australians hoped would shift reconciliation from aspirational rhetoric to genuine recognition of Indigenous peoples' unique place within Australia

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as First Nations peoples. This review focuses on the evidence of the shift from an aspirational assertion of Indigenous rights to the agentic actions of Indigenous people and partner schools in support of the existential project of the renaissance of culture and Indigenous knowledge, and practices (Jones, 2014). This chapter looks to capture the hesitant but still deliberate actions of Indigenous communities in their assertion of their rights to their unique identities that inherently connect them to Country and the languages and knowledges that reside within those unique spaces (Australian Human Rights Commission, 2009; Waugh, 2011).

Indigenous people continue to look for opportunities to position political debate in Australia to support their rights to engage in their cultural practices and/or to reclaim their threatened languages (Douglas, 2011). Yet until very recently, indifference, antipathy or active resistance from schools has been the most likely response, which has made it well-nigh impossible in all but the most remote locations for authentic cultural programs to be developed and taught within classrooms (Lowe, 2009). However, while this may describe the typical schooling experience of the vast majority of Indigenous students, there is evidence of a small number of schools that have, with community support, established prized cultural programs including local language teaching (McNaboe & Poetsch, 2010). Evidence suggests that the establishment of these programs cannot be overstated as they provide strong testimony to the impact of community and student support, and in many cases, an acknowledgment of those few but extraordinary teachers who challenge the ever-present schooling project of assimilating Aboriginal children (Lowe, 2011; Freeman & Staley, 2018). Despite this, the challenge so often heard from teachers is that of feeling unable to teach Indigenous cultural content for which they have little or no connection to and/or knowledge about. This struggle, too often confused as being pedagogic in dimension, plays out with tokenistic curriculum adjustments, or an inability to link Indigenous content to broader discipline learning outcomes. However, recent research into curriculum theory and practice identifies how the technology of curriculum explicitly alienates teachers' moral sense of social justice. Lowe and Cairncross (2019) and Maxwell et al. (2018) identified how academic disciplines and their direct

influence on the knowledge construct of curriculum, systemically silences teachers in developing pedagogic narratives that challenge the underpinning moral assertions of settler colonialism, nation-making and the extinguishment of Indigenous sovereignty (Lowe & Galstaun, 2020).

Although the ever-present assimilatory endeavors of schooling are seen to play out in Australian classrooms (Harrison & Skrebneva, 2020), there are counter-intuitive moments in national and state policymaking that appear to support Indigenous cultural aspirations. From the early 2000s, state and commonwealth governments have worked to establish a curriculum framework to support schools in developing local Indigenous languages courses (ACARA, 2013; Victorian Curriculum and Assessment Authority, n.d.; Board of Studies NSW, 2003). While this curriculum offers students a unique opportunity to learn one of the hundreds of Australia's first languages, it also embeds within it, an implicit assertion of the legitimacy of Indigenous peoples' ontological connection to Country (Emmanouil, 2017).

Yet even though various policies have been established that at least in principle support community cultural aspirations (NSW Department of Aboriginal Affairs, 2013), this review highlights the ongoing structural challenges experienced by Indigenous communities in maintaining deep cultural knowledge when these principles have not been realized, consequently limiting the learning and transmission of their knowledges and languages. In response to the complex socio-political and structural issues influencing students' access and engagement in school-based cultural programs, this review seeks to investigate the following: *'Does Australian Aboriginal and Torres Strait Islander school student access to cultural and language programs have an impact on their educational engagement and learner identities?'*

Methodology

Using the systematic methodology described in Chap. 2, this review is distinguished from narrative reviews through its emphasis on 'transparent, structured and comprehensive approaches to searching the literature and its requirement for [the] formal synthesis of research findings'

(Bearman et al., 2012, p. 625). Using protocols described in the PICO¹ framework (Santos et al., 2007), this review focuses on the impact of school efforts to establish cultural and/or language programs and practices in support of Indigenous students' identity and knowledge acquisition. Using this systematic approach, the review identifies evidence of the efficacy of these programs, their impact on students' sense of identity and connections to their community and Country, schools' connections to local Indigenous communities, and the effect these programs have on Indigenous schooling success.

The review identified 1407 studies for initial review which was externally verified by a second team member by applying inclusion and exclusion protocols adopted by the Aboriginal Voices team (Lowe et al., 2019). The PRISMA² checklist (Moher et al., 2009) (Fig. 3.1) captures the methodical application of the inclusion/exclusion protocols to the studies, which reduced the number of studies to a final 27 that met all six stages of inclusion and exclusion criteria.

Once analyzed using NVivo, the findings were grouped into the four themes used in this report: (1) Indigenous peoples' attachment to culture, (2) the role of the school, (3) language planning and (4) the impact of programs on stakeholders.

Analysis

Theme 1: Indigenous Communities—Cultural Attachment and Aspirations

Vernacular terms such as 'community'/Indigenous/local identity, cultural knowledge, language/lingo, Place/Country and Dreaming to name a few are used to describe the complex, relational concepts that acknowledge Indigenous peoples' feelings of moral, social and cultural connections to their unique knowledges (Biddle & Swee, 2012; Disbray, 2016; Lowe, 2017; Martin, 2017). While many of the studies in this review focused

¹ PICO—Population, phenomena of Interest and Context.

² PRISMA—Preferred Reporting Items for Systematic Reviews and Meta-Analyses.

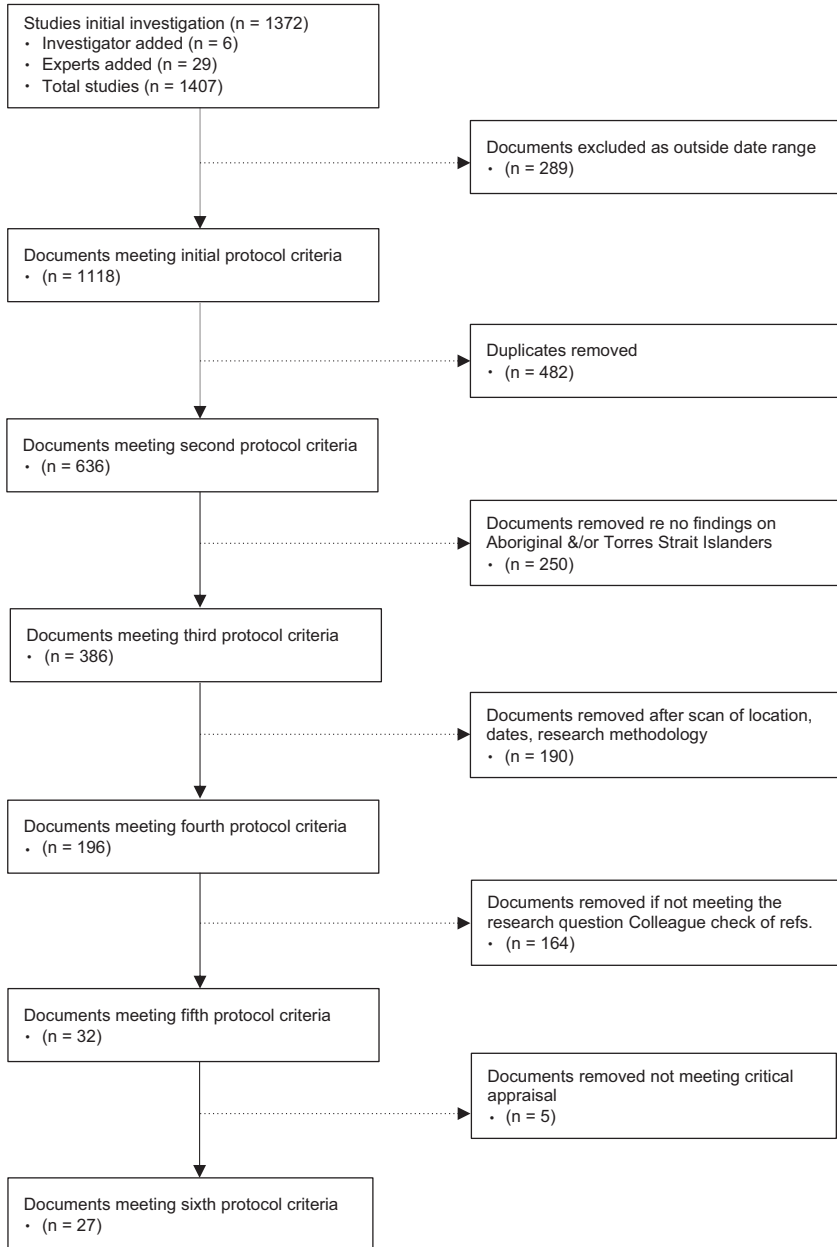


Fig. 3.1 PRISMA flow diagram representing inclusion and exclusion process

on remote locations where language and cultural practices are still practiced,³ all of those tagged to this theme identified the positive impact of programs that accorded to the community's language and/or cultural aspirations, and a hope of its curative impact on the levels of intergenerational community trauma caused through their lost connections to Place (Purdie et al., 2010).

Community Connectedness to Country

The construct of 'Country' and belonging were ever-present in many of the findings, with Biddle and Swee (2012), Douglas (2011) and Martin (2017) all noting the relationship between Indigenous well-being and each community's desire to access and transmit their language and culture (Hobson et al., 2010). This assertion was even more pronounced when communities saw that learning their 'lingo' provided a bridge to their sense of belonging to and intimate knowledge about who they are. This process of 're-awakening' their relationship to this knowledge grounded the community in an increasing desire to connect to the stories of Country and responsibilities they have to it and their kin (Anderson, 2010; Colquhoun & Dockery, 2012). This sense of 'being' on and 'belonging' to Country were recurring themes taken up by Godinho et al. (2015), who noted the particular strength exhibited by those who could situate themselves on ancestral country or articulate cultural knowledge while being off-Country. Osborne and Guenther's (2013) findings underscored the particular benefits accrued by young adults living on Country and engaging in cultural practices. Further, they highlighted a positive impact when active engagement with Country occurred, especially when it was seen to uphold their sense of a unique identity expressed through language and knowing culture (Colquhoun & Dockery, 2012; Douglas, 2011).

³ Those states along the eastern seaboard and the capital cities which experienced the violent histories of dispossession, missions, racism and policies that limited language use (Hobson et al., 2010).

Indigenous Enculturation

A number of studies reported on the particular benefits for Indigenous youth who participated in cultural programs that facilitated the transmission of knowledge that intimately connected them to their community and its history. While Colquhoun and Dockery (2012) noted the deleterious intergenerational impacts of colonization and its particular demoralizing effect on generations of children, studies by Lane (2010), Anderson (2010) McNaboe and Poetsch (2010) and Biddle and Swee (2012) recognized the benefits stemming from programs that iteratively enculturated students through the school providing quality, coherent cultural and language programs. These latter studies noted students' heightened sense of self-worthiness, cultural identity, personal resilience and sense of community.

Valuing Elders

The important agentic role of Elders in driving the development of cultural programs is seen in Anderson's (2010) decade-long, whole-of-town project of re-introducing the Wiradjuri language. Having held their language and cultural knowledge, he noted that Elders proactively initiated community language programs, supporting Wiradjuri families to participate in community education programs as well as many school programs. McNaboe and Poetsch (2010), Douglas (2011) and Osborne et al. (2017, p. 37) similarly identified the role of Elders as protectors of knowledge, advocates and teachers, frequently liaising with schools to support language learning as well as the children's broader cultural education.

Knowledge and Its Impact on Community

There were many studies that identified the positive impact when the community supported the schools' cultural programs. Lowe (2017) noted the progress made in relational capacity building between the language and classroom teachers, as they learnt language together and

co-developed and taught programs that over time infiltrated the general life of the school. Murray's (2017) study on bilingual education on the Tiwi Islands identified a further example of the key work of Elders who constantly sought opportunities for the intergenerational re-enactment of cultural practices with teachers, students and Aboriginal school workers. Similarly, McLeod, Verdon and Kneebone (2014), Lowe (2017) and Green (2010) noted a shift in community well-being when their children could engage in learning coherent and staged language learning. It was seen that these programs boosted the communities' sense of cultural custodianship and sparked a desire to awaken 'sleeping' epistemological knowledge.

While the first theme identifies issues that relate broadly to Indigenous communities' interests in supporting students' access to cultural programs, the second theme looks at the school as a particular site of cultural exposure, how this was achieved, its commitment and understanding and the issues faced in their attempts to establish programs.

Theme 2: The Role of School and School Systems

Policy

Many of the studies highlighted the national and state policy frameworks that have been established to underpin the development of local and state programs. Studies by Disbray (2016) and Simpson, Caffrey and McConvell (2009) highlight how the overlapping policies of funding, curriculum and language strategies often led to jurisdictional confusion and conflict between funding bodies and Indigenous communities. However, Disbray's (2016) study does note the potential of policy, such as the national languages curriculum, to support the establishment of quality classroom programs (ACARA, 2013) and with it, the potential to support community advocacy for this program. Yet, as much as the school can be seen to be a key to the success of these programs, Disbray's study also highlighted the consequence when schools 'sacrificed' these

programs if they appeared to compete with other policy priorities such as the National Assessment Program, Literacy and Numeracy (NAPLAN) external assessments. Even schools who initially garnered community support to establish a culture and/or language program, later failed to recognize the loss of trust and goodwill when they dismissed the community's historic investment of social and cultural capital in these programs (Simpson et al., 2009; Disbray, 2016; Cairney et al., 2017). Conversely, Lowe's (2017) study noted that the act of schools supporting a community's socio-cultural aspirations enabled them to forge highly productive collaborations with local language advocates and tutors, Aboriginal staff and teachers.

Leadership

The need for insightful, but strong leadership was one of the more significant findings of our review, with many studies noting a correlation between what was acknowledged as 'effective' cultural programs and ongoing, strong executive support. Lane (2010), Douglas (2011) and Guenther, Disbray and Osborne (2015) found that though the efficacy of a program was measured by its ability to connect learning to community and Country, it's success was in the hands of school leaders who were seen to hold the power to resource and protect the program. Lane's (2010) study, which unpacked this issue of leadership, suggested that a key element of effective school administration was to find ways to bridge the chasm between the aspirations of the diverse language groups and families in their South Coast community, and then advance a local language program that had broad community and school support. The importance of these findings was evidenced in studies by Lowe (2017), Anderson (2010), Osborne et al. (2017) and Martin (2017) who each identified the importance of co-leadership between schools, local language advocates and Elders as a way of garnering community acceptance of programs that sought to strengthen student identity.

Theme 3: Language Planning

Systemic Support in Building Community Involvement

Many of the studies provide insights into issues seen as pivotal to the success of school-based programs. Anderson's (2010) and Lowe's (2017) both identified the key role of the Elders in establishing school programs. They found that this participation not only shored up the school program, but facilitated its expansion across the town's six schools, while galvanizing wider support among the largely non-Aboriginal community. Disbray (2016), McNaboe and Poetsch (2010) and Lane (2010) noted that the reward for the months of language planning and curriculum development was the elevated levels of relational trust when families saw programs incorporate rich local knowledge into their classroom programs.

While Douglas' (2011) study highlighted the consequences when schools failed to meet community aspirations and employed inappropriate people in the project, studies by Anderson (2010), Maier (2010) and McNaboe and Poetsch (2010) identified that when structural issues are addressed, schools experienced better relationships with families, and a greater willingness to teach and support the program. In all, these studies highlighted that improved levels of trust led to the development of productive pedagogic relationships with teachers and the opportunities for local knowledges to inform classroom learning.

Cultural Programs

Bobongie's (2017) study on Torres Strait Islander girls attending boarding school highlighted the consequences when students' cultural aspirations were restrained as a result of the school being unwilling to provide cultural instruction. Supported by Osborne et al. (2017), this finding noted that students from remote locations needed to maintain regular contact with their communities and its day-to-day rendering of cultural practices, as these grounded their identity, supported their cultural well-being and resilience and critically, taught them about 'living good ways' (p. 13). As noted by Guenther et al.'s (2015) the 'authority' of any of

these programs rested squarely on the participation of the Elders and the intergenerational transmission of knowledge.

Theme 4: Impact of Programs

Cultural Connectedness

One of the key findings was evidence of the positive impact of authentic language and/or cultural programs on students. Armstrong et al. (2012) found that these programs supported student resilience by providing them with the knowledge and tools to negotiate their Indigenous cultural identity.⁴ These findings echoed those by Biddle and Swee (2012), who noted that student local language use supported deeper cultural learning and fortified their community's unique identity.

Martin (2017) similarly noted that parents clearly understood the importance of opportunities to reconnect with community knowledge and their Country by learning about their families and community's history. This resonates with the studies by Harrison and Greenfield (2011), Colquhoun and Dockery (2012), Cairney et al. (2017) who found that many parents looked to schools explicitly to teach their children about local knowledge and history.

Nurturing Well-Being Through Language and Culture

The study by Biddle and Swee (2012) identified Indigenous economic well-being as a key to each community's overall capacity and ability to be involved in cultural activities. It was noted that some communities appeared better able to marshal the financial and cultural resources needed to establish, participate in and sustain cultural programs. Bobongie's (2017) study argued that the high level of boarding student's

⁴Two-world identities refer to the efforts of Indigenous people to walk the fine line between being culturally connected to their Indigenous communities while having to work and engage with wider socio-economic and political world of the state. Brough et al. (2006) refer to stereotypical constructions of Indigenous identity in this liminal space of imposed in/authenticity.

two-way disconnection from their homes and school could be ameliorated through programs that provided regular opportunities for them to participate in empowering ‘women business’. The issue of individual and community well-being was a focus of Osborne et al. (2017) study as it emphasized that the power of community-focused cultural immersion was their ‘everydayness’, where commonplace access contextualized children’s learning within a powerful dynamic of intergenerational cultural transmission.

Broader Learning Impact

While the assertion that learning a second language assists in literacy acquisition in a child’s first language, limited research exists to test the veracity of these claims. Having been asked to verify this, Chandler et al. (2008) investigated whether learning an Aboriginal language assisted the acquisition of English literacy skills. This study of 118 students in four schools found that year 2 students’ exposure to a local Aboriginal language program had a higher score in a phonics-based non-word reading assessment than students who had no access to a second-language program. This study provides some limited evidence that students’ learning of a second (e.g. local Aboriginal) language can enhanced their capacity to improve the acquisition of English literacy skills.

Discussion

This review provides evidence of the significance and value for both Indigenous children and their families, when they were given opportunities to actively engage with school programs that facilitated an immersive experience in a local language and/or culture. This review identified that when students had access to authentic, community-centric cultural programs, it appeared to improve their engagement with school. Further, evidence suggests that community language learning has the effect of re-connecting Indigenous students to the unique body of ancestral cultural knowledge and gain new insights into the epistemic mysteries of their

Country, improving their self-well-being and going some way to reduce the consequences of intergenerational trauma (Colquhoun & Dockery, 2012).

Read in the light of the critical Indigenous methodology underpinning this review, these studies speak to student and community aspirations to know and identify themselves through their cultures and languages (Guenther et al., 2015). Secondly, the studies highlighted a cumulative value to communities, where this contact was shown to enable a re-acquaintance with long-hidden practices and local epistemologies (MacMahon, 2013). A third finding centers on the voices of students and their families who spoke of their desire to rebuild connections to family and Elders (Biddle & Swee, 2012; Murray, 2017). Finally, the studies evidenced community agency, where Elders and families applied pressure on schools to support the establishment of programs that met their cultural and educational aspirations for their children (Lowe, 2017; Osborne et al., 2017).

While much of the research was undertaken in remote areas, there was a small but powerful body of studies which focused on the efforts of Indigenous communities in regional or urban locations. These identified the struggles that schools had in establishing programs when there was limited language knowledge within urbanized and largely mixed Indigenous communities (Green, 2010). These diverse and displaced populations of Indigenous people came with fractured histories, inter-generation resistance, competing standpoint positions and with diverse cultural memories. Often these issues impacted on how local cultural and language reclamation programs could be developed, especially when there was little linguistic content that could be used and taught (Lowe, 2017). While this reality is widely recognized, there is little research which describes how local community aspirations to learn *their* culture and *their* language can be accomplished (Simpson et al., 2019). Unresolved questions also remain in regard to schools, especially in respect to identifying which language is to be taught and what teaching methodologies best supports effective learning within and across different cultural environments. However, across all of the studies, there was no doubt that community supported local culture and/or language programs have the

potential to positively affect Indigenous students to ‘grow up strong’ (Martin, 2017, p. 96).

Conclusion

Overall, the studies paint a picture of Aboriginal and Torres Strait Islander communities’ clearly articulated aspirations for their children to have a deep ongoing relationship to the cultural knowledge of their Country (MacMahon, 2013; Martin, 2017). While there is no shortage of policy rhetoric that speaks of Indigenous peoples’ rights to access and learn their cultural knowledges and languages (e.g. NSW Department of Aboriginal Affairs, 2013), the realities are that contradictory policies and a lack of sustained effort and resources have undermined these aspirations (Simpson et al., 2009). Limited as the research is, it is clear that while there is overwhelming support across Indigenous communities (Martin, 2017) for this long-term endeavor, the broader schooling system has largely failed to affect the educational levers needed to make systemic and school policy promises an educational reality. Yet, notwithstanding the actions of governments, teachers, community educators, Elders, Indigenous language teachers, cultural mentors and linguists continue to work tirelessly to provide students with the experiences and knowledge that underpins each student’s positive sense of identity, and the knowledge, skills and understanding required to develop deep constitutive epistemic relationships bridging the past with present and aspirational futures. This work has been shown to be critical to the cultural survival of Indigenous Australians.

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4

Understanding the Evidence on Racism and Indigenous Schooling

Nikki Moodie , Sophie Rudolph ,
and Jacinta Maxwell 

Introduction

This chapter reports on a systematic review of empirical research published between 1989 and 2016,¹ specifically focused on the issue of racism and its impact on Aboriginal and Torres Strait Islander students at

¹ Unlike other reviews included in this book, this chapter includes research from the period 1989 to 2016. The earlier date is based on the first “National Aboriginal and Torres Strait Islander Education Policy”, a joint policy statement endorsed by all governments across Australia that stressed the need to combat racism in education (Department of Employment, Education and Training, 1989, p. 8).

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school.² We asked the question: How is racism understood to influence schooling experiences of Aboriginal and Torres Strait Islander students? We identify and discuss 46 papers out of a total pool of more than 2100 pieces of published research. The chapter concludes with a discussion of the implications of this review for research, policy and school communities.

Our review shows that whilst researchers have developed a more nuanced appreciation of what racism is over the course of a generation, the effects of racism on Indigenous school students are well-described, significant and stable in the empirical research. These effects include school withdrawal, de-identifying as Indigenous, emotional distress and internalisation of negative beliefs about Indigenous intelligence and academic ability. These experiences then shape school choice and engagement when those students become parents. Aboriginal and Torres Strait Islander students tend to have a more complex understanding of what racism is than teachers and tend to decide their own responses rather than wait for teachers or schools to implement anti-racist strategies. Students don't believe that teachers will be proactive in combating racism or that schools will develop good anti-racism strategies; and the research agrees with them. Teachers tend to blame problems at school on home life and diminish the impact of their own assumptions about Indigenous students' ability. This review suggests that the initially high expectations that Indigenous students have of themselves become difficult to sustain in the face of persistent and repeated negative representations of indigeneity, Indigenous intelligence and academic achievement by teachers, schools and the media.

²In this article, we use the terms 'Aboriginal and Torres Strait Islander' and 'Indigenous' often interchangeably but with recognition both of original source material and the inadequacy of all colonial nomenclature. When referring to specific Indigenous political collectives, we will use their preferred description, such as Wurundjeri People or Kulin Nation, for example.

Methodology

Systematic reviews are most often used in the health sciences to conduct meta-analyses or statistical comparisons of a large number of quantitative studies. The benefit of this approach is that it creates a replicable process that can control for biases and rigorously compare statistical results (Welch et al., 2012). This ensures that researchers can compare ‘apples with apples’ and allows us to draw reliable conclusions about whatever real-world phenomenon has been studied. Systematic reviews are different from literature reviews because they focus only on synthesising the findings of empirical studies. This also means that systematic reviews do not often focus on theoretical issues and can neglect research written from diverse perspectives. Our approach has been to use the systematic review methodology to hear the voices of Aboriginal and Torres Strait Islander people that have already been documented in research. Although this methodology relies on a particular understanding of rigour, we believe it is important to make some assessment about what we do and do not know in order to move the field of Indigenous education forward.

Positioning

We came to this project as early career researchers, one Aboriginal and two non-Indigenous women, committed to anti-racist work that centres First Nations sovereignty. We also came to this project with a degree of scepticism, aware of the deep injustices that Western research traditions have perpetrated on Indigenous people worldwide (Smith, 2012). However, we are also open to what this method might reveal and have endeavoured to keep this tension visible throughout the chapter.

Method

The systematic review method is a tested strategy used to synthesise empirical studies; it relies on strict models for the definition of research questions and frameworks for each stage of data collection, extraction and analysis. The five steps in a systematic review—framing the question, identifying relevant work, assessing quality, summarising evidence and interpreting findings—were followed closely as described in Chap. 2. We identified 2138 potentially relevant studies that were then screened using the inclusion/exclusion criteria in Fig. 4.1, which is depicted in the PRISMA flow diagram in Fig. 4.2.

Review Question

This review is guided by the question: “How is racism understood to influence schooling experiences of Aboriginal and Torres Strait Islander students?”. In designing this question, we attended to three key issues. First, we documented the type of methods used most often in this research, and the states and territories where this research has been conducted. This can highlight trends in research location, patterns of research funding or departmental support. Second, we focus on the different ways that researchers and participants define ‘racism’ in order to acknowledge the different ways that racism is reported as manifesting throughout a school career. Finally, we describe the various impacts of racism on Aboriginal and Torres Strait Islander school students, as documented and analysed in the empirical literature.

Results

The results of the review reveal six mixed-methods studies, eight quantitative studies and 32 qualitative studies. This shows how prevalent qualitative studies are in this area, although quantitative studies have become more common recently—often emerging from psychology. It is however

Author:

Title:

Reviewer:

Review date:

Inclusion criteria	
Explores racism	
<ul style="list-style-type: none"> Racism, race-based discrimination, prejudice, bullying, violence, harassment is at least one variable in the study 	
Focuses on Indigenous school students	
<ul style="list-style-type: none"> Study reports on data from or about Indigenous school students 	
<ul style="list-style-type: none"> Study reports on data from other participants (e.g. parents, Elders, teachers, principals, education workers) about the experiences of Aboriginal and Torres Strait Islander students 	
<ul style="list-style-type: none"> Study uses secondary data from other sources (e.g. NAPLAN) 	
<ul style="list-style-type: none"> Biographical or narrative account from an Indigenous person or people about their experience in a colonial schooling environment (treated as a case study, e.g. N of 1) 	
Published 1989-2017	
<ul style="list-style-type: none"> May report on data, experiences of earlier periods, but not published before 1 January 1989 	
Focused on P-12 schooling in Australia	
Peer-reviewed (grey literature, government reports excluded unless peer-reviewed)	

Exclusion criteria	
Source must not be a republished article (for identical papers republished in different outlets, keep the earliest published version)	
Source must contain empirical research i.e. observation or measurement of a phenomenon	
Source must contain empirical data collected from, generated by or about Indigenous school students (e.g. teachers discussing their own experiences would be excluded, but parents discussing the racism their children experienced would be included)	

Fig. 4.1 Screening tool for inclusion/exclusion criteria. Note. Adapted from Fig. 2, in "The impact of racism on the schooling experiences of Aboriginal and Torres Strait Islander students: A systematic review", by N. Moodie, J. Maxwell & S. Rudolph, 2019. *Educational Researcher*, 46(2), p. 278

essential to note that following appraisal with the Long and Godfrey (2004) tool (Fig. 4.3), the majority of autobiographical and narrative accounts from Indigenous authors were excluded. Most often, this was

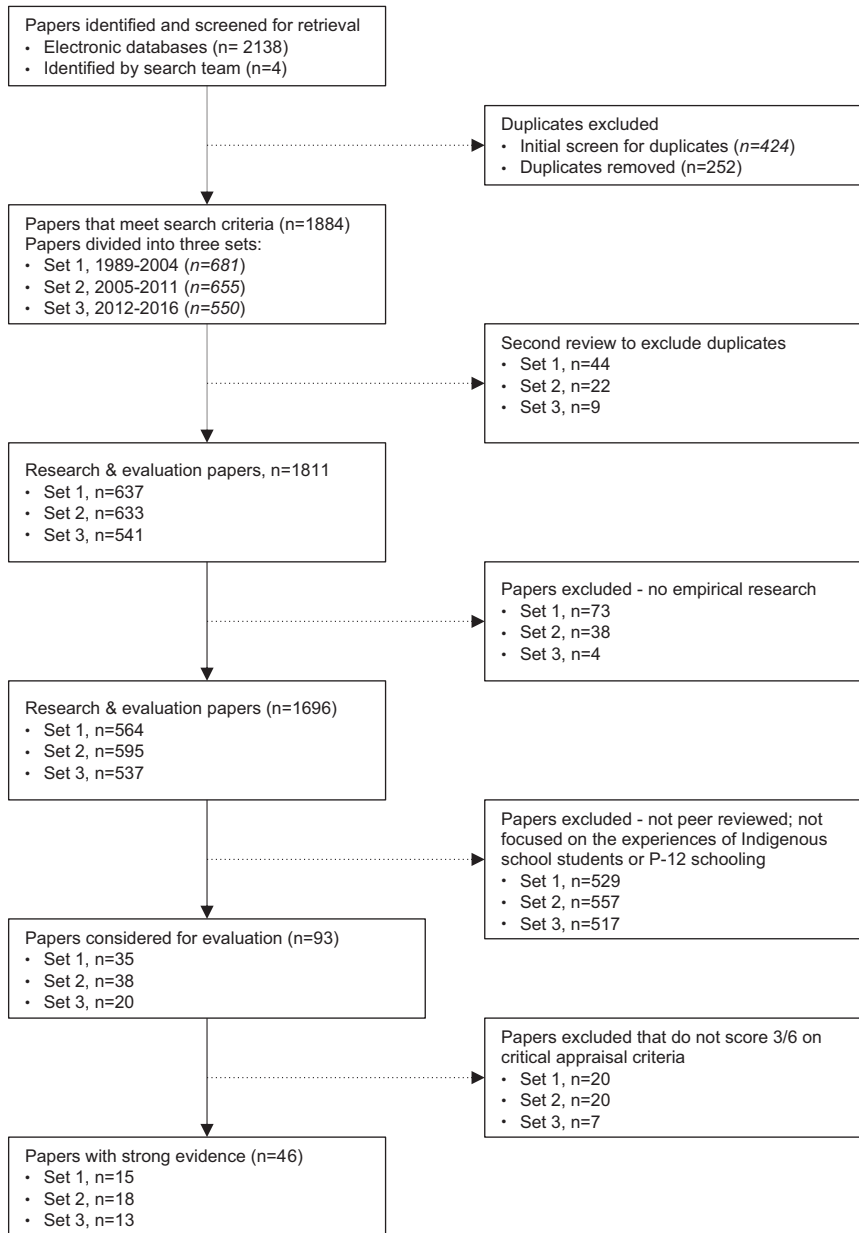


Fig. 4.2 PRISMA flow diagram representing inclusion and exclusion process. Note. Adapted from Fig. 3, in “The impact of racism on the schooling experiences of Aboriginal and Torres Strait Islander students: A systematic review”, by N. Moodie, J. Maxwell & S. Rudolph, 2019. *Educational Researcher*, 46(2), p. 280

Source Appraisal	
• if described, score = 1	
• not described, score = 0	
1. Research design, appropriate methodology described	
2. Sources/ sample, recruitment strategy described	
3. Theoretical or philosophical constructs described	
4. Ethical considerations, researcher positionality described	
5. Responds to articulated research questions, triangulation described	
6. Research utility/ implications described	
7. Unweighted score (/6)	

Fig. 4.3 Critical appraisal checklist. Note. Adapted from Fig. 4, in “The impact of racism on the schooling experiences of Aboriginal and Torres Strait Islander students: A systematic review”, by N. Moodie, J. Maxwell & S. Rudolph, 2019. *Educational Researcher*, 46(2), p. 281

because a description of methodology or research design, for example, tended to not be included in those early publications. This is a major limitation of the systematic review method, critical appraisal tools and the overall study design, and we encourage readers to critically examine the screening (Fig. 4.1) and quality assessment (Fig. 4.3) tools used in this study. We hope that meta-analytical work in the future continues to extend these tools in culturally relevant ways, but offer this study as the first step in considering the utility of this method to Indigenous education researchers, teachers and schools, and students and their communities. We describe our initial findings under three broad headings: Study Type and Location, Understandings of Racism and the Impact of Racism.

Study Type and Location

Most research was conducted in secondary schools, with one study focused on preschool students (Kaplan & Eckermann, 1996) and three focused solely on primary schools (Malin, 1990; Paki, 2010; Partington et al., 2001) or primary school curriculum material (Crawford, 2013). Single studies of note include: Indigenous students in special schools (Graham, 2012); parents’ attitudes to their children’s experiences of

racism (Groome, 1990); and a mixed-methods study of Nyungar children's attitudes to Aboriginal English (Purdie et al., 2002).

No publications report on data exclusively from Tasmania or the ACT; Table 4.1 shows research locations. It is notable that only two studies acknowledge Aboriginal *and* Torres Strait Islander students (but did not

Table 4.1 Research jurisdictions

Jurisdiction	Number	Publication
NSW	9	Bodkin-Andrews et al. (2013, 2010a, b), Crawford (2013), Edwards-Groves and Murray (2008), Graham (2012), Kaplan and Eckermann (1996), Morgan (2006), Simpson et al. (2001)
Vic	1	Healy (2015)
Qld	13	Eckerman (1999), Gool and Patton (1998), Hardy (2016), Keddie (2011, 2013), Keddie et al. (2013), Keddie and Williams (2012), Matthews and Aberdeen (2004), Michaelson (2006), Mills (2006), Nelson and Hay (2010), Sarra (2008), Wilkinson (2005)
SA	5	Blanch (2011), Groome (1990), Malin (1990), Russell (1999), Sanderson and Allard (2003)
WA	7	Dandy et al. (2015), Coffin et al. (2010), Mander et al. (2015), Paki (2010), Partington et al. (2001), Purdie et al. (2002), Wooltorton (1997)
Tas	0	–
NT	2	Day (1992), Priest et al. (2011)
ACT	0	0
National	2	Helme (2005), Wall and Baker (2012)
Multi-jurisdictional		
Qld, NSW, NT, Vic	3	Mansouri et al. (2009, 2012) Mansouri and Jenkins (2010)
NSW, Vic, WA	1	Tarbetsky et al. (2016)
Qld, NSW	1	Foley (2000)
Qld, WA	1	Martino (2003)
Not stated	1	Mohajer et al. (2009)
Total ^a	46	

Adapted from Table 6, in "The impact of racism on the schooling experiences of Aboriginal and Torres Strait Islander students: A systematic review", by N. Moodie, J. Maxwell & S. Rudolph, 2019. *Educational Researcher*, 46(2), p. 286

^aTotal number of papers included in this review

say how many students identified with these categories); no other studies from 1989 to 2016 identify Torres Strait Islander students in their samples.

Understandings of Racism

The way racism is understood in the research has changed. Initially, racism was defined as *discriminatory practices* evident through demeaning attitudes, stereotyping, subjugation, ostracism, prejudice, exclusion, exploitation, domination, marginalisation and alienation. This earlier work also includes a focus on physical assault and verbal racial harassment from school staff and other students (Foley, 2000; Groome, 1990). One historical ethnography frames the issue of scientific racism (Eckerman, 1999) and there is some discussion of the structural relations of power and institutional racism (Foley, 2000; Groome, 1990; Martino, 2003; Matthews & Aberdeen, 2004). In the later studies the experience of racism is extended from individual attitudes and prejudices (Mansouri & Jenkins, 2010; Mansouri et al., 2012) to explicitly note negative representations of Aboriginality leading to deficit thinking (Blanch, 2011; Keddie et al., 2013; Michaelson, 2006; Wilkinson, 2005), low expectations (Bodkin-Andrews et al., 2013; Day, 1992; Helme, 2005; Hewitson, 2007; Malin, 1990; Sarra, 2008; Wilkinson, 2005) and intra-cultural racism (Coffin et al., 2010; Tarbetsky et al., 2016). Discussions of Whiteness also appear in more recent studies (e.g. Martino, 2003; Paki, 2010; Keddie, 2013). This includes work that considers the epistemic impact of White dominance and White privilege (Hardy, 2016; Martino, 2003) and the privileging of students from culturally dominant ethnic groups (Mills, 2006).

Acknowledging systemic racism allowed researchers to present a complex picture of racism in schools. For example, the presence of institutional racism combined with interpersonal racism perpetrated by non-Indigenous teachers and students was conceptualised by Wilkinson (2005) as systemic racism. Other studies saw systemic racism represented by assimilatory policies, meritocracy and racial conflict (Morgan, 2006); structural relations of power (Martino, 2003; Partington et al., 2001; Sanderson & Allard, 2003), implicit and explicit racism (Edwards-Groves, 2008) and

interpersonal and internalised racism (Priest et al., 2011). Systemic racism was also discussed in relation to more recent trends in schools in identifying disability in students (Graham, 2012). It was recognised as historical, ongoing and repeated (Keddie & Williams, 2012) and maintained through hidden ideological constructs (Wall & Baker, 2012). Helme (2005) suggests systemic racism leads teachers, students and community members to conceptualise vocational pathways as more appropriate for Aboriginal and Torres Strait Islander secondary students at a disproportionate rate, when compared to non-Indigenous students; this observation is consistent across three decades of research.

Bodkin-Andrews et al. (2010a) distinguish between racial discrimination and racism, and there is a collection of studies that understands racism as constituted by false and damaging representations of indigeneity. These latter studies see racism as 'subtle and sinister' (Wall & Baker, 2012) in that it is perpetuated through media and schooling materials that position Aboriginal and Torres Strait Islander people as inferior (Wall & Baker, 2012; Crawford, 2013; Healy, 2015). Racism here sets up social and educational circumstances in which Indigenous students have to answer to deeply ingrained racial stereotypes. Across three decades of research it is evident that researchers have shifted their focus from interpersonal racism, including a focus on assault and corporal punishment, towards relational and systemic understandings of racism.

Understanding the Impact of Racism

Racism was found to have a wide range of harmful impacts on Indigenous students. Physical experiences of racism in the form of physical assault, verbal harassment, corporal punishment and aggression were reported, particularly in early studies (Foley, 2000; Groome, 1990; Martino, 2003; Simpson et al., 2001). Other manifestations of racism also impact students' identity formation and learning experiences, including ostracism of parents by school staff (Partington et al., 2001; Sanderson & Allard, 2003), teacher indifference (Foley, 2000; Sanderson & Allard, 2003) and substandard instruction for Aboriginal students (Malin, 1990). Two studies in particular draw attention to the assimilationist function of

schooling and teacher attitudes (Foley, 2000; Wooltorton, 1997). Simpson et al. (2001) describe how students are placed in the impossible position of trading cultural identity for educational success as a result of racial and cultural marginalisation.

Racism has a strong impact on Indigenous student performance and achievement, including contributing to internalised racism, disengagement, emotional distress and school withdrawal. Several research projects established that perceived interpersonal and systemic racism had a considerable and negative impact on academic performance and grades, particularly in English, Maths and Science (Bodkin-Andrews et al., 2010b; Mansouri et al., 2009; Sarra, 2008). Racism was also reported as impacting student identity construction and subjectivity, with Aboriginal students being found to experience marginalisation (Malin, 1990; Wilkinson, 2005) and exclusion from learning activities and school (Mansouri et al., 2009), internalised racism (Blanch, 2011; Coffin et al., 2010), disengagement from school (Hickey, 2010), poor social and emotional well-being (Edwards-Groves, 2008; Mansouri et al., 2009; Priest et al., 2011) and negative perceptions of schooling and the fairness of teachers' disciplining practices (Edwards-Groves, 2008; Mansouri et al., 2009).

These findings are confirmed by two recent studies that show that racist attitudes and behaviours are prevalent in Australian secondary schools, occurring in and out of the classroom (Mansouri et al., 2012; Dandy et al., 2015). Teachers who discriminate against Indigenous students and their parents, or who have a low view of Indigenous students' academic capacity, have a consistently negative effect on academic engagement and can contribute to students' 'self-sabotaging' behaviour (Foley, 2000; Groome, 1990; Bodkin-Andrews et al., 2013; Partington et al., 2001). Michaelson (2006) found a correlation between the percentage of Indigenous students in Queensland schools and Department of Education transfer ratings, which he suggests is an indication of how undesirable the school is to teachers. Sanderson and Allard (2003) found that teachers tended not to recognise that racism existed within the school, but rather attributed any problems to home life, or factors outside school influence. However, racism clearly accounts for differences in achievement; racial discrimination "negatively explained a significant proportion of the

variance in both Indigenous and non-Indigenous students' standardised achievement" in spelling and maths (Bodkin-Andrews et al., 2010a, p. 17).

Internalised beliefs of lower academic capacity have been found to deeply impact Aboriginal and Torres Strait Islander students' capacity for academic achievement. Tarbetsky et al. (2016) show that Indigenous status itself does not predict poor outcomes; rather academic achievement is impeded by implicit beliefs that teachers and students hold about Indigenous intelligence and ability. The research demonstrates that Indigenous students and parents have high expectations for achievement, but exposure to persistent and repeated negative representations of indigeneity or Indigenous academic ability leads to de-identification and disengagement.

Implications

Implications for Research

Our review identifies a number of urgent gaps in the research. We note there has been little empirical research on the prevalence of racist beliefs or practices amongst adults involved in school communities, such as teachers and principals, curriculum resource providers, policy actors, lobby groups or other parents. Research that may have documented such findings was possibly excluded due to the strict application of the method, but we suggest is rather more likely to be representative of a focus on child—rather than adult—participants in research on schooling. Further research on how scholars understand racism would also be a valuable addition to the literature. This would help identify when researchers use language like *disadvantage* euphemistically, to stand in for the more specific and descriptive language of *race*, *racism*, *racial inequality* or *racial oppression*, for example (McGloin, 2014; Vass, 2014).

Overall, we agree that the clarity and rigour of research outputs are improved by considering standards such as the *Consolidated criteria for reporting qualitative research* (Tong et al., 2007), and the Long and Godfrey (2004) assessment criteria used in this project (Fig. 4.3). Whilst

these criteria often require disclosure of ethics approvals, a deeper consideration of the cultural and political implications of Indigenous peoples' access to research training and authorship, for example, would be an integral next step in this work.

Implications for Policy

The national Indigenous education policy landscape in Australia is dominated by the *Closing the Gap* framework (<https://www.closingthegap.gov.au/>). The other major national policy document—the *National Aboriginal and Torres Strait Islander Education Strategy*—expired in 2018 and has not been replaced, leading to an effective ‘standstill’ in policy direction for Indigenous education (Hogarth, 2019). The *Closing the Gap* policy barely mentions racism, discrimination or prejudice (Rudolph, 2019) and deficit language has long defined policy discourse in the field (Hogarth, 2017). Thus, these absences, the overriding deficit discourse and the findings of this systematic review point to an important policy opportunity for addressing racism in schools as a significant barrier for Aboriginal and Torres Strait Islander students.

This review indicates the work that needs to be done to address racism—both interpersonal and systemic—across teacher education, schooling and the media. Policy at both the national and local levels could improve academic outcomes by addressing the long-standing racism that Indigenous families have faced within the schooling system. This would entail moving to account more strongly for the influence of colonising histories in excluding and diminishing Indigenous communities. While teachers are now required to address Indigenous education through two teaching standards (Australian Institute for Teaching and School Leadership, 2011), the research describes how schools and teachers have been found to perpetuate racism through both passive and overt means. Three decades of research urges renewed attention to anti-racist strategies in schools and racial literacy in teacher education (Moodie, 2019). Auld (2018) argues for mandatory reporting of racism in schools as a possibility tracking racism occurring, and for forming anti-racist communities that challenge racism.

Implications for Students, Families and Schools

A key implication of the findings presented here is that data related to Aboriginal and Torres Strait Islander students as a group are not routinely interpreted in ways that sufficiently account for effects of interpersonal and systemic racism on student experiences and outcomes. Researchers have demonstrated that Aboriginal and Torres Strait Islander students experience interpersonal, internalised and systemic racism which has physical, emotional, psychological, physiological and social effects that damage students' identities, learning, academic performance, health and well-being. While research identifies peer-to-peer racism as requiring action, considerable attention must be paid to the role of school staff in the active and passive endorsement of racist practices. The findings from this review and the published research (e.g. Auld, 2018; Macedo et al., 2019; Riley, 2019; Russell, 1999) provide an evidence base that suggests that advocating for the following actions may be useful to stakeholders who are committed to improving the experiences of Aboriginal and Torres Strait Islander students: anti-racist education of pre-service teachers, pre-service teacher educators, practising teachers and staff throughout the school system; anti-racist reform at a system-wide level; in *addition* to measures that promote positive identity development, improved relationships between families and schools, and increases in Indigenous pedagogies and curriculum content.

A key implication of existing research is that it should not be assumed that schools are safe places for Aboriginal and Torres Strait Islander students. This is not a conclusion unique to this review, nor will it be news to Indigenous people, who are deeply familiar with the nature and function of colonial schooling systems, however it is worth highlighting here. There is evidence of historical and contemporary perpetuation of racist ideology and practice by school staff and systems, and passive enabling of racism through everyday schooling practices. The results of this systematic review have, therefore, not revealed an evidence base that supports *relying on* schools to self-generate solutions to racism, nor does it support measures such as encouraging students to report racism without ensuring staff are able to appropriately respond to such reports. However,

the research does support calls for school staff to actively undermine racism as part of broader strategies to improve the schooling experiences of Aboriginal and Torres Strait Islander students. The research suggests that stakeholders should be wary of initiatives that seek to improve experiences of Aboriginal and Torres Strait Islander students without explicitly addressing racism. Initiatives that, for example, endeavour to improve academic achievement through increased association between schools and Indigenous students (and their communities) *without addressing racism* ignore an important aspect of school experience that has been repeatedly proven to impact learning and achievement. Requiring increased attendance, participation and retention at school without first ensuring schools are safe places, free from racism, are strategies that can perpetuate negative effects for students, their families and communities (Salmon et al., 2019).

Conclusion

We acknowledge that the systematic review method can exclude autoethnographic and theoretical work—and thus the works of many Indigenous authors. Whilst Indigenous authorship is the first and most essential strategy for decolonising research, we offer a small and limited contribution to policy, practice and theory by synthesizing a narrow selection of empirical research which has already been done and, we argue, insufficiently heard in and of itself. Our chapter thus offers a robust and reliable assessment of three decades of empirical research that reports impacts of racism on Indigenous students at school and the importance of its counter; proactive anti-racism strategies implemented quickly and coherently by governments, policy authors, school leaders and teachers in schools across Australia.

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5

Improving School Engagement with Indigenous Communities

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Introduction

An analysis of both the last ten years of the state and commonwealth ‘Closing the Gap’ strategy, and the ever-growing corpus of educational on the schooling of Aboriginal and Torres Strait Islander student, highlights the pervasiveness of student underachievement, systematic community and school conflict and resistance, and cultural contestation between schools and Indigenous people (Guenther et al., 2019). The admission of schools’ failure to shift the current levels of student underachievement over the last 25 years since the inception of the first Aboriginal Education Policy (Department of Education and Training, 1989) saw the Rudd

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Government, with the states and territories establish the Closing the Gap strategy. This whole-of-community and government strategy gave particular prominence to education, with three of the seven national strategies focusing on at least halving if not closing the gap for Indigenous student's literacy and numeracy outcomes, and their retention to Year 12.

In their attempts to achieve these targets, Governments have often pursued policies and/or strategies that have demonstrated little evidence of significant educational outcomes for Indigenous students. These have included policies that have endorsed unproven strategies like boarding school strategies for students in remote locations (NT, WA and Qld), Attendance Strategies (NSW, NT, SA, WA and Qld); targeted pedagogical programs (Direct Instruction or Accelerated Literacy); and national curriculum initiatives to include the *Aboriginal and Torres Strait Islander Cross-Curriculum Priorities*. Sitting beside these, are the welter of systemic programs, including policies that attempted to mandate schools to 'partner' Aboriginal and Torres Strait Islander families. This 20 year plus perennial project (e.g. NSW AECG & NSW DET, 1999) has been instituted by school systems to draw Indigenous families into the task of 'supporting' schools to improve their children's educational outcomes (Smith et al., 2017).

While government policies, such as the NSW DET Connected Communities Strategy (2012), have elevated the importance of Aboriginal communities' engagement to 'sharing the endeavour' in educating Aboriginal children (NSW AECG & NSW DET, 2010). The 2013 NSW Ochre Strategy, in noting the dimension of all governments' policy dilemma said that their preliminary consultation highlighted:

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[T]he concerns raised by Aboriginal communities over the absence of genuinely shared decision-making, the duplication of services, lack of coordination, unclear accountability pathways and—despite significant investment over time—limited demonstrable improvement in the lives of Aboriginal people in NSW. NSW Department of Aboriginal Affairs (2013, p. 7)

Though NSW specific, these findings ring true across other jurisdictions, with Fogarty et al. (2018) and Patrick and Moodie (2016) identifying concerns about government policy, their inability to deliver the promise of equitable outcomes and failure to bolster wider reconciliatory discourses to guide long-term socio-cultural reform of government in support of Indigenous Australians.

Unsurprisingly, research by Munns et al. (2013) argues that the social, cultural and epistemic disconnect between schools and Aboriginal people rests in part on teachers' inability to see how their deficit based 'professional' beliefs influence their ability to understand the educational needs of Aboriginal students. Conversely, other research attests to parents' often heard contention, that 'good' teachers underpin their teaching through inclusive curriculum, relational pedagogies strategies that reach out to families, and seeking opportunities to learn of and from their students and community's cultures and histories (Guenther et al., 2015; Perso et al., 2012; Vass, 2017). These two positions frame the field of contestation that surrounds the work that community and school engagement could possibly do in support of the education of Indigenous students.

The complexity of the history of dissonance between Indigenous families and schools has been shown to affect the educational achievements of Aboriginal students (Sanderson & Allard, 2001) and begs for school action to find the means to link themselves to the families of these children. Yet the history of these efforts (of which there have been many) has been largely based on an unquestioned policy assertion that these interactions are in themselves, a curative for student underachievement and a self-actualizing instrument of change in schooling practices (Australian Institute of Health and Welfare, 2014; NSW AECG & NSW DET, 2010).

Though mindful of this long history of engagement policy failure, this review is positioned from within an awareness that Indigenous families

continue their insistence on establishing multiple opportunities for meaningful engagement with schools. This, they argue, must inform new ways of schooling that would resonate with their social, cultural and educational aspiration of ‘Success as Aboriginal’, where a student’s self-assertion of their Indigenous identity is itself a wellspring for educational success. As such, this review appraises the body of recent Australian research, on the establishment and implementation of the collaborative efforts of schools and Indigenous communities, identifying evidence of their impact and highlighting the identified preconditions which underpin its success or failure. Based on our commitment to the Critical Indigenous methodology, the researchers asked: *What issues affect the development of Aboriginal community and school collaboration and what impact have these had on schools and Aboriginal students, families and their communities?*

Method

The systematic review is an increasingly used methodology applied to locate and analyze the body of research that can assist in answering specific research questions. It sets out the development of a methodical process through which the research literature can be carefully sifted to locate research that meets specific requirements identified in the research question (Gough et al., 2012). The aim of this review is to test the evidence for often-made assertions that school and Indigenous community engagement supports students’ schooling outcomes through the initiation of productive and authentic relationships between families and their children’s schools.

The review is an iterative investigation using search terms drawn directly from the inquiry question and project protocols as set by the PICo framework¹ (Joanna Briggs Institute, 2017). These focused this investigation on the population of Australian Indigenous students, their families and communities, three phenomena of interest—engagement/s between

¹ The PICo criteria invaluablely assist in identifying the research population, the phenomena of interest and the context, which is then used to guide defining the question and the subsequent Boolean search strategy used to locate potential research studies [see Petticrew and Roberts (2006, p. 38)].

schools and Indigenous people, their impact on participants, and the effect of school-based cultural programs on students and community engagement. These criteria were investigated within the context of K–12 schools. In addition to these criteria, the studies were appraised against the additional project protocol of time (2005–2017) and a ‘quality’ criterion used to evaluate research² (Coughlan et al., 2007). This initially search identified 1050 studies that meet the PICo requirements which were whittled down using the six inclusion/exclusion phases until there were 32 studies that met all review requirements identified in Fig. 5.1.

Findings

This systematic review question is in two parts—initially identifying both the barriers and enabling elements shown to affect Aboriginal families/communities and school’s engagement, and the evidence of their impact on any of the stakeholder groups.

Barriers to Engagement

Unsurprisingly, many of the 32 studies identified personal, structural or epistemic barriers seen to negatively impact on community and school collaboration. This discursive body evidence centered on three interlocking concerns, the impact of a long history of colonial dispossession, the effect of schools’ low expectations on teachers, Indigenous families and students, and the negative practices of schooling which were seen to affect relational disengagement.

Colonial Experiences

Bond’s (2010) study of the role of Elders in the education of Aboriginal students on Mornington Island highlighted the effect of systemic policies seen to support the breakdown of social cohesion, the acceleration of the

² See Chap. 2 on methodology.

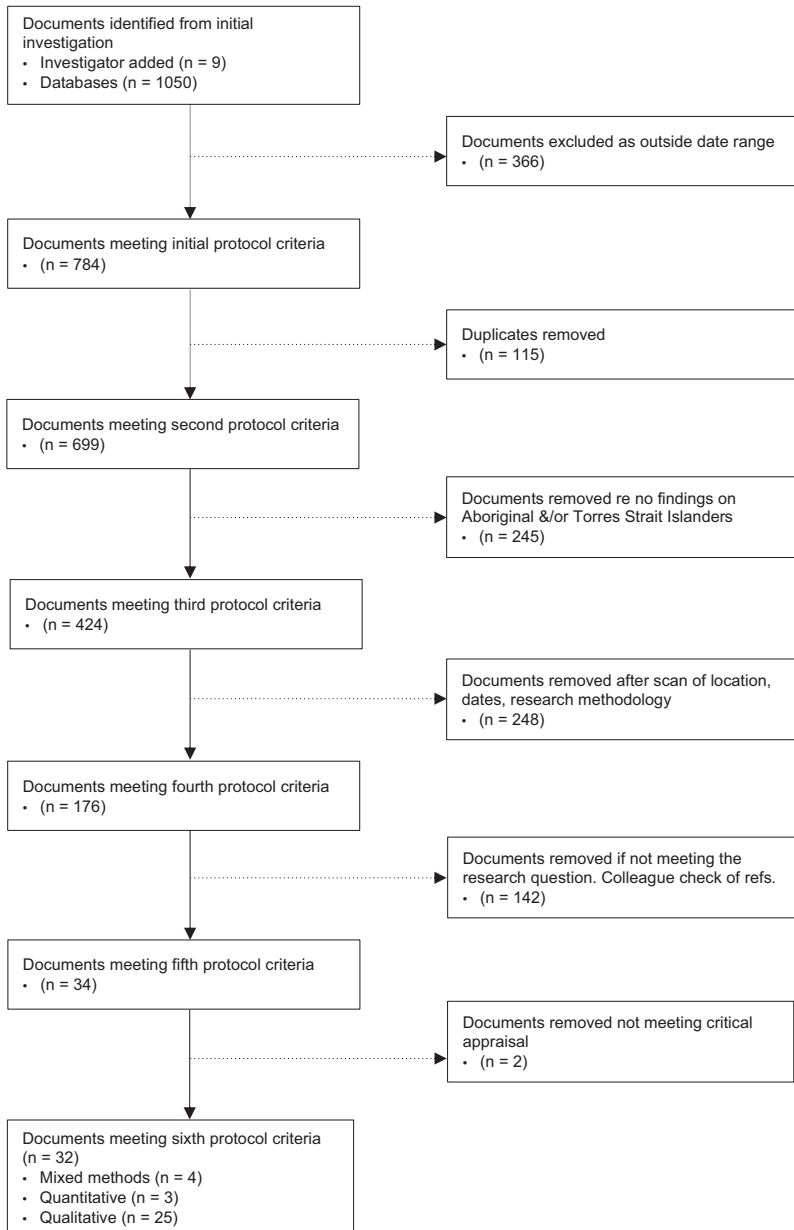


Fig. 5.1 PRISMA flow diagram representing inclusion and exclusion process. Adapted from Fig. 1, in 'Factors affecting the development of school and Indigenous community engagement: A systematic review', by K. Lowe, N. Harrison, C. Tennent, J. Guenther, G. Vass & N. Moodie, 2019, *Australian Educational Researcher*, 46(2), p. 257

loss of local cultural practices and school's deliberative exercising of its 'authority' in ways that marginalized the Elders' authority within their communities.

The legacy of schools and their role in perpetuating Indigenous disadvantage was seen in the studies by Hayes et al. (2009) and Woodrow et al. (2016), who reported that Aboriginal families identified the sorry legacy of schooling and its impact on community socio-cultural dislocation. These studies identified that even when schools looked to reach out to the community, they failed to comprehend the perception that schools had actively participated in subjugating local community languages, cultural knowledge and student identities.

The impact of this history was evidenced by Muller and Saulwick (2006) and Hayes et al. (2009), who noted that while on the one hand Aboriginal parents expressed the desire to establish a relationship with teachers, they also spoke of their underlying mistrust of school motivation in proposing such a policy. This finding was supported by Chenhall et al. (2011), Barr and Saltmarsh (2014) and Woodrow et al. (2016), who found that Indigenous families identified that many school programs sat within deficit discourses about them and their children, an unwillingness among many teachers' to shift their pedagogic practices, and rampant tokenism in the ways that Indigenous knowledge was represented in classrooms. Mechielsen et al. (2014) found schools and communities appeared to be locked into contested practices where school inclusion strategies were seen by communities as furthering the schooling project of assimilation and cultural displacement.

Low Expectations

Yunkaporta and McGinty (2009) found that while Aboriginal students were often victims of low expectations, and where in some cases these actually emanated from within Aboriginal communities themselves. They found that one of the consequences of tribal dispersal was the levels of internal resistance by some within the local Indigenous community who vigorously questioned the value of revitalizing the local language and cultural knowledge. This ginger group claims that this knowledge negatively

impacted Indigenous students' learning through their exposure to 'primitive' knowledge, a claim emanating from the long history of 'cognitive imperialism' that spawned Indigenous self-loathing while furthering the endeavor of their cultural assimilation (Battiste, 2004).

Studies by Hayes et al. (2009), Muller (2012) and Woodrow et al. (2016) identified how the historic effect of racism crossed generations, impacting on community expectations and students' self-efficacy, the high levels of student self-sabotage and social 'shame', and the heightening of students' resistance to both school and schooling.

In line with this, several studies suggested that the impact of heightened levels of socio-economic disadvantage among Aboriginal families shaped the nature of their relationship with government. Chenhall et al. (2011), Chodkiewicz et al. (2008) found that schools argued that their capacity to engage Aboriginal families was limited by the community's low SES, which then impacted on their ability to access social services. These findings highlighted the powerful negative discourses that perversely suggested schools should be exonerated of perpetuating Indigenous student underachievement. This theme appeared to be taken up in the study by Chenhall et al. (2011), who suggested that 'some' parents were in part to blame for the high level of student truancy, which it was argued, was as a consequence of pervasive disadvantage that affected the schools' capacity to address the learning needs of Aboriginal students. Muller's (2012) study advanced a number of significant findings on the impact of 'shame' in Indigenous communities. He argued that this wellspring of Aboriginal fear and social humiliation, paralyzing parent's ability to take an active role in their children's education, and instead becoming a source of resistance to the perceived infractions by teachers and the school.

Schooling Practices

Several studies highlighted the issue of community access (or lack of) to the school had a negative impact on parents' engagement with schools. Barr and Saltmarsh (2014) highlighted the complexity of the history-laden discord between schools and Indigenous communities, especially

the latter's perceptions on how schools exercised their considerable power over both students and families. While Berthelsen and Walker (2008) noted the level of teacher resistance to engaging with parents and the consequent impact that this had in sapping parents' willingness to engage with them, Muller (2012) suggested that when teachers were seen to support this engagement, it was seen to counter the cycle of dissonance and resistance between them and parents.

Several studies reported on engagement programs that sought to enhance student outcomes through 'improving' their school attendance. The research highlighted that these programs primarily pivoted on two key discourses—the first which focused on community capacity building to 'improve' parental support for the school (Lea et al., 2011), and a second that sought to responsibilize 'good' families to influence community opinion in support of the school (Chodkiewicz et al., 2008; Woodrow et al., 2016).

This research highlighted the mismatch in the purpose of these collaborations, with parents arguing that they sought to influence and inform the school and its teachers about their communities, while schools sought to engage parents to the primary task of supporting their efforts to educate their children (Lowe, 2011). Lewthwaite et al. (2015) have suggested that Indigenous families that felt isolated from schools were often exasperated by teacher 'ignorance' or worse, resistant to engaging with local Indigenous knowledge and experiences. Overall, these studies underscore well-known community concerns that school programs developed to support community engagement were vague, generalized, 'feel good' policies that, though speaking of inclusion, actually provided little authentic access to inform the school and/or teachers practices (Cleveland, 2008).

Enablers

This second theme identified those findings that recorded the policies, practices and actions of schools and communities themselves that enabled positive and effective community and school collaborations.

Beliefs

Four studies made references to the impact of positive engagement on informing teachers' beliefs and attitudes, their understanding of Indigenous knowledges, and insights into the lived of families. Woodrow et al.'s (2016) study identified that parents saw that access to Indigenous knowledge was critical for their children's sense of identity, believing that it would fortify them against assimilatory practices of schools. Harrison and Murray (2012), Woodrow et al. (2016) and Ewings' (2012) studies identified how the establishment of quality micro-collaborations between teacher/s and Aboriginal Education workers and Elders had a significant impact in that it improved teachers' classroom practices, saw families invited into classrooms and evidenced curriculum and pedagogic collaboration that legitimated local epistemologies and provided the moment when students could sense these communities connection to Country.

Engagement

Several studies looked to identify effective collaboration between Aboriginal people and schools, where families could exercise their social and cultural capital in support of their children's education. Chenhall et al. (2011), Chodkiewicz et al. (2008) and Lowe (2017) found that increased social interactions underpinned emerging levels of trust and respect between the school and families as they worked together to support establishing impactful school programs. Studies by Lowe (2017), Lea et al. (2011), Lovett et al. (2014) and Bond (2010) identified how the communities were enabled through their engagement, to garner wider institutional support in establishing what they saw as 'high value' cultural programs, the inclusion of local knowledge in the schools' curriculum and the consequential positive impact of enhancing the position of Elders.

It appeared from the studies that when programs were co-developed, possibly taught and then evaluated, there was significantly higher levels of trust, respect, especially when these programs were seen to support the pedagogical presence of local Aboriginal cultural and language programs.

Guenther et al. (2015), Kamara (2009), Lowe (2017) and Woodrow et al. (2016) found that the establishment of these programs in particular significantly strengthened the quality of the community's relationship with the school. Guenther et al. (2015), Ewing (2012), Muller's (2012) and Woodrow et al. (2016) evidenced that the teaching of local languages provided a framework for deep epistemic and pedagogical exchange between teachers, students and their communities. This discussion identified how the establishment of genuine educational programs facilitated a shift in schools' conceptualization of social justice, authentic engagement and relationship building. This is the critical underpinning and often untapped facility of trust that is needed to secure effective school and local Aboriginal community engagements (Auerbach, 2012).

Leadership

The issue of co-leadership loomed large, highlighting the deliberative action of Indigenous agency in purposefully seeking out school leaders as they sought to affect purposeful collaborations. Bennet and Moriarty (2015) highlighted initiatives of Elders and Aboriginal education officers (AEOs) in support of the opportunity to work with pre-service teachers to develop the necessary skills to establish partnerships with parents. Owens' (2015) study also focused in on community agency and leadership, with the community pressing the school to support efforts to establish a school-based childcare program. Further, Bond's (2010) study highlighted how community Elders 'guided' her research to investigate how successive school administrations had marginalized their social and cultural influence on the school and its staff. Lowe's (2017) study also zeroed in on the exercise of community agency when Indigenous communities were seen to challenge through very purposeful resistance, to the school's financial practices in expending Indigenous grant money. While these studies provide examples of community leadership, studies by Kamara's (2009), Barr and Saltmarsh (2014), Hayes et al. (2009) and Curriculum Services (2012) all identify how principals' effectiveness needs to be measured against their ability to build a culture of transformative change. Lovett et al. (2014) found that these leaders exhibited an

acute understanding of the history of Aboriginal education and the impact of those discourses that normalized the exercise of power over Aboriginal people.

Mobilizing Capital

This category captured details that identified the deliberate actions of community and teacher in seeking opportunities for purposeful collaboration. Berthelsen and Walker (2008) noted the impact when Aboriginal parents were able to clearly articulate the educational aspirations for their children. This was similar to that which motivated the Elders in Bond's (2010) study as they set out to expose the litany of school actions that had over the previous 30 years, reduced their influence on how schooling was conducted on their island. Lampert et al. (2014) identified how the community had encouraged and facilitated teacher's involvement in programs that deepened their understanding of their connection to Country. Other studies also identified the positive effect that the presence of Aboriginal staff had on the school and students, with Dockett et al. (2006) and Lowe (2017) evidencing how this legitimated local knowledge and Indigenous pedagogies when Aboriginal teachers were given the opportunity to teach in classrooms.

Each of these studies identified how these collaborations became foundational to the direction that schools took as they progressively developed a keener understanding of the importance of establishing programs that supported the exercise of their social capital to influence school practices, and in turn build deeper relational trust, respect and reciprocity between teachers and the Aboriginal community.

Impact of Collaboration

Aboriginal and Torres Strait Islander Communities

One of the disconcerting elements of this review was the non-existence of evidence that school and community engagement programs could identify a causal effect on the educational outcomes of students. Barr and

Saltmarsh (2014), Chenhall et al. (2011) and Cleveland (2008) each identified that one of the reasons for communities' reticence in engaging with schools was informed by the belief that schools were largely disinterested in 'real' collaboration as their position was infected with deficit views of the Indigenous students in their care. However, this position is somewhat mitigated by the studies of Bennet and Moriarty (2015) and Guenther (2011) who found evidence of the positive outcomes that accrued to student well-being when Aboriginal communities engaged with schools. They further noted that the impact of community engagement was amplified when communities felt that their 'ownership' over the programs provided greater leverage in determining the direction of their children's education. In all, these studies underscored the contention of many Indigenous people that the success of any program was reliant on finding the tipping point where parental trust in the school, its programs' authenticity and purposefulness were oriented to addressing students' educational and ontological needs.

Teachers/School

The second area of impact focused on how high-quality engagement projects with Aboriginal parents and schools were almost singularly dependent on the transformational leadership skills of principals, teachers (Barr & Saltmarsh, 2014; Lowe, 2017) and/or Indigenous families (Lowe, 2017). These leaders were shown to construct valued moments of engagement, engendering high levels of relational cache that enabled them to manage the instances of resistance that always reared its head. As Bennet and Moriarty (2015) and Bond (2010) noted, the importance of building relational bridges between teachers and students was that they underpinned multiple and innovative engagements that developed out of these newfound relationships. Lampert et al. (2014) found that it was Aboriginal community who wanted to broker a relationship that facilitated working with teachers so that they could understand the socio-cultural complexities of their lives and aspirations. While parents expressed a desire to be more actively involved in their children's schooling, they also identified that principals and teachers had the ultimate responsibility to improve their children's outcomes.

Discussion

Purpose of Engagement

While the purpose of school and community engagement was explicitly discussed in at least half of the studies, there were a variety of different articulations as to what such a purpose should be, with Bennet and Moriarty (2015), Bond (2010) and Maxwell (2012), suggesting that the purpose of community engagement was to assist teachers' understanding of the experiences and aspirations of Aboriginal communities, their local epistemologies and their connectedness to Country. Studies like those by Lowe (2017) and Owens (2015) highlighted the actions of Aboriginal communities as they enacted their broader agendas through establishing collaborations with schools. It was seen that these communities looked to ally schools to their broader social, cultural and political aspirations to establish culturally 'valued' programs that went beyond the classroom and garnered wider recognition and support for reconciliation, recognition and sovereignty.

Critical Challenges

Overall, the review facilitated the identification of findings that related to the establishment of successful programs between schools and a small number of Australian Indigenous communities. In respect of Indigenous families, the findings suggested that they looked for authentic opportunities for collaborations that had the purpose of transforming their children's educational opportunities. Parents wanted their participation to have a purpose, of impacting teachers' beliefs, knowledge and understanding and opening eyes to their aspirations for their children (Barr & Saltmarsh, 2014).

The review highlighted findings that spoke of the critical role of schools and teachers in being enabled to develop relational strategies and to build trust and respect (Australian Institute of Health and Welfare, 2014; Barr & Saltmarsh, 2014; Bennet & Moriarty, 2015). Secondly, studies by Bond (2010) and Guenther et al. (2015) identified that quality

relationships were based on relational factors, such as teacher compassion, and programs that empowered Indigenous communities to have higher expectation of themselves and schools. Notwithstanding their understanding of the challenges, Indigenous families have argued that teachers need to be supported to see their responsibility in actively affecting the policy and pedagogical changes needed to challenge the status quo that has legitimated Indigenous underachievement.

Conclusion

This systematic review of recent situated Australian research on school community engagement has explored the question of the impact that Aboriginal community and school collaboration has on schools and Aboriginal students, families and their communities. What emerged from these studies is that the issues shown to inform the Indigenous schooling success or failure need to be seen as complex and bounded by the uniqueness of each context, including the histories of each location and the quality and authenticity of engagement between each school and their local communities. Further, issues of school and community leadership were also seen to affect their individual and collective capacity to establish collaborations, especially when issues of power over the making of key educational decisions were at stake. Families and community leaders looked to be genuinely engaged in the making of decisions that impact both schooling success and that provide opportunities for shared engagement in developing programs that support each community's distinctive sense of identity.

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6

Professional Learning and Teacher Identity in Indigenous Education

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Introduction

Late in 2019, the education ministers from across Australia came together to announce the goals for the upcoming decade, the Mparntwe Declaration (Education Council, 2019). Included in the ‘commitment to action’ is the renewed call to ‘empower’ Aboriginal and Torres Strait Islander students to ‘reach their potential’, and for all involved in education to work towards ‘closing the gap’ (2019, p. 16). Thus, it is explicitly acknowledged that education outcomes for these students ‘remain behind those of other learners’ in key aspects of schooling. Linking with this, the

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recent annual ‘closing the gap’ report to parliament notes that the ambition to halve the gap on literacy and numeracy by 2018 is yet to be met (Department of Prime Minister and Cabinet, 2020). Moreover, 25% of Indigenous students in years 5, 7 and 9 remain below the national minimum standards in literacy, and 17–19% remain below national minimum standards in numeracy.¹ While there is scope to be critical and cautious of the ‘gap policy’ framing (c/f Lingard et al., 2012), this nonetheless offers the reminder that the interests, experiences and achievements of Indigenous students, their families and communities are not well served by the education sector. This is not a new phenomenon, with little progress being made since the ‘gap policy’ era was initiated in 2009 alongside the 2008 Melbourne Declaration on Educational Goals.

As would be expected of high-profile policies that impact on an important part of the Australian population, there has been considerable attention, funding and effort exerted across the education sector to address these ambitions over the last decade. A potentially significant contributor to this process, then, has been the upskilling and knowledge base of those on the front-line, the teachers that work with Indigenous learners. Said another way, professional learning was positioned as an essential component, if the policy goals—the commitment to action and targets—were to be achieved. However, and regrettably, ‘research has shown that many [professional learning] initiatives appear ineffective in supporting changes in teacher

¹The authors note that Indigenous is used to refer to Australia’s First Nations Aboriginal and Torres Islander peoples, the plural serving as a reminder that the terms refer to culturally diverse communities, and people will identify with their cultural identities accordingly (Gillan et al., 2017, p. 1).

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practices and student learning' (Darling-Hammond et al., 2017, p. v). As will be outlined further in this chapter, this appears to be the case, as largely ineffective professional learning initiatives designed to improve the experiences and academic achievements of Indigenous students have dominated activities in this space. This is itself a telling finding of the Aboriginal Voices (AV) team. However, arguably more concerning are the underlying reasons that may explain why this is the case, with this systematic review pointing to the ongoing effects of deeply embedded ontological and epistemological race-based assumptions and practices.

Teacher professional learning (henceforth PL) has been described as 'both a policy problem and a policy solution', a double-edged dilemma that concurrently offers the promise of a panacea for long-standing concerns with inequities in schooling, while concurrently being weighed down by techno-rational understandings of teacher 'quality' and 'accountability' (Mockler, 2013). What might this look like in practice? All too often PL initiatives may offer educators and schools 'bolt-on' and 'tool-kit' style approaches to improving teaching and learning. The emphasis is typically on the teachers' acquisition of knowledge and skills (Mockler, 2013). Kennedy (2016) has described this in terms of the underlying theory of action, entailing addressing a 'problem of practice' that requires the development of new or different knowledges, followed by engagement with strategies and resources to be used when returning to the classroom. It is a formula that gestures to good 'bang for your buck', the opportunity to incrementally polish the schooling practices, and this can all readily be conceptualised as a way addressing the needs of targeted groups such as Indigenous learners.

However, this dominant model of PL fails to account for the significance of 'identity-work', the point that educator practices stem from how they conceptualise themselves as teachers, the purposes of schooling and their understandings of students (Mockler, 2013; Netolicky, 2020). In Kennedy's (2016) view, this is grounded in concerns to do with teacher motivation, the how and why that may underpin (dis)engagement in PL, as this then forms the basis of PL's translation into actions in the classroom. Said another way, PL not only can, but should, be working towards something more than the acquisition of knowledge and skills. Truly

effective PL provides opportunities for educators to engage more deeply with philosophical, ethical and political questions connected with schooling, the work of teachers and the experiences of learners.

This is a conceptualisation of effective PL that resonates powerfully for the non-Indigenous lead author of this chapter. It was as participating in mandated PL experiences such as ‘hidden histories’ in 2008, as a high school history in teacher in suburban Brisbane, that provoked deeply questioning teacher identities and pedagogical practices, and eventually led to his engagement in doctoral research. In this case, it was the absence of identity-work being scaffolded in useful or meaningful ways during the ‘hidden histories’ PL, and in particular the trivialising, ill-informed or hostile comments from teachers on staff, that invited him to consider what then took place in the classroom when working with and in support of Indigenous learners in the school. On reflection this is perhaps not quite as surprising now, as it was at the time. And as will be shown later, an emphasis on teacher/professional identity-work is often an absence in the PL reviewed for this chapter, and this goes a long way towards explaining why there has been scant improvement concerning the experiences or achievements of many Indigenous learners around Australia over the last decade.

What Is Good Practice PL?

A decade ago, an influential article from Desimone (2009) reiterated the valuable contribution of PL in support of improving teacher ‘quality’, increasing teacher ‘effectiveness’, and how this advances the academic achievements of learners. Hence, a good understanding of the qualities that underpin PL that achieves these ambitions was noted as being crucial. She went on to outline a model with five ‘critical features’ that include:

1. Content focus
2. Active learning
3. Coherence

4. Duration

5. Collective participation (Desimone, 2009, p. 185).

As Desimone explains, this is a model that accepts a positivist approach, calling for PL to be designed to understand and (importantly) measure how and why learning is effective (or occurs at all) for participating educators (Desimone, 2009, p. 187). Writing more recently, while emphasising the strengths of the evidence-base that supports the utility of the model, she also concedes that several large-scale studies have shown ‘disappointing results’, highlighting the challenges of operationalising the five features into effective PL practices (Desimone & Garet, 2015, p. 253). Kennedy (2016, p. 971) shares similar concerns, pointing out that despite this model being widely used, the features are ‘unreliable predictors’ of PL success. It is perhaps with a view to some of these limitations that Darling-Hammond et al. (2017, p. 4) have recently reworked the model to include the following:

- Use of models and modelling
- Use of coaching and expert support
- Opportunities for feedback and reflection

According to these authors, effective PL will be designed to simultaneously incorporate many of these features (inclusive of those from the Desimone model).

The value and important role of PL are acknowledged all around the world, and much can be learned from studies of PL that are focused on or across different contexts. However, it is also pertinent to keep in mind the limitations of doing so, as the veneer of globalising discourses and education policies can serve to unhelpfully obscure the particularities of national systems and cultural milieus (Rizvi & Lingard, 2010). In the case of Australia, recent emphasis is on establishing ‘growth-focused professional learning environments in which teachers can interrogate and improve their practice, based on knowing research and knowing their students’ (Netolicky, 2020, p. 17). In part, this accepts that the ‘the knowledge, skills and attitudes needed for optimal teaching’ are not fully established during teacher education (Hammerness et al., 2005, p. 358).

The contribution of PL to help promote ‘equity and excellence’ in schooling was acknowledged with the 2012 release of the *Australian Charter for the Professional Learning of Teachers and School Leaders* (Australian Institute for Teaching and School Leadership, 2022). The Charter includes the following definition:

Formal and informal learning experiences undertaken by teachers and school leaders that improve their individual professional practice, and a school’s collective effectiveness, as measured by improved student learning, engagement with learning, and wellbeing.

On the one hand, this could be viewed as a useful way of conceptualising PL that is expansive and open to interpretation, as it invariably needs to be. On the other hand, this could be thought of as pointing out what is fairly self-evident, and hence it doesn’t invite much more than surface level engagement with PL. It is certainly not the sort of framing that would require educators or learning communities to consider in depth the complexities of addressing the more specific experiences of, for example, Indigenous students. Rather than a generic, and potentially unhelpful conceptualisation of PL, a more focused definition may require educators to critically reflect on deficit theorising with a view to replacing this understanding with the sort of ‘agentic thinking’ that helps redefine classroom relational practices as the fundamental cornerstone of effective teaching and learning (Bishop et al., 2014, pp. 10–11). This approach to PL moves closer to purposefully considering the identity-work that is required for many educators to reconceptualise how they understand themselves, their relationships with students and the work undertaken in schooling.

Teacher identities are not fixed or stable over time, rather, they are more helpfully understood as continuously being ‘work in progress’. Professional learning is one of the contributing factors that shapes the identity-work educators experience, and as Mockler (2013, p. 42) outlines, this is because it can provide opportunities for the professional and personal to rub up against each other. In this sense, and ideally, PL opens up space for educators to question what they do, why they do things particular ways, the purposes of schooling, why things could or should be

different, and so on. The linking of PL with identity-work in this way shifts the emphasis onto notions of ‘becoming’, a valuable nuance that moves beyond ‘technical-rational’ conceptualisations of educators (Mockler, 2013, p. 42). It is this line of thinking that Netolicky (2020, p. 18) takes up in calling for transformational PL, initiatives that work towards impacting on ‘what teachers and school leaders think, believe, feel, and do’. In short, those involved in education need to believe in the reasons for change, prior to seriously engaging with efforts to make changes to their established practices (ibid). This is an approach that resonates with Kennedy’s (2016, p. 974) call to further refine the current dominant models of PL:

[W]e need to replace our current conception of ‘good’ PD as comprising a collection of particular design features with a conception that is based on more nuanced understandings of what teachers do, what motivates them, and how they learn and grow.

The Approach for the PL Systematic Review

According to Dixon-Woods (2016), systematic reviews vary in approach and framing, with some located more towards the ‘conventional’ end, some more ‘interpretive’ and many hybrids in-between. The distinction stems from the purpose of the study. More conventional approaches are designed to sort through the scope, scale and quality of available evidence. Whereas some SRs are more concerned with conceptual and theoretical development. The ‘specific purpose of the review is critically important’ (Dixon-Woods, 2016, p. 385), which for this SR was framed as an ‘interpretive synthesis’ that sought establish a conceptual understanding of PL designed to improve the experiences and academic achievements of Indigenous learners. The question that guided the SR was influential:

What evidence demonstrates that PL can effectively change teachers’ understandings, beliefs, and attitudes, and from this, improve the schooling experiences and achievements of Australian Aboriginal and Torres Strait Islander students?

The question was informed, in part, by Gillan et al. (2017) reminder that addressing deficit and race-based assumptions remains a fundamental challenge for the sector.

The research question was also partially prompted by the success of the *Te Kotahitanga* longitudinal study of culturally responsive schooling in New Zealand (Bishop et al., 2014). This PL initiative explicitly rejected deficit theorising, and over time demonstrated that educators could learn how to establish and maintain respectful and productive relationships with Māori students (Bishop et al., 2014, p. 7). *Te Kotahitanga* established an evidence-base that accounts for the benefits associated with explicitly addressing deficit theorising by evaluating and documenting changes in the teachers understanding, beliefs and attitudes. Additionally, *Te Kotahitanga* actively fostered culturally responsive approaches to schooling; teaching and learning that is intellectually demanding, engages with intercultural knowledge and fluency, and raises the socio-political consciousness of students (Ladson-Billings, 2014). Thus, for this SR, attention was focused on the PL evidence-base that addressed curricular and pedagogical practices that engaged with the politics of knowledge construction in relation with the local context of learning. In essence, while student improvement on assessment may be part of this evidence-base, this was not viewed as the only or most suitable measure of positive experiences and achievements for Indigenous learners.

The Research Strategy

As part of the broader Aboriginal Voices project, this review of research on professional learning followed the established protocols and methodological framing outlined in Chap. 2. However, there were also some elements that are particular to this systematic review, notably the inclusion of research on the delivery of PL activities. The database search located 1144 references, and after duplicates were removed, this was reduced to 1055. The abstracts for all of these sources were then manually reviewed by two team members. The exclusions were based on the following criteria:

- The research centrally involved initial education teacher students.
- The research focused on the PL experiences of the researcher.
- The research design/methodology did not include an explicit focus on a PL activity/intervention.
- The research did not focus on concerns with the experiences or achievements of Indigenous learners.
- The research focused primarily on the learning/development of Indigenous staff, parents or community.

This process removed 1017 sources from the list, leaving 38 references. A further 3 were subsequently removed as physical copies of these could not be found or accessed. The remaining 35 sources were then used to identify and add a further 17 sources based on the inclusion criteria. This resulted in 52 sources being included in the initial phase of reading and evaluating for final inclusion. A further 21 sources were removed following this phase, based on the limited focus on PL aiming to improve the schooling experiences and achievements of Indigenous learners. It was also during this phase that some sources were retained despite falling somewhat outside the explicit inclusion criteria. Notable in this regard are the retention of Fredericks (2008) research on ‘cross-cultural awareness training’ in the health sector, Osborne’s (2013) critical reflection on the roll-out of the MindMatters initiative, Craven et al. (2014) review of PL research, and Burgess (2017). All four of these sources were viewed as making worthy contributions in relation to the SR research question (see Fig. 6.1 for a flowchart of this process).

Each source was then closely read, with defining features recorded alongside of initial notes regarding some of the strengths and/or concerns. This was a process to establish markers of similarity and difference, for instance, the context of research (urban, remote, regional or a mix), methodology (qualitative, quantitative or mixed), the length of the study, the focus (math, literacy etc.) and the positionality of the researchers. This was followed by a thematic analysis to evaluate for quality based on six criteria, with each source receiving a ‘score’ out of

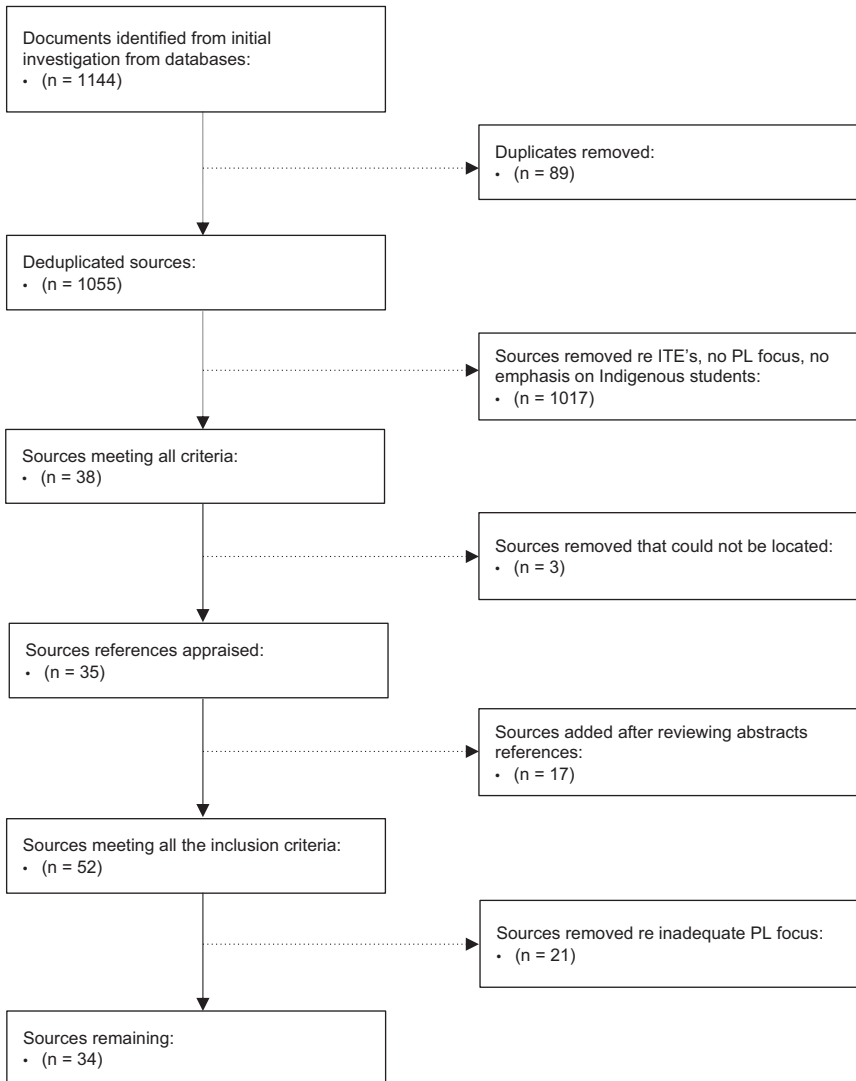


Fig. 6.1 PRISMA flow diagram representing inclusion and exclusion process. Note. Adapted from Fig. 1, in 'The possibilities and practicalities of professional learning in support of Indigenous student experiences in schooling: A systematic review', by G. Vass, K. Lowe, C. Burgess, N. Harrison, N., Moodie, 2019, Australian Educational Researcher, 46(2), p. 348

6. These included further considering the methodology, theoretical framing, ethical dimensions, the depth of the PL details and contribution to the field.²

Five Themes

The Challenges of Context

Over half of the studies focused on regional (or rural) and/or remote settings, and the majority of the remaining addressed a mix of urban, regional and/or remote locations. Only one project focused exclusively on an urban (or ‘metropolitan’) setting (Young, 2010). Thus, the specificities of supporting and working with Indigenous learners within urban or metropolitan contexts, who constitute over 70% of the national student population, remains largely overlooked. It is also perhaps unsurprising, given the high Indigenous student enrolment, that emphasis on PL research from the Eastern states was largely reported on. More broadly, with 29 of the 31 studies coming from just four states (Qld, NSW, WA and NT), the research base may uphold a perspective of Indigenous peoples as living primarily in locations distant from urban centres.

The SR also reveals broader methodological concerns that stem from this. For example, while there may be good reasons for obscuring details about the research context, the absence of contextual specificity is also problematic. This is because the school location influences the understandings, beliefs and attitudes that teachers hold. Thus, if an educator comes from an urban, and likely high socio-economic background, but then find themselves teaching in remote or regional settings, accounting for this movement should, ideally, be part of the PL and research narrative. In essence, if PL is to genuinely and positively effect change in how some teachers understand themselves in relationship with Indigenous

²Some of this material was ‘grey literature’, such as conference papers or professional magazine stories, hence for many ‘quality’ was linked to the source context.

peoples and local communities, finding ways of accounting for the importance of context alongside of carefully protecting learning communities may require further attention.

Research Design Considerations

A preference for small scale, qualitative methodologies that followed an action tradition was evident. This is, up to a point, unsurprising given it provides opportunities for educators to be involved as researchers—as knowledge holders and makers from within the research site. Hence, this is typically a collaborative and localised approach which is well suited to Indigenous-focused PL. This is because it enables educators to confront their values, beliefs, the current institutional arrangements in their setting, and from this to change schooling practices (Yunkaporta & McGinty, 2009, p. 59). While this gestures to the potential for this approach to focus on identity-work, if this is not made explicit and the reflective activities scaffolded and purposeful as central to the PL, it is likely to fall short of taking full advantage of this potential. This was however, either not often core to the PL, or was not reported on.

The PL reported on by Yunkaporta and McGinty (2009) offers a strong illustration of how and why this approach can constructively help with improving schooling practices for Indigenous learners. It is inclusion of this reflective and evaluative component that distinguishes this contribution, with the participant narratives exploring the intertwining of personal and professional learning. The paper offers a compelling reminder why more than attendance or test scores need to be addressed in PL. It was arguably the involvement of local community with the PL, and changes in the relationships between educators and people from the community, that were of central import. A crucial facet of effective PL was also reflected in studies from Ewing et al. (2010), Burrridge et al. (2012) and Warren et al. (2009). In the case of the latter, interviews (rather than an action style research) were used to explore the benefits of PL strategies that explicitly address power hierarchies and decision-making practices by focusing on the involvement of local Aboriginal Education Officers (AEOs) working with educators.

Balancing the Depth of Detail About PL

In general, the reviewed sources provided limited depth and detail about PL activities. In part, this gestures to a curious quandary regarding publication conventions and potential audiences. For example, in sources that may be more directed towards educators, there may be a tendency to provide truncated or muted details about theory and methodology, such as Young (2010) and Trinidad and Broadley (2010). In sources that may be more directed towards researchers, there may be an inclination to gloss over the nuts and bolts of the activities central to the PL initiatives, such as in Warren and Quine (2013) and Owens (2015). In conference papers, such as Baturu et al. (2007) and Helmer et al. (2009), the scope, scale and complexity of the discussion can be impacted on. And in reports, such as research commissioned by government as with Burrigge et al. (2012) and Burgess and Cavanagh (2013), there may be constraints on the extent to which the authors present critical accounts of what has transpired.

Illustrative of how the publication source may influence the construction of texts, are the contributions linked with the Canadian derived web-based literacy program, ABRACADABRA (ABRA for short). For instance, the paper from Harper et al. (2012) notes that a one-day training session was offered, in anticipation that departmental guidelines for PL would then establish a culture of collaboration. A few structural details are provided, such as the running of 30 minute sessions four times a week for the following four months, with two site visits from the researchers. In this case, the methodology and findings are privileged, at the expense of detailing the PL activities that took place. While understandable in many respects, this also presents only a partial account of what took place.

In another publication, a few further details are provided, such as ABRA involving 32 instructional activities embedded in 17 stories, with teachers guiding whole of class or individual students through a progression from basic to complex. For this paper, Harper (2012, p. 452) explains that as high levels of researcher support had been linked to positive outcomes, her intention here was to outline a small subset sample to consider examples where low levels of support are offered. The focus is on the

emotional labour involved in undertaking the PL, and while this presents an encouraging account of how resourceful and independent educators can be, it offers little further understanding about the PL itself. This was also the case for the other two sources included in the SR, reporting on the pilot study in the conference paper from Helmer et al. (2009) and the Helmer et al. (2011) publication that focused on the experiences of the researchers and PL coaches. While it may be disconcerting that such limited detail about the PL is accounted for across the four sources, this should serve to raise questions about 'our' publication practices.

Explicit Engagement with Theory

Further questions can be asked about methodological and publication practices when considering that only a little over half of the sources explicitly engaged with theory. This is perhaps most surprising when considering the preference for small scale action style research, which are often grounded in social justice concerns and guided by critical pedagogical approaches. As highlighted by Baynes (2015), researchers and participants may come together in efforts to rekindle or recharge the moral aspirations that motivated involvement in schooling in the first place. Despite making valuable contributions in other ways, the texts from BurrIDGE et al. (2012) and Burgess and Cavanagh (2013) are illustrative of the marginalisation of explicit engagement with theory, with the corollary of this being the peripheralisation of issues to do with power and decision-making. A worrying point in view of both projects stemming from research collaborations (commissioned projects) with government departments.

Explicit engagement with theory is important and useful, as shown in more recent publications from Burgess and Cavanagh (2016) and Burgess (2017). The latter text offers a 'problematizing [of] cultural competence' that assists with the development of a more complex reading of deficit schooling practices, prior to considering cultural pluralism, and then naming and addressing issues linked with power. Similarly, Burgess and Cavanagh (2016) make use of Wenger to analyse the benefits of praxis, those efforts to act on and in the world with a view to transforming it. In our view, explicit engagement with theory is a vital component that

elevates reporting on research as being more than descriptive. Explicit engagement with theory enables, for example, more robust accounts of why actions may or may not be effective, considering impacts from multiple perspectives, and revealing the complexities and contradictions concerning issues of power and decision-making.

The Ongoing Difficulties of Accounting for Race and Intercultural Complexity

Ongoing concerns to do with power and decision-making then lead to questions regarding the presence, depth and positioning of issues to do with race and intercultural complexity in PL. For example, while issues of race and power are named by Baturo et al. (2007) in the introduction and conclusion, the approach is brief and the focus is reserved for adult to adult dynamics, overlooking the import of teacher-student relationships. Similarly, Harper et al. (2012) raise conceptual questions about the 'cultural appropriateness' of ABRA, but this does not subsequently extend to theorising interpersonal relationships or pedagogical practices. While Beveridge and McLeod (2009) are motivated by, and name, concerns to do with social justice and (in)equities, there is no direct engagement with deficit theorising or the efforts of teachers to racially or culturally locate themselves. Also falling short of deeply considering institutionalised forms of racism and the reproduction of race, Warren et al. (2009, p. 214) explain that is 'youth and inexperience' that underpins current poor practices and helps explain the 'negative beliefs and attitudes' that are linked with 'Indigenous underperformance'.

There were however also contributions that more meaningfully account for racialised power and decision-making. For example, Osborne's (2013, p. 182) paper about the MindMatters PL addressed 'mental health, and social and emotional wellbeing' across the learning community. Communication and relationships between educators and community members were central to establishing a network built on understanding, respect, confidence and agency. Important with this PL were efforts to purposefully interrupt enduring power relations, with a view to rebuilding intercultural relationships and practices. Similarly, Fredericks (2008)

makes visible the significance of ‘educating for cross-cultural interactions’ by demonstrating the benefits stemming from genuinely listening to, learning from, and working with Indigenous people from within the local community (p. 85). Fredericks is critical of PL that typically focuses on ‘Otherness’ in ways that reproduce deficit theorising by failing to adequately account for dominant structural and systemic arrangements and practices (Fredericks, 2008, p. 88).

Conclusion

If schooling is to genuinely interrupt the processes and practices that underpin and explain the harmful experiences and poor academic achievements that many Indigenous learners leave schooling with, then efforts to foster (anti)racist and/or colour-conscious skills and knowledges must be central to teacher education and PL (Leonardo & Grubb, 2014). As noted earlier, it was anticipated that this would be a feature of some, if not the majority, of PL activities reported on for this review. However, it appears that this is not the case; rather, it would be the exception. It is, perhaps, worth noting that there may be a range PL activities that educators encounter that do name and address deficit theorising, and work towards engaging in depth with issues of race and intercultural complexity. However, these were not identified for the SR as they (likely) failed to focus specifically on Indigenous education, and importantly, they also may not have adequately focused the PL initiatives on curricular and pedagogical practices for targeted initiatives such as literacy, numeracy or science.

This is, then, a timely reminder of the importance of identity-work in connection with effective PL. Educators must be provided with PL opportunities to focus on and reconceptualise what they ‘think, believe, feel, and do’ (Netolicky, 2020, p. 18) when working with and in support of Indigenous learners. The relational is of crucial importance. Moreover, in addition, they need to be provided more than opportunities to simply improve their skills and knowledges as, for example, Math, English or

Science teachers. They require PL opportunities that are transformational in terms of the philosophical, ethical and political questions connected with knowledge-making practices within these disciplines, how these are positioned within schooling, their work as teachers within these processes and practices, and the experiences of Indigenous learners within this context. Questions of relevance are also significant.

Overall, there was a paucity of evidence that shows PL initiatives as actively embracing this identity dimension. Of working with and in support of teachers in their efforts to reconceptualise their understanding, beliefs and attitudes of themselves as educators or in terms of their relationships with Indigenous learners. However, the SR does serve to highlight that Indigenous epistemologies/methodologies and the genuine involvement of Aboriginal and Torres Strait Islander peoples do make a difference. The inclusion of these facets improves outcomes for the educators and the Indigenous learners in their classrooms. In this regard, Burridge et al. (2012), Burgess and Cavanagh (2013, 2016), Yunkaporta and McGinty (2009), Ewing et al. (2010) and Armour et al. (2016) illustrate 'quality research' in response to the SR question. These are collaborative initiatives that not only make concerns to do with power more explicit, they worked with and model intercultural practices, and the end results are improved in connection with this. It is encouraging that there is an emerging evidence-base that shows how and why 'good practice' PL can be operationalised within Australia, and specifically, with Indigenous learners in mind. While the significance of this noteworthy and should be taken up by many, to do so and on the scale required to effect serious and sustainable change, will likely require the sort of political leadership, courage and trust that has long been called for. As highlighted more than 20 years ago in the concluding words of Rigney (1999, p. 119):

From an Indigenous perspective, my people's interest, experience, and knowledges must be at the center of research methodologies and the construction of knowledge about us. Incorporating these aspects in research we can begin to shift the construction of knowledge to one that does not compromise Indigenous identity and Indigenous principles of independence, unity, and freedom from racism.

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7

Knowing in Being: An Understanding of Indigenous Knowledge in Its Relationship to Reality Through Enacted Curriculum

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What Is Curriculum?

As organisational structure, curriculum determines how students move through their education, how they learn, where they learn, what counts as learning, and most importantly what counts as effective and successful learning. Moreover, “what knowledge is selected, how it is taught and evaluated in schools goes to the very heart of issues of individual and social identity” (Atweh & Singh, 2011, p. 189). In western schooling, students learn knowledge about the world outside the school, and most

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learning is theoretically based (Harrison, 2022). Learning and teaching are representational, and curriculum more generally is a 'stand-in' for 'reality'. Students are expected to learn about this world inside the classroom if they are to be successful at school, and teachers devote enormous amounts of time to planning how best to scaffold these stand-in concepts for students. Osberg and Biesta (2003) assert that western curriculum is governed by a representational epistemology:

In modern, Western societies schooling is almost invariably organised as an epistemological practice. Educational institutions present knowledge about the world 'outside' and for that very reason they rely upon a representational epistemology. This is an epistemology which says that our knowledge 'stands for' or represents a world that is separate from our knowledge itself (p. 84).

Knowledge and its referent ('reality') are conceived in western epistemology as separate insofar as we can know the world from a distance, and reality can be represented as an objective entity (Green, 2018). It thus paves the way for students learning from books *about* life. This is a *representational epistemology*, and governs how students learn in schools and how teachers teach (Osberg & Biesta, 2003). However, *representational epistemology* works successfully for some students, but not for others. Other forms of knowledge are marginalised, even to the extent that

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emotional (Ahmed 2004), artistic (Massumi, 2002) and the metacognitive (Ellsworth, 2005) are structured and organised as an explanatory “instrument” (Green, 2018) of western thought and its reality. This leads Osberg and Biesta (2003) to explore an alternative understanding of this western relationship to reality. They argue that ‘knowledge’ and ‘the world’ should not be understood as separate systems which somehow have to be brought into alignment with each other, given they are part of the same evolving complex system.

How curriculum is organised in western schools then will always suit some students, but others less so. Past research (Green, 2018; Harrison, 2022) demonstrates how the organisation of the curriculum in Australia (not just the syllabus) not only disadvantages Aboriginal and Torres Strait Islander students, but also fails to produce the promised outcomes (e.g. a job). The object of curriculum is not only the student, but it is also the promise of something better. For learning and teaching to be successful in western classrooms, students must have faith in a prior body of knowledge being taught in Australian schools, and they must have faith in the capacity of teachers to represent this knowledge. Students must believe that the knowledge will be of some use to them.

Throughout this chapter, we apply the term *Country as curriculum* to refer to how the stories of the land and its history, the changes in seasons, plants, and trees are learnt by the younger generation through the social practices of life, rather than through a didactic form of classroom teaching. This is *knowing in being*, without the separation of knowledge and reality.

Curriculum Organisation

A western curriculum is usually organised in three ways. First, it consists of a prior body of knowledge; second, it depends on a *representational epistemology* to ‘bring’ the world out there into the classroom; and third, it is motivated by a promise. We can gloss this third point as the teacher’s promise to students that if they accept the teacher’s approach, they will get what they want at some point in the future. Students must believe in this promise in order to succeed, and Indigenous students in particular

must put aside their experiences of colonisation and invasion in order to believe that the promise will come true for them. Curriculum is thus organised as an *approach* to learning prior knowledge, and it represents *the promise* of a better future, or at least a more enlightened one.

Both Grumet (2014) and Green (2018, 2022) add to this conception of curriculum order. Grumet proposes that curriculum scholarship should contain three themes: “curriculum as autobiography”, because we are all situated in the curriculum that has shaped us, and that we in turn, would shape; “curriculum as phenomenon”, because there is no neutral knowledge and every discipline is saturated with its cultural history; and “curriculum as event, because curriculum ... is not a state of things, but a happening” (Grumet, 2014, pp. 87–88). Like Osberg and Biesta (2003), Grumet (2014) identifies an alternative understanding of knowledge as event, as well-being representational of some object outside itself. Green (2018) builds on this idea of curriculum “as the worldly interplay and (con)fusion of subject and object, as transaction and as relationality” (p. 15). We can refer to Green’s insightful conception of curriculum in two ways, namely teaching and learning as *doing* (western transactional), and teaching and learning as *being* (interactional).

Following Osberg and Biesta (2003), Grumet (2014), and Green (2018, 2022), the focus of this Systematic Literature Review (SLR) is on exploring possibilities for an alternative understanding of knowledge in its relationship to reality. We explore alternative understandings of how curriculum knowledge can be organised in ways that better align with the learning of Indigenous students. In particular, we seek a conception of curriculum that does not depend on a separation of knowledge and the world, but brings knowledge and the learner together through what we term an *enactment of Country* (a term which is often conceptualised as *land* in North America). The results of our SLR present a method of conceptualising curriculum knowledge as other than representational, and to this end, we find that learning on Country (including land, sea, sky, people) brings into being the interactions of humans and environment. We will find from the research presented in this SLR that enacted curriculum is about practices of knowing in being, where learning and teaching depend on an interactive epistemology, and not only a representational one. The importance of being on Country is to learn from Country,

through *knowing in being*—a practice that cannot be overstated in terms of identifying what constitutes successful learning for many Indigenous students involved in the studies presented here.

Methodology

A positionality statement for each of the authors is provided in the appendix to this book.

Method

This systematic review was conducted through a search of seven (7) databases: A+ Education via Informit online (inclusive of AEI ATSI Australian Education Index and Theses); ERIC Ovid; PsycInfo via Ovid, Proquest Central, Web of Science, Scopus, and Libraries Australia. While a central string of search terms was developed from the research question and more broadly from the field, variations were required as many of the databases had developed a different thesaurus structure for subject searches. This required to varying degrees, a change in the focus used by a number of the databases.

The search was conducted using three primary concepts: first, identifying the cultural group; second, curriculum; and third, school types such as primary and secondary. Other search strategies utilised during the selection phase included a direct search with key journals identified in the search. These included *Australian Journal of Early Childhood* (where papers related to primary and secondary years of schooling), *Australian Journal of Indigenous Education*, and *The Australian Educational Researcher*.

Research items were included in this review on the following basis: (1) peer-reviewed and published, including NGO reports, if they were primary sources; (2) Australian-based research in schools; (3) research based in Australian schools that focused on evaluating school-based policies, practices, interventions, or programs including some form of data analysis and literature review analysis; (4) explicitly linked to Aboriginal and Torres Strait Islander students and their education; (5) set within the

primary and secondary years of schooling, and (6) published during the period 2006–2017. The date 2006 was identified as the limit because research conducted prior to 2006 was deemed to be ‘out of touch’ with contemporary approaches to learning and teaching in Indigenous education. Following a strict set of review protocols (see Harrison et al., 2019), the initial 886 studies identified for review were reduced to a final total of 29 studies.

Understanding Indigenous Knowledge

This SLR focused on what we could learn from the literature published in the field of Indigenous education about possibilities for an alternative understanding of Indigenous knowledge in its relationship to reality. We were looking for alternative conceptions of knowledge. We documented above how western curriculum can be understood as first, a prior body of knowledge, second, as an approach to representing knowledge of the world to students in schools, and third, curriculum as a promise, even as a fantasy designed to motivate students to learn. But we also emphasised how difficult it is for many Indigenous students to believe in this (western) fantasy in the face of the ongoing effects of invasion.

Two key findings relating to the organisation of curriculum arose from our SLR. First, the research shows that what counts as knowledge for Aboriginal and Torres Strait Islander people is enacted through place-based relations of Country. There is an overwhelming sense that Country *is* the curriculum for students, teachers, and researchers involved in these studies. Second, the SLR reflects on the very nature of learning and its purpose for Indigenous people—as *knowing in being*, rather than knowing for the future, or learning through theory. The importance of being on Country to learn from Country—*knowing in being*—is what constitutes successful learning for many Indigenous students involved in the studies presented here. This second finding, *knowing in being* will be addressed in the second section below. We now turn to the 29 studies identified in this SLR.

Country as Enactment of Place-Based Relations

Country is the teacher as Harrison (2013) suggests, but not through a representational epistemology. Country is itself an enactment of place-based relations between animals, plants, and humans, and students will learn if they have the skills to listen and recognise these agentic relationships. Agency is applied here as an enactment rather than something that somebody or something has (Barad, 2007). Aboriginal children learn through being on Country. Country is the enactment of curriculum when we decentre the role of the human individual in learning, where the student is expected to be far less manipulative in his or her interactions with others (also see McKnight, 2016a, b).

In northeast Arnhemland, Guyula (2010) notes that we (Yolŋu) have never learned in classrooms, and we have never asked questions about what we want to learn. Our children have just participated in normal lifestyles for how to survive in hunting and living in the bush, to be able to grow up and get the knowledge, and then as they grow up, they are ready for another level of education in the bush, according to the old men, the wise men, and the land and the trees, and the birds that talk with the land. Guyula notes how Yolŋu students learn out there under a tree, highlighting that the hills, trees, the land, the air are always communicating, teaching you. Children learn through being on Country. Yolŋu students are not told what to learn, and unlike Balanda, they don't choose what they want to be when they grow up.

Rioux (2015) explores the effectiveness of the Montessori method in teaching zoology to Year 8–9 students in an Indigenous independent high school at Koora in Queensland and develops a theory that explains the impact of the approach on their learning about vertebrates. The echidna and other animal narratives in the curriculum have reconnected students to their forebears, and to a kinship alliance with the Elders and with history (Rioux, 2015). Culturally appropriate stories, locally produced and inserted in the school curriculum, govern engagement and learning of Indigenous students. Students are learning through the place-based relations of Country (Sofa, 2014). Country is teaching students through enactments of these relations. Interactional epistemology drives the learning.

Using a land education approach, Calderon (2014) argues colonialist ideologies such as the British 'settled' the land are pervasive in the social studies curriculum in Australia, noting that such ideologies must be made explicit for students in any attempt to decolonise the power relations that underscore pedagogical approaches in schools. For Calderon (2014), making colonialist ideologies explicit for students implies a commitment to land education, where students learn about their historical relations to place and Country. However, she adds a disheartening rider that dominant settler epistemologies leave little room for Indigenous epistemologies and little to no possibility for decolonising work in education. Calderon (2014) emphasises that land education must start from the supposition that all places were once Indigenous lands and continue to be, and moreover, that one's identity is constructed from and within place. Atweh and Singh (2011) remind us that "what knowledge is selected, how it is taught and how it is evaluated in schools goes to the very heart of issues of individual and social identity" (p. 189). Identity grows out of and is produced through interactions on Country.

Disbray (2016) focuses on 'two-ways or both-ways strong', where students are balanced in both worlds, strong in their western knowledge and English and strong in their own identity, cultural knowledge, and language. In *Both-ways* curriculum, the home language is positioned as essential rather than optional for learning in and through a second, additional language. It also creates space to recognise the role of Aboriginal teachers in their children's education. Importantly, Disbray (2016) identifies in the study a fundamental divergence between top-down and local formulations of just what constitutes educational attainment, failure, and success with respect to languages and goals of education. Guenther et al. (2015) argue that Aboriginal and western curricula are largely irreconcilable because of the ways in which concepts such as *success* are defined and applied in Aboriginal and western contexts, with Verran (2010) reminding us that curriculum is not only about new forms of cognition, it presents us with new ways of seeing, new structures, and new ways of feeling. Yet in recent years, assessment has become increasingly focused on standardised outcomes, thus privileging learning through doing rather than being, and knowledge as representational rather than interactional.

McNamara and McNamara (2011) report on a study designed to document and synthesise local knowledge of environmental conditions, including seasons and climate, and transfer this to the younger generation in the local primary school. This research project sought to document, collate, and analyse local knowledge from Elders into a seasonal calendar specifically for Erub Island, located in the eastern group of islands in the Torres Strait. The knowledge was gathered through a number of in-depth, unstructured interviews with Elders on Erub Island. The knowledge collected ranged from information about wind directions, wet and dry seasons, patterns in bird migration and nesting, and plant and cropping cycles. Moreover, knowledge about major totems, and other plant and animal species that are seasonal indicators have also been important inclusions in the final seasonal calendar, as their inclusion provides a more holistic understanding about Islander knowledge of their environment. The collected knowledge was then transcribed, collated, and synthesised into tables, with the final product being a seasonal calendar.

Reading seasons and environments has been a long-held practice for Torres Strait Islanders through their close relationships with their islands and seas. This research project with Elders on Erub (Darnley) Island documented and synthesised their knowledge of seasonal patterns and indicators, and climate change. This knowledge varied from details on the migration and nesting patterns of the main totem birds, to the movement of the Tagai star constellation, to the onset of wind patterns indicating certain planting or fishing cycles. The importance of documenting and transferring such knowledge is that it continues the task of generating interest among the younger generation to ‘read’ their landscape, which is especially pertinent given the projected impacts of climate change. The ability of Islanders to identify indicators and ‘read’ their country is an important tool in monitoring and adapting to environmental change, as well as maintaining culture, livelihoods, and environment.

Important and ongoing research (McNamara & McNamara, 2011; Ewing, 2014; Verran, 2013) demonstrates how *Country is the curriculum* for many Aboriginal and Torres Strait Islander people. Country tells stories of the land and its history, the seasons, the plants and trees and transmits these to the younger generation through the social practice of life,

rather than through a didactic form of classroom teaching. This is knowing in being, without the separation of knowledge and reality. Learning takes place quite simply through the social practice of life.

Knowing in Being

In her research, set in a Torres Strait Islander community in Australia, Ewing (2012, 2014) explores parents' understandings of mathematics and how their children come to learn mathematics. A *funds of knowledge* approach is used in the study and is based on the premise that people are already competent and have knowledge that has been historically and culturally accumulated into a body of knowledge and skills essential for their functioning and well-being. Ewing (2012) emphasises how learning can be rich and purposeful when it is situated within that which already exists, namely the culture, community, and home language of the group. Indigenous epistemology is described by Ewing (2014) as relational and interconnected because meaning is produced in context. Students are learning through everyday life, through their cultural and linguistic interactions with others.

Teachers need opportunities where they can engage with parents to learn what funds of knowledge exist among their students. Knowledge is something that is shared and exchanged rather than disembodied and commodified. Keddie (2014) presents an epistemology where community, kinship, and family networks are at the centre of all relations, reflecting an ethos around a stable identity, and providing a cultural anchor that reflects the shared beliefs and behaviour of the Indigenous community (Burgess et al., 2019). Curriculum is viewed as social practice, where knowledge is produced through social interactions.

Treacy et al. (2014) focus on western mathematics to note how it has its origins in the autonomous existence of concepts and is oriented by a valuing of separation and objectivity in relation to the world. By contrast, an Indigenous world view generates a mathematics that is "characterised by a very personal view of the universe in which humans are seen as united with nature rather than separate from it" (p. 264). People themselves are situated within the curriculum, and become the curriculum

story. To recall Grumet's conception of curriculum as autobiography, "we are all implicated in the curriculum that has shaped us" (Grumet, 2014, p. 87). Relations are enacted through the production of curriculum knowledge. Knowledge and knowing arrive at the same time. This is *knowing in being*, with little sense of knowledge existing prior to learning (Whitehouse et al., 2014).

Western approaches to teaching and learning are focused heavily on engaging students to speak abstractly about the world outside the classroom, but rarely are these students encouraged to situate themselves in the world itself (Treacy et al., 2014; Harrison, 2013; Yunkaporta, 2009). Rather than relying on students learning an abstract body of knowledge, an Aboriginal pre-schooler might be involved in a real-life event such as finding his or her way home (Treacy et al., 2014). This is performative learning, being on Country, and learning from Country. There is no promise here that knowledge will become useful in the future, or that theory will eventually become practice.

Interactional Epistemology

We have identified above how western curriculum is organised in three ways, as a prior body of knowledge, as an approach to representing knowledge of the world to students in schools (representational epistemology), and third, as a promise that this knowledge will become useful and meaningful at some point in the future (and therefore the student should accept the approach in order to receive the knowledge). It should also be emphasised how difficult it is for many Indigenous students to believe in this promise, both in the face of the ongoing effects of invasion (e.g. trauma), and in the context of the continuing and increasing gap in economic, social, and educational opportunities (Australian Government, 2020) available to Indigenous Australians after years of failed promises.

However, the curriculum in most schools is working against Indigenous students, even before the class begins. Representational epistemology calls upon all students, including Indigenous students to be self-motivated and outcome oriented in how they learn (Osborne & Guenther, 2013). It also expects all students to accept a prior body of scientific

knowledge, largely as it is represented in the classroom by mostly non-Indigenous teachers. The SLR highlighted how all students are expected to learn a body of knowledge that is usually presented out of context, with numerous studies (Guenther et al., 2015; Guyula, 2010) highlighting the difficulties of this approach for Indigenous students.

We have sought an alternative understanding of knowledge in its relationship to reality. This SLR has reviewed 29 studies which bring knowledge and the learner together through what we term an *enactment of Country*. When Country is conceived as the ‘enactment’ of curriculum, students are learning through place-based relations, that is through their interactions with the seasons, winds, tides, and with other animals. The various studies highlight how Country is conceptualised as the enactment of curriculum when the role of the human individual is decentred, and learning is viewed more as being rather than doing, as interactional rather than representational. Knowledge and learning in this context are not something that a student has or does. Barad (2007) reminds us that “we don’t obtain knowledge by standing outside the world; we know because we are of the world” (p. 185). We are situated in the very curriculum that shapes us (Green, 2018; Grumet, 2014; McCarthy, 2010), just as we are always situated within the Country that shows us what to do, and when. The learner is of Country.

One’s learning is always the learning of another, where students are bound to others and their lives are intertwined with others. This means that practices of knowing and being are mutually implicated, with Barad (2007) highlighting how “practices of knowing in being” (p. 185) is an alternative way of understanding knowledge in its relationship to reality. This is an alternative to standing outside the world, as students so often do in western classrooms (with even the non-Indigenous students telling their teachers how boring this is!) The curriculum relationship in an interactional epistemology is not about subjects and objects, rather it brings into being the interactions and interdependency of humans and animals, and plants, the seasons, and so forth. Thus we can say that enacted curriculum is about the interactive practices of *knowing in being*, rather than knowing through the knowledge that is taught by teachers and learnt by students. Both constitute very different relationships to knowledge.

Of course the question of how these two very different understandings of curriculum organisation can be brought together for the benefit of all

students (Bat et al., 2014; Fogarty, 2010) is the ongoing dilemma for governments and communities alike. We have identified two very different forms of knowledge production (interactional and representational) and two even more diverse ways of passing-on the knowledge (as being and doing), approaches which are evident in both western and Indigenous curricula. While it would be a mistake to identify these differences as exclusively Indigenous or non-Indigenous, western curriculum nevertheless privileges one way of representing knowledge to children in schools, and one way of learning this knowledge. Our dilemma is how we can bring both epistemologies together in a conception of both-ways curriculum so that the promise of something better is more than an empty promise for Indigenous students.

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8

Innovative School Leadership: Impacting Aboriginal Student Outcomes into the Future

Karen Trimmer  and Roselyn Dixon 

Leadership Research for Universal Student Outcomes

Before the impact of research on Indigenous students can be described, it is necessary to consider Australian approaches to educational leadership and research historically and reflect on its applicability to enhancing the educational and social outcomes for Aboriginal children in Australia. Education policy development and decision-making processes in Australian schools have been focused on centrally developed frameworks that are deemed to apply to all communities and students regardless of contextual circumstances such as geographical location, language spoken

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in the home, or cultural background (Trimmer, 2013, 2015). The main body of educational leadership research has been generic with regard to how it impacts on specific groups of students. The assumption of universal applicability of policy, educational leadership, and school decision-making is questionable in relation to the academic, social, and emotional outcomes for Aboriginal students in Australia.

Whilst the political climate of Western nations and demands of cultural minorities for increased participation have contributed to the rise of school-based decision-making and management as an administrative strategy in education since the 1960s, Australia has been found to be a country with one of the most centralised educational policy and school leadership approaches (Caldwell, 2006). Since this time, research and government reports, such as the Karmel Report (Interim Committee for the Australian Schools Commission, 1973), have recommended that Australian schools move towards a more decentralised form of leadership and management, and a commitment to decentralisation and devolution of authority in education was made at a national level following the election of the Australian Labor Party in 1983 (Caldwell, 1990). National and State government initiatives since then have continued to move in this direction with proponents of decentralised policy and school decision-making arguing for an alternative perspective and approach to school leadership (Bardhan, 2002; Council for the Australian Federation, 2007). However, an emphasis on standards-based accountability, such as is currently a focus in Australia, reinforces the responsibility of schools and principals to conform with and achieve institutionally set goals, including high achievement in NAPLAN (Australian Curriculum, Assessment and Reporting Authority [ACARA], 2017) and international testing; adherence to a nationally set curriculum; and standards for quality teaching and educational leadership (ACARA, 2012; Australian Institute of Teaching and School Leadership, 2014). This educational culture dominated by the forces of accountability and standards creates a dilemma for school leaders in trying to make decisions to meet the learning needs for their school and community whilst meeting the externally imposed requirements of these bureaucratic influences.

Consistency and universalism in curriculum and quality standards have been lauded as critical aims in public education to ensure equity of access and opportunity for all students (Jamieson & Wikely, 2001) and

compliance with universally required policy positions in education and schools promotes this ideal (Trimmer, 2012). However, as Jamieson and Wikely (2001) point out, this view is ideologically incompatible with the paradigm of responding to the individual needs of children and their communities. The current educational culture, dominated by forces of managerialism and standards, creates a dilemma for schools in trying to make decisions to meet the learning needs of their individual school whilst meeting the externally imposed requirements of these bureaucratic influences (Trimmer, 2013, 2015) that may be contrary to identified strategies for education at the school level.

To address issues such as client satisfaction, social justice, and equity of service provision, the Commonwealth Government and the state departments of education need to ensure that services are provided in areas and geographic regions that are not commercially viable and where no other providers exist. The quality of the process of assessing the needs in such areas and provision of educational services that meet these identified local needs is fundamental to the success of schools and educational strategies put in place by departments. Information gathered through consultations with peak bodies, local community organisations, and community members is a valuable resource for planning to determine local needs. Where local stakeholders are consulted and included in decision-making processes there are opportunities for an improved contribution to the planning and development of services that begin to address the issues of client satisfaction, justice, and equity of service provision. It is long established that having a shared vision and goals for a school has the potential to unite a school and its community (Bennis & Nanus, 1985) and studies in several national contexts have shown that involvement of stakeholders, such as community members, is associated with higher achieving schools (Hallinger & Heck, 1999; Anderson & Minke, 2007) and impacts on child development and educational achievement (Fullan, 2007). An important factor in the external environment that impacts on principal collaboration and engagement with the community is the location of the school and characteristics of the community it serves (Trimmer, 2013, 2015, 2016). Contingency theory (Fiedler, 1967; Fidler, 2001; Morgan, 2006) suggests that leadership needs to be tailored to the circumstances and the external context including where the school is located, and

stewardship theory also supports empowerment of principals by provision of structures that give greater authority and discretion to principals to reconceptualise the relationship between schools, their communities and external environment (Dalton et al., 2001; Trimmer, 2015). These studies reflect a common view of the importance of involving community stakeholders in school governance and decision-making processes.

Where a school is located in a community that differs from the norm, the expectations and needs of the community are likely to differ (Trimmer, 2016). Differences due to factors including geographical location, ethnicity, cultural influence, and poverty/affluence have been cited as critical characteristics of educational communities that need to be considered (Fullan, 2007; Karstanje, 1999; Levacic et al., 1999). A remotely located Aboriginal community may experience all of these critical characteristics. These studies found that in schools with such unique circumstances, there were limitations in the use of centralised management approaches. The findings demonstrate that school leadership approaches need to be decentralised and may differ dependent on the characteristics of the local community and school.

In communities where the cultural background differs from that of the principal, the risk propensity and perception of community has been found to differ from that of principals such that greater input from the community is required to reach agreement on decisions. A principal in a rural or remote school, with a large proportion of Indigenous students, may face greater constraints in their decision-making due to lack of information about the expectations and needs of the community of the school. In addition, the expectations and needs of such a community are less likely to align well to policies that have been developed centrally to apply to generally applicable circumstances. Collaborative leadership and decision-making will therefore enhance the influence and contribution of stakeholders and community (Bauer & Bogotch, 2006). The model of parental involvement developed by Hoover-Dempsey and Sandler (Anderson & Minke, 2007) linked involvement in their children's education with student outcomes. Research on parental involvement in education has provided evidence that where commitment and responsibility are shared between parents and the school, student educational outcomes are improved (Cavanagh & Dellar, 2003). Parents, as their child's first

educator, have knowledge about their children's skills and learning needs and a vested interest in their educational achievement, so such research findings are intuitively reasonable and such involvement is also required to attain lasting change (Trimmer, 2012).

However, these traditionally acknowledged findings are only being specifically applied, researched, and reported in the literature over the past decade in relation to Aboriginal children in Australia. National policy focused on "Closing the Gap" (Prime Minister and Cabinet, 2018) has resulted in significant funding and strategic action by government and education systems to improve a wide range of social and academic outcome indicators, including literacy and numeracy standards through NAPLAN (ACARA, 2017), attendance, and graduation rates, but to date there has been limited demonstrable improvement against these indicators (Steering Committee for the Review of Government Service Provision, 2014, 2016). The importance of governance models that recognise that policies and procedures cannot be applied universally to all schools and circumstances, and leadership approaches that incorporate increased participation of community in governance and decision-making for otherwise disenfranchised communities, continues to be reflected in the educational literature internationally for a range of disadvantaged minority groups (Battiste & Henderson, 2018; Guenther et al., 2014; Trimmer, 2012). These approaches are based on an understanding that having a shared vision and goals for a school has the potential to unite a school and its community. It was therefore timely that a thorough review of the current evidence be conducted to evaluate what policy, educational innovations, and strategies have been demonstrated to have had an impact on Aboriginal students given the systemic lack of improvement in Indigenous education outcomes in Australia over the last 10 years.

School leadership is paramount in fostering student engagement and improving educational outcomes as it impacts upon curriculum and pedagogic practices within the school, teachers' professional learning, cultural safety and respect for cultural identity, and knowledges through language and cultural programmes and engagement with community (Trimmer et al., 2019). When considered holistically, leadership influences development of genuine understanding and acknowledgement of Indigenous ways of knowing within the school that engages with and facilitates innovative

ways to address cultural safety and provide support for teaching and learning. This is consistent with the premise of working collaboratively at the cultural interface (Nakata, 2007). In this context it is more than trying to “close the gap” via universal policies and processes from a Western viewpoint as this may not account for understandings and priorities of Aboriginal people and communities. Student achievement is a wicked problem that requires complex, multi-layered responses over time that consider broader issues around the complexity of student’s lives that go beyond individual circumstances and are embedded in historical inequities and colonialism. Whilst such issues require broad focus at national policy level, at a local school level acknowledgement and engagement by school leaders provide opportunities for positive connections and innovative practice to emerge at the cultural interface (Martin et al., 2017; Nakata, 2007; Yunkaporta & McGinty, 2009). Roberts (2009) identifies educational, strategic, and interpersonal leadership as the key capabilities of school leaders impacting on outcomes for Indigenous students.

Methodology

Position Statement

Professor Karen Trimmer is a non-Indigenous Australian who has worked across Australia in schools, governments, and universities in the fields of teacher training, decision-making, and Indigenous education. Associate Professor Rose Dixon is a non-Indigenous Australian who has taught in Australia and New Zealand, before entering academia. Both authors are the first in their families to go to university and share a strong commitment to social justice.

Method

A systematic review (Trimmer et al., 2019) was conducted of Australian research published between 2006 and 2018 on the role of school leadership in supporting sustained change in Aboriginal student learning and social outcomes. For this review the research question identified was:

What is the role of school leadership, and its relationship with community, in developing an environment to support sustained change in Aboriginal student learning and social outcomes?

Implicit in this research question are the impacts of school policy, governance, and decision-making on local communities and students' histories and current experience, their agency, and the need to transform both policies and practices used to subjugate Indigenous peoples (Smith, 2000). The systematic review methodology was based on the Cochrane Review guidelines (Cochrane Collaboration, 2011; Hannes, 2011) that require location and analysis of diverse studies to identify findings specific to the identified research question. A detailed description of this methodology is reported by Lowe et al. (2019) and in Chap. 2. The number of papers included and excluded at each phase for this study is shown in Fig. 8.1.

Findings

Our review identified six emerging themes that were consistent across the literature, focusing on community relationships, principal role, leadership styles, pedagogy and curriculum, participation and achievement, and the impact of policy.

Relationship to and Collaboration Between Principals and Community

Successful leadership in Indigenous schools requires a collective effort that needs to be co-constructed to empower community leaders and meet the needs of students and the expectations of community (Kamara, 2009, 2017). Cultural competency is critical (Osborne, 2013) and a positive approach is for principals to be open to intercultural space and both-ways leadership as a precursor to culturally relevant conversations. Leadership undertaken by Indigenous community members was found to have positive impacts in situations where the community was empowered through a school-initiated project and also where family and community took the

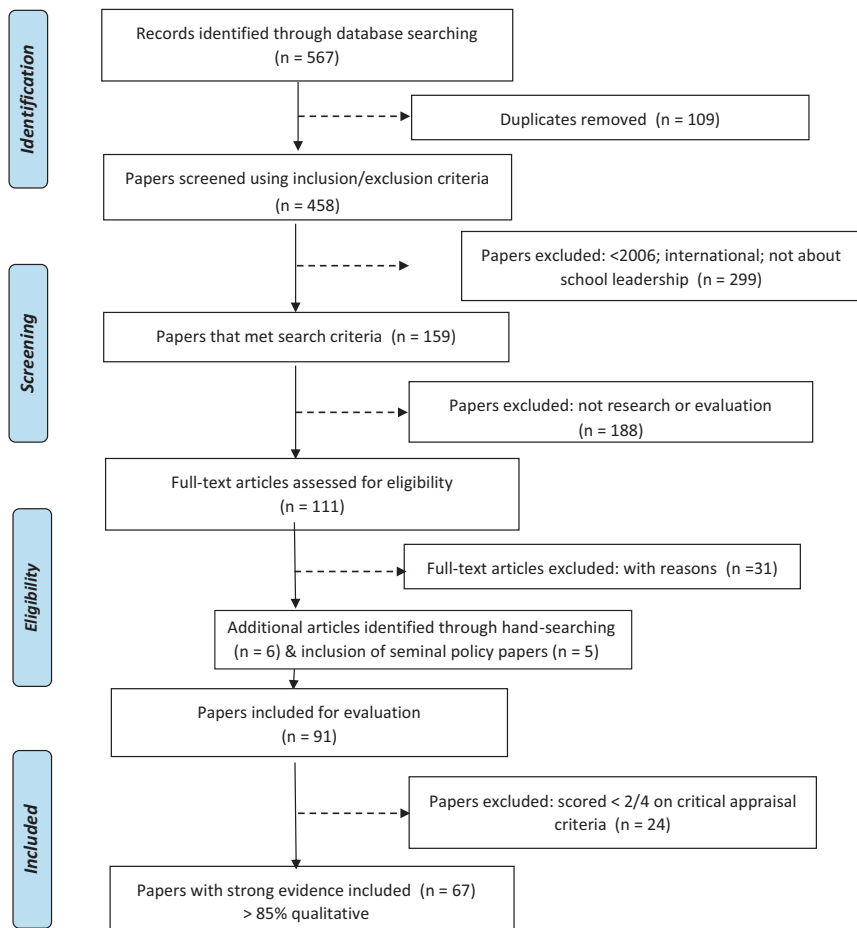


Fig. 8.1 PRISMA flow diagram representing inclusion and exclusion process. Adapted from Fig. 1, in "School leadership and Aboriginal student outcomes: systematic review," by K. Trimmer, R. Dixon and J. Guenther, 2019, *Asia-Pacific Journal of Teacher Education*, doi:10.1080/1359866X.2019.1685646, p. 4

lead role (Fluckiger et al., 2012; Riley & Webster, 2016). Full partnerships between homes and schools are necessary to enhance children's learning (Lovett et al., 2014), but relational attributes of authentic engagement are needed for such two-way relationships (Keddie, 2014; Lowe, 2017).

Complexity of Principal Role

The role of principals has become increasingly complex including responsibility for system accountability, curriculum leadership, community liaison, and financial and human resource management through to cleaning and fixing broken toilets if based in a small community school. Impacts of this overload with regard to time that can be allocated to any given component of the role are significant for principals (Gurr et al., 2014). The importance of context was highlighted in the numerous difficulties that principals tackle daily in realising their roles and how they are often required to re-think and re-work their role and daily tasks due to the range of contextual factors (Niesche & Keddie, 2014). These factors included remoteness and its associated lack of access to resources, inexperienced teaching staff, and high turnover of both principals and teaching staff.

Models and Styles of Leadership

Styles of leadership were overtly reported in few studies but implied in many others focusing on relationships with community and complexity of the principal role. In each case, collaborative models, distributive leadership (Jorgensen & Niesche, 2011), servant leaders, and transformative leaders are recurring as those that enable empowerment of community and engagement of community, teachers, and students in innovative approaches and programmes that positively impact on achievement. The impact of cultural context on leadership practices for principals and teachers working in Indigenous education contexts is critical to ensure equity and diversity and that social exclusion in education is addressed (Kameniar et al., 2010). However, this was not evident where leadership style was tokenistic or incompatible to Aboriginal culture (Grint, 2005; Keddie & Niesche, 2012). While there was no one best method of leadership because all communities are unique, distributed and collective leadership styles, such as both-ways leadership that occurs in the cross-cultural space, were found to have positive results and mutual benefits across the studies (Dempster et al., 2016; Frawley & Fasoli, 2012).

Leadership of Pedagogy and Curriculum

While leadership may become subservient to management in schools due to the many demands on principals' time, the role of leadership in curriculum change is very important, particularly for principals in small remote Indigenous schools (Jorgensen & Niesche, 2011). However, the complexity of the role combined with inexperience and cultural unpreparedness can make it hard for school leaders to make an impact on learning (Jorgensen, 2012; Luke et al., 2013). Studies showed that principals can lead curriculum change where they build on home-school-community partnerships through collective leadership (Johnson et al., 2013; Fluckiger et al., 2012; Klieve & Fluckiger, 2015; Lovett et al., 2014; Riley & Webster, 2016; Warren & Quine, 2013; Warren & Miller, 2013). They also found that curriculum materials had to be specifically designed so that they showed respect for parental and community voice. Principal support for and involvement in professional learning to establish partnerships between school and community, to revise teaching approaches and curriculum, and to value family and Aboriginal cultural heritage effected positive change for teachers but the competing time demands for principals made participation difficult (Owens, 2015; Principals Australia Institute, 2014).

Participation and Achievement

Studies that directly addressed the areas of lowered engagement, achievement, and completion of Indigenous students in remote schools outlined the impact of specific leadership programmes that had differing levels of success in increasing engagement and academic results (Button et al., 2016; Luke et al., 2013). Other strategies such as alternative arrangements that acknowledge family or cultural needs and flexi schools showed that culturally respectful environments that promote positive cultural identity assist students and increase their potential for achievement (Keddie, 2014; Rahman, 2010; Shay & Heck, 2016).

Impacts of Governance, Policy, Procedures, and Accountability Requirements on Leadership and Decision-Making

Competing discourses in top-down and bottom-up policy impact on both policy development and implementation (Guenther et al., 2014). There are incongruities between local discourses that emphasise bi- and multilingualism, local identity and knowledge and community language maintenance and institutional discourses. The dominant discourse and power dichotomy impact representation and development of policy based in difference that is counter-productive for Aboriginal students (Moore, 2012). One of the contributors to the complexity of the principal role has been the result of moves towards decentralisation and deregulation of governance in schools leading to a rise in school-based decision-making and management, which has occurred simultaneously with an increase in accountability mechanisms in the form of national standards, curriculum, and testing. Principals therefore find themselves trying to balance these endless demands for bureaucratic accountability requirements and simultaneously meet the particular learning needs of their students and local community. In particular, the emphasis on high stakes testing (NAPLAN) is seen to be crowding out Indigenous language and other culturally valued learning (Disbray, 2016). Related to this is the argument that the discourse of disadvantage is being applied to Aboriginal education statistics (Lester, 2016). While all principals face the dilemma of balancing governance requirements and local needs, Osborne (2013) indicates that remote school principals in particular find themselves caught in between governmental discourse and the voices and values that exist in the remote communities where they live. Whilst purposeful reform is currently being undertaken in state education systems across Australia to respond to identified issues and impact on current practice in schools (Department of Education and Training, 2016), studies question whether Aboriginal students are learning from provided education and the relevance of the systemic measures of “success” including measures of attendance, literacy and numeracy benchmark scores,

student retention rates and transition from school to university, accredited training, or employment which compromise the “Gap” (Guenther et al., 2014; Frawley & Fasoli, 2012; Osborne, 2013; Prout, 2009, 2010).

Innovative School Leadership: Moving Forward

The role of the principal in leading a school is complex and goes well “beyond the school gate” into the community Kamara (2009, 2017). It includes relationship building, curriculum leadership, and advocacy roles, externally with community and internally to professionally develop teachers. Collaborative both-ways leadership has been demonstrated across the research as an essential component of school leadership that empowers communities to be equal participants in student learning and results in enhanced academic, social, and emotional outcomes for Aboriginal children. New models of professional development that include intercultural awareness, both-ways, intercultural, or shared leadership models should be developed and trialled. These leadership approaches should be monitored and assessed via a broad range of methodologies to provide stronger research evidence of impact on community relationships and social and educational outcomes for students. The vast majority of the research studies conducted to date were qualitative but going forward it would be advantageous for confirmatory, longitudinal, cross-sectional quantitative, and mixed-methods designs to also be conducted.

It is clear that such leadership approaches need to be based on knowledge of cultural context and tailored to meet needs of individual communities. Appointment of experienced and culturally competent leaders, including Indigenous appointments, is therefore required in Indigenous schools and these placements should be for a minimum period of 5 years to allow development of relationships and trust with the community. Such principal appointments will enable the implementation and assessment of the models of collective leadership including intercultural, shared and both-ways, and distributed and collective leadership approaches on educational outcomes.

At system level research is needed on how to maintain talented staff in “high needs schools” so that leadership and curriculum initiatives can be sustained over time. Provision of purposeful and targeted professional development of teachers and educational leaders is one essential component of such a strategy. One possibility is to explore community of practice as a model of professional learning as this approach has already been found to provide assistance for curriculum leadership in remote schools learning (McLean et al., 2014; Wenger et al., 2002). Employment of an increased number of Indigenous staff should also be a focus at systemic level, along with research on ways of empowering Indigenous staff and communities to build capacity for voice, self-efficacy, and community leadership to ensure that they have agency to facilitate needed change.

Impact of leadership on curriculum and pedagogy is significant, and beyond the professional development of teachers and education leaders, curriculum and pedagogy must be adapted to be culturally responsive and include the input of voice and decision-making by the community. There is currently a tension for educational leaders between demands of general curriculum and Aboriginal knowledge and pedagogy that needs to be acknowledged systemically to allow principals to effectively lead culturally appropriate curriculum change by building on collective home-school-community collective partnerships. New approaches to curricular and pedagogical reforms in these schools could then be effectively implemented and assessed. Researchers, in collaboration with school and community, would then be able to empirically assess the impact of initiatives and models of curriculum, pedagogical, and policy change.

Aligned to provision of autonomy and agency to educational leaders and communities is the acknowledged need (Guenther et al., 2014) to reconceptualise what is assessed at systemic level to include alternative measures of what is important to communities and culture. Ideally this would include incorporating Indigenous perspectives to adapt policy and practice around attendance, literacy and numeracy benchmark scores, student retention rates, and transition from school to university. Imposition of universal policy on all schools, students, and communities, such as high stakes testing (NAPLAN), is currently discriminatory in that it doesn't adequately reflect abilities and potential of all who are required to sit these tests.

Provision of autonomy for school leaders to make decisions in collaboration with community leaders, and to initiate flexible practices for assessment and attendance, which allow for cultural practices, including residential patterns, can be accomplished without compromising accountability for academic or social outcomes. However, systems would need to devolve responsibility to school leaders, who have the appropriate experience and expertise, so that they are able, in collaboration with community, to adapt policy, curriculum, and pedagogy and develop models of how to include Indigenist perspectives and support Aboriginal values and codes of behaviour. This could include more flexible organisational structures beneficial to engagement and retention, such as flexible timetabling, or schools collaborating to share resources for professional development on a visiting circuit to allow the possibility for ongoing sustainable impact on itinerancy, student learning, and school functionality.

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9

What Does Quality Teaching Look Like for Indigenous Australian Students and How Do We Know?

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Introduction

The current angst over Australia's declining performance in the Programme for International Student Assessment (PISA) prompts broad community commentary on quality teaching including a perceived lack thereof. As Alan Reid noted in *The Conversation* (December 9, 2019), "The Daily Telegraph claimed Australian schools 'are failing'". The Australians bemoaned Australia had "plunged in global rankings", and business leaders told Australian educators to "lift your game". He further notes that

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claims linking teacher quality to these tests are flawed as they only test three subject areas using a questionable methodology and the often ‘knee jerk’ policy responses such as the Education Minister’s reaction, “take a chainsaw to the curriculum” (Reid, 2019), have never been tested in terms of their ability to improve the PISA scores.

This focus on measuring a narrow set of student skills as an indicator of student achievement and, by default, quality teaching ignores the complex factors that impact on everyday teaching, contributes little to the debate, and, if anything, undermines schools’ efforts to provide quality education for their students. What the PISA test does show is the growing inequity in the Australian education system where postcode¹ rather than ability is a more reliable indicator of school success (Ting & Bagshaw, 2016). Consequently, this amplifies disadvantage for students from poorer areas which often include large Aboriginal and Torres Strait Islander (henceforth referred to as Indigenous²) communities, and so the search for ‘what works’ for these students continues unabated.

In response to these concerns, this chapter describes the findings of a systematic review that analyses research studies on teaching pedagogies that support, engage, and/or improve the educational outcomes of

¹ Postcode: identifies the area in which you live (also known as a ZIP code in the USA).

² Terminology: The term Indigenous is used when referring to Australia-wide issues, which includes both Aboriginal and Torres Strait Islander peoples. When referring to the Australian curriculum and teaching standards, Aboriginal and Torres Strait Islander are used as per these documents.

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Indigenous students and therefore identifies what quality teaching might look like in this context. As part of the Aboriginal Voices Project, this systematic review was one of ten based on a rigorous criteria designed to answer the overarching question “*What are the issues affecting the underachievement of Aboriginal students in Australia and how can research inform solution/s to the array of long-term issues that need to be simultaneously addressed?*”

Many studies analysed in this review included teaching and learning practices that focused on one or more of the following: high expectations, cultural responsiveness, connectedness, relevant curriculum, engaging learning activities, and inclusion of student cultural backgrounds. Here, an effective pedagogy was identified as any specific and/or defined teaching/learning practice or process that has a positive impact on supporting and/or engaging and/or improving student outcomes. This acknowledges that pedagogy does not occur in a vacuum but is embedded within and influenced by other factors such as curriculum, teacher effectiveness, parent and community engagement, and school context, and so balancing the influences of these is a challenge when identifying what specific practices are effective.

The key findings of the review noted that pedagogies could be grouped as those designed to improve specific skills such as literacy, those that were deemed effective in a variety of contexts, and pedagogic frameworks that supported quality teaching. Other influencing factors on pedagogies included student engagement, curriculum, teacher professional learning, and the perceived critical role of the school community context.

Implications emerging from this review highlighted a number of key issues, least of which is the paucity of research that could empirically link any specific pedagogical approach to improved Indigenous student outcomes. Others include the lack of a national vision for Indigenous education including a clear disconnect between policy and practice, ‘institutional deafness’ in regard to understanding Indigenous peoples’ visions and aspirations of successful schooling for their children, the invisibility of ‘urban’ Indigenous students, and the paucity of teacher professional learning specifically designed to support teaching practice to improve Indigenous student outcomes.

Quality Teaching, Standardisation, and Effective Pedagogies

In order to understand why teachers employ the pedagogies that they do, we need to think about the discourses of teaching such as ‘quality teaching’ both within the profession and beyond where it is more broadly transmitted through the media (Mockler, 2018). Often based on an assumed understanding of what it is, quality teaching has attracted considerable government and public attention over the last two decades. Certainly, the introduction of national measures for teaching accreditation, curriculum, and assessment has significantly influenced what and how teachers implement the teaching/learning strategies they do.

This obsession with standardising all aspects of education is problematic because it undermines many of the general capabilities the government has identified for preparing students for the twenty-first century. These include critical and creative thinking, personal and social capability, and ethical and intercultural understanding (Australian Curriculum, Assessment and Reporting Authority [ACARA], n.d.-a, n.d.-b). Moreover, educational structures and processes focus on ranking individual achievement in order to determine who is worthy of further education and employment opportunities and who is not.

This is clearly a significant issue for Indigenous students’ educational outcomes (Gillan et al., 2017). The current trend of measuring student achievement against predetermined benchmarks in external tests such as the National Assessment Programme—Literacy and Numeracy (NAPLAN)—has resulted in a more prescribed approach to curriculum and pedagogy as well as higher levels of institutional surveillance of teachers and students in an increasingly restrictive audit culture (Stacey, 2017). This further normalises western hegemonic notions of ‘success’, the ‘good teacher’, and effective schools thus normalising and reproducing white middle-class understandings of the purpose and goals of education (Lowe & Yunkaporta, 2013).

Given that the achievement gap between Indigenous and non-Indigenous student outcomes continues, it is fair to say that these measures have limited success for Indigenous students. The intense focus on

Indigenous students' poor educational outcomes means less attention to culture, language, and identity and a greater focus on meeting mainstream criteria in assessment, standards of behaviour, and western knowledge reproduction (Keddie, 2012). This narrowing of curriculum, pedagogy, and assessment aggravates the ongoing impact of colonisation including silencing the rights-based agenda imperative for overall well-being, self-determination, and realisation of broader Indigenous aspirations (Lingard et al., 2012).

Vass et al. (2019) identified a paucity in teacher professional learning to adequately prepare teachers for teaching in Indigenous contexts which often manifests in low confidence, knowledge, and skills in implementing Indigenous curriculum and pedagogy. Buxton (2017) argues that there is inadequate preparation for teachers to meet the requirements of the Australian Professional Standards for Teaching (Australian Institute for Teaching and School Leadership [AITSL], 2011) relating to Indigenous students and pedagogies, and so Hardy (2013) suggests that policies need to be refocused on teacher professional learning to improve pedagogical approaches and the professional capacity. These factors, along with the absence of a commonly understood Indigenous curriculum narrative that exists for subjects such as history or science, mean that teachers have little knowledge or experience to draw on and therefore tend to default to their educational experiences which are likely to be lacking in Indigenous content. Thus, the gap in teacher knowledge and skills in Indigenous curriculum and pedagogy is palpable and requires significant commitment, strategies, and resources to redress.

Notably, many of the studies in the review identified that where schools engaged with their local Indigenous families and communities, projects were more likely to be successful in engaging Indigenous learners (Burgess et al., 2019). For example, Burgess and Cavanagh (2016) reported on a highly successful teacher professional learning programme in NSW led by local Aboriginal community members. Participating teachers noted the transformative impact this has on developing genuine relationships with Aboriginal families, communities, and students, and then building this into their pedagogical practices.

Therefore, the notion of 'quality teaching' is a contested one, often misunderstood and scrutinised within a climate of a national obsession

with standardised assessment. The implications for Indigenous students are twofold. Firstly, this tends to reinforce a deficit positioning as poor achievers, and secondly, in ignoring more important priorities such as culture, kinship, Country, and self-determination, health and well-being outcomes receive little attention.

Methodology

A critical Indigenous methodology (Denzin & Lincoln, 2008; Smith, 2012) informed the development of the Aboriginal Voices project in order to account for Indigenous peoples and communities. This methodology appropriately centres on ‘Indigenous standpoint’ (Foley, 2003) as the foundation of the work signposting a commitment to social justice, rejecting deficit discourses about Aboriginal peoples, and providing non-Indigenous researchers with “an Indigenous method or framework ... to incorporate Indigenous knowledge, history, and experiences in the research process” (Drawson et al., 2017, p. 13). Applying this methodology means that research studies cited in the review were interrogated to ascertain the level of their understanding and respect for the Indigenous peoples and communities they are working with and the need to challenge policies and practices that continue to colonise and oppress (Smith 2000).

Positioning

As the lead author, I am a non-Aboriginal teacher who has worked in Aboriginal education for over 35 years, currently as a lecturer/researcher. Born and working on Gadigal Country,³ I am a parent of Aboriginal children involved in local Aboriginal community activities. While having a personal and professional passion and commitment to Aboriginal education, I am aware of my white privilege and the cultural biases that accompany insider/outsider positioning. Thus, I am guided by my

³Country is an Aboriginal English term that describes land as a living entity, the essence of Aboriginality, and includes the people, culture, spirituality, history, and environment.

Aboriginal family, colleagues, and the Aboriginal students and community members who provided valuable input for the framing of the Aboriginal Voices project.

Method

The reviews in this project employed a systematic review to engage a rigorous and transparent methodology to conduct a thorough search of the research literature relating to the specific research question being investigated (Petticrew & Roberts, 2006). This occurred through the use of a common criterion for selecting research studies as follows:

- Research population—Australian Indigenous (Aboriginal and Torres Strait Islander) students
- Publication language—English
- Time period—2006 to 2017
- Research context—Australian K–12 schools and/or their communities
- Studies—peer-reviewed research, government reports, key grey literature, and theses
- Studies meeting a quality research criterion (Coughlan et al., 2007)

Reviews included qualitative, quantitative, or mixed-methods research and databases relevant to the Australian education context such as A + Education via Informit Online which were chosen for initial searches. Inclusion and exclusion criteria were applied to identify the final set of studies as demonstrated in Fig. 9.1 and described in Chap. 2.

A summary table of the research studies that met the inclusion criteria was constructed to identify participants, research design, methodology, factors impacting on the study, key themes, and findings emerging from the study. Key information such as the number of qualitative (34), quantitative (5), and mixed-methods (14) studies, the types of research designs used, and the size of research studies were categorised so as to group ‘like studies’ for initial analysis. Individual papers were then analysed across the categories to identify key emerging themes as follows: specific pedagogies, effective pedagogies, pedagogic frameworks, the interrelationship of pedagogy with other practices to support student learning, and context.

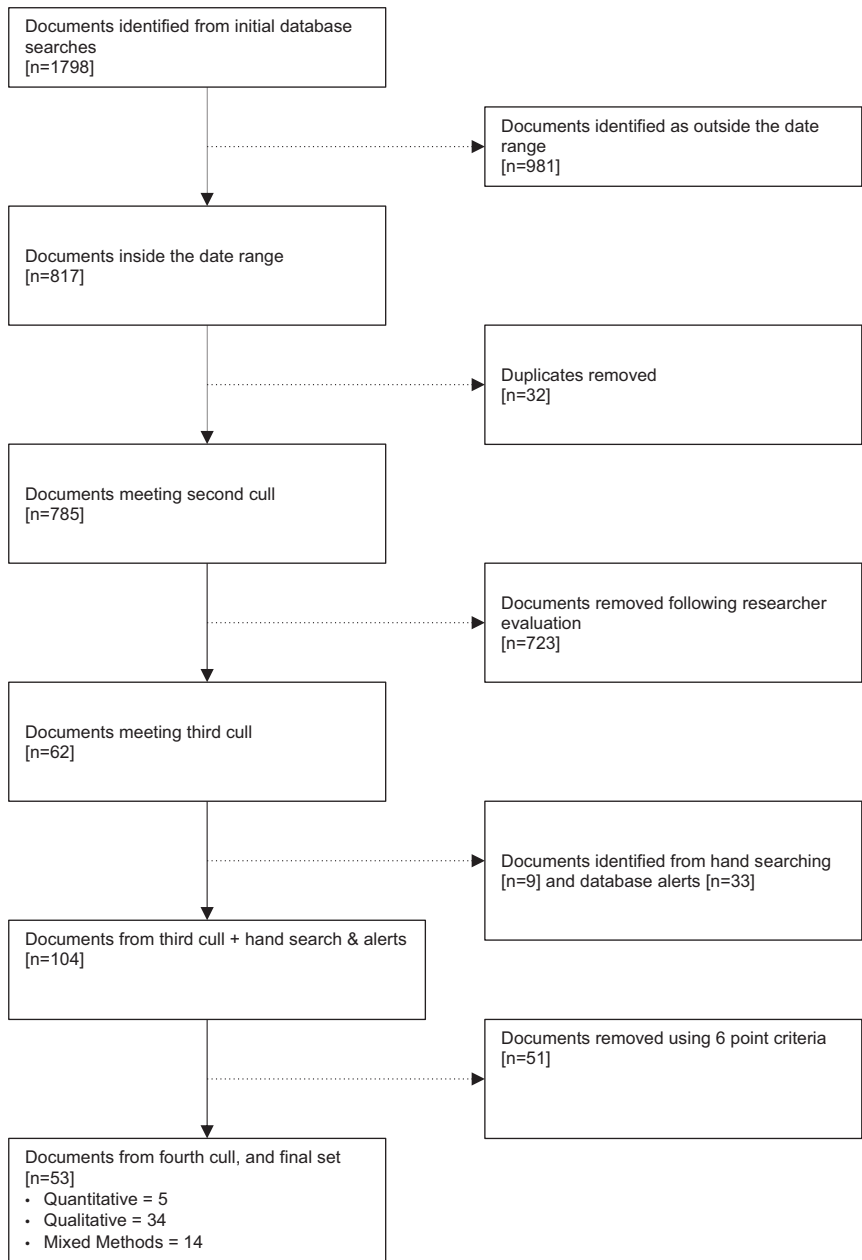


Fig. 9.1 PRISMA flow diagram representing inclusion and exclusion process. Note. Adapted from this figure, in “A systematic review of pedagogies that support, engage and improve the educational outcomes of Aboriginal students”, by C. Burgess, C. Tennent, G. Vass, G. Guenther, K. Lowe & N. Moodie, 2019, *Australian Educational Researcher*, 46(2), p. 301.

Findings

Common factors identified across the findings that contribute to quality teaching in Indigenous contexts included substantial teacher-student relationships, learner-centred strategies, genuine inclusion of Indigenous families and communities in school life with opportunities to influence teaching and learning, and the important role of an inclusive school culture. Regardless of the research outcomes, it was clear that in many cases, teachers were motivated to improve Indigenous student engagement in their learning and support them in reaching their potential.

Specific Teaching Strategies

Eighteen studies evaluated pedagogies that support Indigenous students in attaining specific skills, in most cases, literacy and numeracy. Concerns around the achievement gap between Indigenous and non-Indigenous students (Oliver et al., 2011) were often the key driver for studies in this area. In larger studies, Indigenous students were often a subset of a larger student group, included because of socio-economic status and achievement levels. However, much of the literature consisted of microstudies evaluating the use of pedagogical approaches to respond to perceived deficiencies in Indigenous education in specific contexts, usually remote schools. Examples such as the use of culturally appropriate readers to address Indigenous literacy outcomes (Darcy & Auld, 2008; James, 2014) or dialogic approaches to support Indigenous students' understanding of scientific concepts (Wilson & Alloway, 2013) reported success in terms of student engagement, but no specific evidence in terms of outcomes was offered to support these as an effective pedagogical practice.

Effective Teaching Strategies

The key finding here is that studies including Indigenous voices find that pedagogies based on positive, reciprocal relationships emerge as a cornerstone of effective strategies for engaging Aboriginal students (Donovan, 2015; Lewthwaite et al., 2015; Martin, 2009). Examples include

contextual variations of culturally responsive, place-based, authentic, and generative pedagogies and participatory issue-based collaborative learning. However, these pedagogies were not linked to improved student outcomes but rather were used as tools to engage Indigenous students in their learning.

Pedagogic Frameworks

Fourteen references focused on pedagogic frameworks developed and/or trialled in schools. The most reported models were the NSW Department of Education and Training Quality Teaching Framework (eight references) consisting of four articles on the Systemic Implications of Pedagogy and Achievement in NSW Public Schools (SIPA) study, Indigenous pedagogical frameworks (six references), and two articles on Yunkaporta's (2009) 8 Aboriginal Ways Pedagogy.

While not designed specifically for Indigenous students, the SIPA study provides statistical evidence that Indigenous students' results improved exponentially compared to non-Indigenous students when given high-quality assessment tasks, thus reducing the achievement gap (Griffiths et al., 2007; Gore et al., 2017). Although important in terms of pedagogic practices, these practices were not specifically identified or described.

Yunkaporta's (2009) pedagogic framework is important given its focus on Aboriginal epistemologies, ontologies, and axiologies; however, his research is not designed to test the veracity of the framework in terms of improving Aboriginal student outcomes. Rather, it focuses on the significance of the interrelationships between Indigenous people, culture, and Country and the importance of teachers' deep understanding of these relationships to better understand and engage the students they teach. Its inclusion in the research criteria highlights the importance of an Indigenous standpoint and its contribution to pedagogic theorising and highlights the role of teacher conscientisation as a precondition for building capacity to improve Indigenous student learning experiences.

Impact of Other Factors on Effective Teaching

Many of the references (43) discussed pedagogy in terms of non-pedagogic approaches to support learning such as student engagement, teacher professional learning, and curriculum. In some cases, the focus was on one factor, while others included two or more factors recognising that pedagogy is embedded within and integral to the many facets of teaching and learning. Lewthwaite et al.'s (2015) study is important here because it sought the views of 27 Aboriginal students and 47 parents about effective teachers as the basis for developing quality teacher professional learning. Students highlighted the importance of culture, positive relationships, needing to learn about the literacy demands of schools, and support for student behaviour. Parents emphasised that teachers need to understand the impact of colonisation on Aboriginal peoples' relationship with educational institutions, to teach code-switching so Aboriginal children can communicate in both cultural contexts, to change their deficit views of Aboriginal people, and to affirm their child's cultural identity. The study suggests the importance of culturally relevant and responsive teaching practices to address the issues raised. While these studies provide important and relevant connections between curriculum and pedagogy, they do not frame these in relation to improving student outcomes.

Context

The consistent focus of many research studies was on students in remote and very remote schools, suggesting that the issues for students and the challenges for teachers are largely context dependent. For example, Godinho et al. (2017) identified the need for pedagogical strategies in remote communities to adapt to the cultural and linguistic needs of students through integrating local knowledge, practices, and language, while Bond (2010) notes the division between the knowledge held by Elders in remote communities and tension with many teachers who arrive in these communities.

Fourteen references focused on the influence of context on pedagogy, and in another nineteen studies, context was a considerable influence more generally. Contextual studies offer critical and nuanced understandings of specific community issues, thus challenging research that frames Indigenous education in terms of deficits and failures.

Implications

As a result of this systematic review, we find out more about what is missing, misunderstood, or under-researched than what was discovered or proven. Significantly, Donovan (2015) and Lewthwaite et al. (2015) note that Indigenous voices and perspectives are often excluded from the research, despite discourses of consultation, ethical research, and Indigenous empowerment.

Most research studies assumed a ‘common understanding’ of what pedagogy means rather than articulate a specific meaning and so this limited interpretation and comparison of many of the research findings. Moreover, most pedagogical approaches described in the studies focused on engaging and supporting conscientisation based on the assumption that this would lead to improved educational outcomes. However, no empirical evidence was put forward to correlate this causal link.

Notably, rather than revealing pedagogies that improve Indigenous student outcomes, poor quality teaching often emerged in the evidence. This included low teacher expectations, defensive teaching, a focus on behaviour management, and lower levels of culturally responsive teaching, indicating equity issues aggravated by a lack of teacher knowledge, understanding, and skills in working with marginalised students (Griffiths et al., 2007). Along with limited preservice and in-service teacher professional learning in Indigenous education, this is a key concern impacting on teacher attitudes and assumptions about Indigenous students, cultures, and histories (Lewthwaite et al., 2015) and therefore the pedagogies applied in the classroom.

Implications for Policy, Aboriginal Families, and Schools

The lack of a national vision for Indigenous education was clearly evident in the literature. While the ‘Closing the Gap’ (Department of the Prime Minister and Cabinet, 2020) strategy exists with a clear aim to redress Indigenous disadvantage, its narrow focus on measurable targets such as attendance, literacy/numeracy, and Year 12 (or equivalent) attainment serves to highlight the paucity of a conceptual vision that acknowledges the holistic nature of Aboriginal and Torres Strait Islander peoples’ lives, such as individual and collective needs around the link between culture, kinship, Country, and well-being (Salmon et al., 2019). Now in its 12th year, the ongoing failure of the CTG strategy in most targets indicates that there are other issues at play as Schultz (2020, p. 1) notes:

- Whole population targets ignore regional, community, and individual characteristics.
- The use of statistics as evidence masks the myth that numbers are neutral as well as the role they play in determining the choice of indicators.
- The focus on difference aggravates deficit discourses about Aboriginal and Torres Strait Islander peoples further contributing to disadvantage.
- The targets assume western aspirations of wealth accumulation.
- These factors perpetuate colonisation through assimilation and uneven power relations.

Despite discourses of consultation, self-determination, and partnerships, the Uluru Statement from the Heart (2017), which represents an Indigenous Australian national vision for the future, has been summarily dismissed by the current federal government (Schultz, 2020, p. 2). This ‘institutional deafness’ towards Indigenous aspirations, along with the lack of a national policy that looks beyond the numbers to articulate a holistic vision led by Aboriginal and Torres Strait Islander peoples, condemns the current strategy to ongoing failure.

Evident from this review of effective teaching and learning for Indigenous students is the disconnect between policy and practice.

Policies that are initially intended to support practice are increasingly distant from what is happening in the classroom, due largely to limited consultation and, at times, exclusion of teachers and Aboriginal communities making decisions about what and how to teach. The limitations of the Australian Professional Standards for Teachers (AITSL, 2011) and the national Australian Curriculum (ACARA, n.d.-a, n.d.-b) become more visible in the context of Indigenous education. For example, only two of thirty-seven professional teaching standards directly relate to Indigenous peoples and issues, and while there is a specific cross-curriculum priority on Aboriginal and Torres Strait Islander cultures, this framework does not include what is important to Indigenous people in terms of rights such as sovereignty, self-governance, and economic independence (Lowe & Yunkaporta, 2013). This therefore leaves teachers with little guidance and support in implementing curriculum and pedagogies to improve the educational outcomes of Indigenous students and address issues of ignorance, racism, and stereotypes in the broader student population.

The invisibility of urban-based Indigenous students in the research became evident as the majority of studies were located in rural or remote areas. Where studies may have been located in urban areas, this was not mentioned and therefore the specific needs of urban-based students were not accounted for. This highlights a concerning gap in the literature given the increasing population of Indigenous families living in urban centres, often off-Country and away from extended family and cultural networks. This could be due to the distribution of students across many schools rather than concentrated in one or two locations, and so where Indigenous students are a small minority, teachers and schools are often unaware of the specific needs of Indigenous students and/or don't prioritise these.

Conclusion

In exploring the research question identified for the systematic review described here, there is more evidence linking engagement and support for Indigenous students to specific teaching practices than there is

in linking these to educational outcomes. This highlights the challenge of measuring effective teaching via student outcomes, which is misinformed considering the issues identified in standardised assessment regimes. This also ignores the role of the complex and nuanced factors that impact on student learning both within and beyond the school walls.

The importance of local context particularly given the diversity evident across Australian Indigenous communities is significant in this review and so poses another challenge in identifying quality teaching in Indigenous contexts. The current approach of standardised curriculum, teacher accreditation, and student assessment regimes that assume ‘one-size-fits-all’ (Godinho et al., 2017) undermines effective local programmes because they include local Aboriginal voices and actions. This then highlights the clear lack of a national vision that moves beyond standardisation to include perceptive policy directions that can account for both overarching principles in Indigenous education and local initiatives that meet local needs.

Finally, quality teaching is significantly affected by the quality of professional learning teachers receive in university and schools. Despite often good intentions, a number of factors contribute to an overall lack of knowledge, understanding, and skills in implementing Indigenous curriculum and pedagogies. These include the lack of a coherent curriculum narrative, limited guidance from AITSL and ACARA beyond the specific standards and curriculum priorities, professional learning often focused on standards and delivered by institutions rather than Aboriginal communities, and a clear disconnect between policy and practice and institution and school community. Until the big picture promises of the Alice Springs (Mparntwe) Education Declaration (2019, p. 4)—such as equity and excellence to produce confident, creative, lifelong learners who are active and informed community members—become the key drivers of policy and practice, then the merry-go-round of student underachievement will continue. Shamefully, the implications for Aboriginal and Torres Strait Islander families and communities are far more dire than for most Australians.

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10

Interrogating Indigenous Student Literacy Programs

Amanda Gutierrez, Kevin Lowe ,
and John Guenther 

Introduction

This chapter explores the dominance of particular styles of literacy programs designed for Aboriginal and Torres Strait Islander¹ children and teenagers that appear to be in favor with government funding bodies. It refers to the findings from a systematic review on literacy programs designed specifically to improve the literacy outcomes of Indigenous students (Gutierrez et al., 2019), some of which have received significant funding from the government. Trying to ‘fix’ literacy for Indigenous students has been a significant focus for the government for decades, with significant

¹ Australian Aboriginal and Torres Strait Islander peoples are two specific Indigenous groups located within Australia. When the term ‘Indigenous’ is used in this chapter, it refers to traditional peoples from these two groups.

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investment (Johnson et al., 2016). National testing by the government paints a grim picture, and the *Closing the Gap Report* (Department of Prime Minister and Cabinet [DPMC], 2019) suggests that high investment in trying to find the magic fix (Luke, 2012) has not been successful. In addition, Fogarty et al. (2018) argue that standardized testing has led to generic pedagogic approaches, the politicization of literacy learning for Indigenous students, and an over-reliance on metrics to compare literacy learning outcomes of Indigenous students with non-Indigenous students. They also emphasize the danger of relying on these metrics for widely implemented literacy programs, and the deficit discourses they encourage.

This chapter considers voices across Indigenous literacy and literacy discussions to consider how the ideas from these authors have been represented (or not) in the peer-reviewed publication of findings on the literacy programs. This helps to highlight what worked, what didn't work and why, and gaps between literacy research and the literacy programs. It asks why these gaps exist, what seems to be prioritized, and the implications of the gaps.

Methodology and Method

Critical Indigenous Methodology

The systematic review was a part of a larger project investigating issues in education for Indigenous students. It was important for the project to take a holistic perspective, which is linked to critical Indigenous methodology (see Chap. 2). In the context of literacy programs, this methodology has key links to the imperative in literacy literature and by literacy experts on the goals of literacy to improve social justice outcomes, access to power, recognition of literacies that recognize the multiplicity of identity, and

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multiplicity of text types. Authors such as Daniel (2011), Johnson et al. (2014), Lowe (2017), and Riley and Webster (2016) argue for valuing of diversity in literate experiences and opportunities for these diverse voices to have agency and control to represent their own experiences and cultures.

Positioning

It is particularly important in Critical Indigenous Methodology for the authors to disclose their position. The three authors in this chapter come from various backgrounds. Amanda is a non-Indigenous woman from an Anglo-Saxon background. Throughout her academic life and research, she has been committed to interrogating her ‘white’ position in classrooms and exploring literacy approaches that encourage critical engagement with texts and society to understand how literacy can be used to access and maintain power. Her research includes a critically reflexive interrogation of a critical literacy pedagogy implemented in a remote North-west WA school. Kevin is a Gubbi Gubbi man from southeast Queensland. He is a Scientia Indigenous Research Fellow at the University of New South Wales, working on research to develop a model of sustainable improvement in Aboriginal education. John’s position in this paper is as a non-Indigenous researcher. As such he is not intending to represent the views or standpoints of First Nations Peoples. Rather, his intention is to critically examine publicly available data in ways that challenge conventional wisdom about the role that education plays as a pathway to employment and economic prosperity. Having worked in remote contexts with First Nations Peoples he is reflexively conscious of his ontological alignment with hegemonies that continue to marginalize, discriminate, and ‘other’ First Nations Peoples (see also Guenther et al., 2013).

Method

This chapter utilizes a systematic review method to help categorize and synthesize peer-reviewed literature on literacy programs. The search was limited to Australian peer-reviewed articles from the years 2007–2017. We also included gray literature that was of relevance to the focus of the

systematic review. The database searches were conducted on reputable databases that specifically related to the field of Education. We identified 3315 initial results; duplicates were removed (638) using Endnote software and article abstracts were scanned using Covidence systematic review software. The filtering process for this stage of the review is included in Fig. 10.1. A critical appraisal assessment process was then applied to the remaining articles, which decreased the number of papers to 28 (see Fig. 10.1).

Review Question

This review was framed using the following question: “which literacy programs have demonstrated improvements to Aboriginal students’ literacy acquisition, and under what conditions did this occur?” In addition, the review used the following sub-questions to refine the focus:

- what literacy-specific programs have been identified as being successful with Aboriginal and Torres Strait Islander students?;
- what literacy-specific programs have been identified as not successful?;
- under what conditions is success evident?;
- and how is success being measured?

It was considerate of developing a culturally responsive methodology, in that it primarily focused on practical implementation of literacy programs, the quality of these programs and the associated training, rather than the student. This review considered the stakeholders for whom this area is of importance, such as teachers, schools, families, and policymakers.

The Literacy Context and Framework for Analysis

Political Approaches to Indigenous Literacies

Approaches to improving Indigenous students’ literacy outcomes are shrouded in politics and continuously used by both politicians and the media to leverage political debate. Government reports such as the

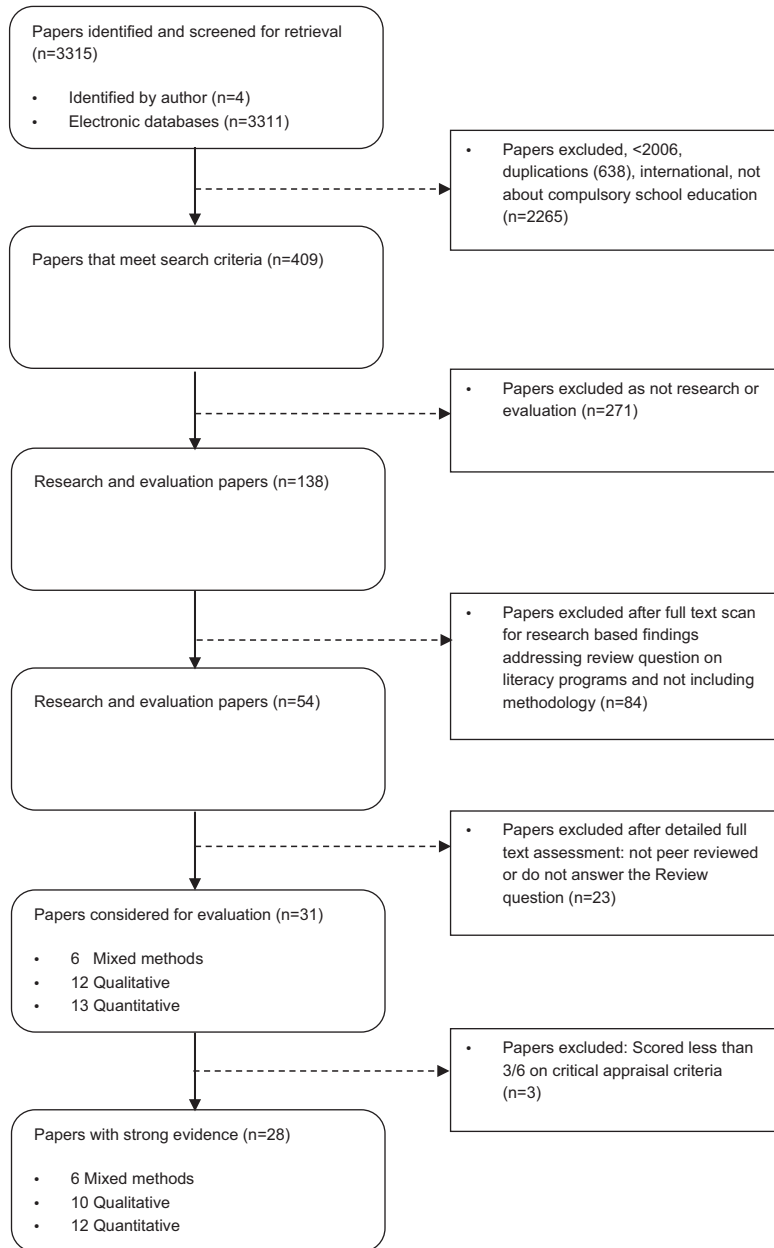


Fig. 10.1 PRISMA flow diagram representing inclusion and exclusion process. Note. Adapted from this figure, in “Indigenous student literacy outcomes in Australia: a systematic review of literacy programmes”, by A. Gutierrez, K. Lowe and John Guenther, 2019, *Asia-Pacific Journal of Teacher Education*, doi:10.1080/1359866X.2019.1700214, p. 4

Closing the Gap report (DPMC 2019) illustrate the overall lack of improvement in literacy outcomes for Indigenous students, stating that the government is not on target to meet its goal of halving the literacy gap. The kinds of literacy skills that are used as evidence in these reports link to those that are assessed in national testing such as NAPLAN (ACARA, 2017). Assessment like NAPLAN tends to use a definition of literacy that focuses on structural, formulaic, and mechanical skills of reading, writing, grammar, and spelling (Frawley & McLean-Davies, 2015). Frawley and McLean-Davies (2015) criticize the test as promoting “a particular set of skills and practices that do not easily correlate to students’ experiences (and needs) of literacy in their school, home and community” (p. 87). The regime of NAPLAN testing has increasingly influenced literacy practices over the last 10 years and is clearly evident in the focus of many of the literacy programs reported on in this paper such as the Direct Instruction and MultiLit programs.

Many authors working in the area of Indigenous literacies argue for a more developed understanding of the complex factors that come into play when implementing literacy pedagogies and policies for Indigenous students. For example, Prior (2013) and Wolgemuth et al. (2011) argue that influential factors such as attendance, health issues, lack of highly skilled literacy teachers, staff turnover, and limited understanding of Indigenous culture and learning styles need to be taken into consideration. They also argue that literacy intervention needs to be as early as possible (Wolgemuth et al., 2011; Prior, 2013), especially considering the gap in achievement widens between the ages of 3 and 7 (Klenowski, 2009). In addition, authors such as Fogarty et al. (2018) argue that both historically and currently literacy policies are done ‘to’ rather than ‘with’ Indigenous communities and “do not match with the linguistic, cultural and social contexts that young learners inhabit, particularly those living in remote communities” (p. 192).

Literacy Debates and Research: The Foundation for the Analysis Framework

Literacy has been a highly contested field for decades with multiple debates and literacy ‘crisis’/literacy ‘wars’ (Snyder, 2008) influencing mainstream delivery of literacy. Over the last thirty years the ebb and

flow of political and media attacks on literacy education has attempted to characterize literacy educators as “postmodern radicals”, which has “had repercussions for policy decisions and funding” (Snyder, 2008, p. 9). The various public debates most significantly represent nostalgic desires to return to traditional approaches to grammar, literature, and values education. There is a tendency to set up binaries, such as basic reading skills versus critical literacy skills (Howie, 2006) and phonics and traditional grammar versus whole language (Snyder, 2008). The findings from this review make clear that, as Snyder notes, these debates may have influenced policy and funding. Indigenous literacy programs including explicit phonics teaching feature heavily in many of the intervention literacy programs for Indigenous students.

Setting up binaries in literacy is counterproductive and fails to recognize the significant literacy work by researchers and educators over the last thirty years to represent the multiplicity and socially situated nature of literacy. There has been considerable work to develop balanced literacy models that take these factors into consideration. Some of these models have had a pronounced impact on literacy teaching in Australia (and other western nations). Of particular importance to this chapter are the four resources model (Freebody, 2007; Freebody & Luke, 1990; Luke, 2000) and various multiliteracies models (e.g. New London Group, 1996; Kress, 2000; Unsworth, 2008). These models reflect the historical evolution of definitions around literacy which have been influenced by systemic functional linguistics (Halliday & Matthiessen, 2004), genre theories (Badger & White, 2000; Hyon, 1996), critical literacies (Freebody, 2007; Green, 2006; Gutierrez, 2014; Luke, 2014, 2018), and multiliteracies.

The models promote a rounded approach to literacy including an interweaving focus on code-breaking (which incorporates close language study and practice such as phonics and language awareness); cultural influences on understanding texts, and increasing the kinds of texts students are familiar with; improving students’ understanding of textual features and genres; and developing a critical awareness of the ways texts work and the reader’s position in interpreting/acting on texts and the world. As a side note, we use the term ‘text’ to mean anything that can be interpreted, which ranges from written text on a page to a person’s facial expression when they see you. These can be interpreted or ‘read’ and have

meaning. These skills are not hierarchical; rather they can work in tandem with each other, and often do. One frustration of those who promote these balanced approaches is being told that children need ‘the basics’ before they can think critically about texts. The two can happen simultaneously, and this is particularly important for children who are trying to understand the world around them. Also, work in the area of multiliteracies encouraged thought around the multimodal nature of texts students use in and beyond the classroom and the literacy skills needed for the current and future multimodal literacy environment.

Using the information provided in the articles on each literacy program, and the four resources and multiliteracies theories as tools, each program was assessed for the range of literacies being tested and reported. This is represented in the results section. Note, the CAIPE (Creative Arts and Indigenous Parental Engagement) program did not include enough information about their approach to literacy and hence could not be categorized (The Song Room, 2012).

Results

Limitations applied to this systematic review included the need for publications to provide evidence of literacy outcomes for sizable cohorts or long-term case studies to provide clear evidence of positive growth in Aboriginal and Torres Strait Islander literacy outcomes. This meant other studies which discuss literacy approaches in small-scale case studies or individual teacher inquiry research projects were not included. While these studies reported on interesting findings, they were often short projects, did not include a clear comparison of literacy before and after the project, and had very small sample sizes. This is not to discount the value of these publications, as they often provide local and contextualized understandings of literacy projects.

Summary of the Literacy Programs

Table 10.1 below provides a brief summary of the focus and testing of each of the programs that were identified through the systematic review.

Table 10.1 Summary of literacy programs

Program	Location of participants	Sample age	Testing method	Brief overview of program
ABRACADABRA (7 documents)	NT, urban, remote, and very remote	Kinder-grade 3	GRADE K, PIPS-BLA	Interactive online literacy tool for students aged 4–8. Focuses on phonological and phoneme-grapheme awareness
Bilingual Education (6 documents)	NT, QLD, NSW, remote Aboriginal community	VET (ages 14–20), 1–2 and primary	Interviews, word awareness test, Martin and Pratt Non-word Reading Test	4 different projects focusing on areas such as code-switching, benefits of learning an Indigenous language, ICT and multiliteracies, and community-based stories in local languages
Direct Instruction (1 document)	Cape York, QLD	Primary	NAPLAN, PAT-R, DIBELS, Neale Analysis of Reading	DI is a highly structured, at times scripted, block approach to literacy. It focuses on the mechanics of language
MultiLit (1 document)	NSW urban	Years 5 and 6	Neale Analysis of Reading, Burt Word Test, SA spelling Test, Wheldall Assessment of Reading and Martin Pratt Nonword Reading Test	Aimed at students who are 2 years behind in reading in chronological age (low-progress readers). It is a skills-based program focusing on phonemic awareness, phonics, fluency, vocabulary, and comprehension

(continued)

Table 10.1 (continued)

Program	Location of participants	Sample age	Testing method	Brief overview of program
National Accelerated Literacy Program (6 documents)	NT	P-12	IL, TORCH, MAP, PM Benchmark Kit, GRADEK, attendance data, observation instruments	Aims to improve literacy standards for those who have fallen behind (usually 2 years). Uses written texts (mostly narrative genre) that are considered age appropriate and engaging. Based on Vygotsky's (1978) concept "zone of proximal development", students are heavily scaffolded through a series of routine reading and writing processes
Principal as Literacy Leader (PALL) (4 documents)	SA, QLD, NT— regional, rural, and remote	Primary	Principal evaluation reports, surveys, attendance data, case study site visits	Aimed to connect Indigenous leadership partners to principals in schools for shared leadership in developing place-based reading action plans. Focus was on rich oral language, phonological awareness, phonemic awareness, vocabulary, fluency, and comprehension

(continued)

Table 10.1 (continued)

Program	Location of participants	Sample age	Testing method	Brief overview of program
Learning to Read, Reading to Learn (2 documents)	NSW rural and urban	Years 7–10, K-9	NAPLAN, teacher tracking of growth via discourse analysis of writing assessment	Aims to develop weak students' abilities to read and write texts appropriate for their age, and to extend advanced students beyond expected levels. The program is theoretically underpinned by the principles of scaffolded learning, systemic functional linguistics, and genre approaches to writing. Teachers are trained in discourse analysis to analyze student writing
CAIPE (1 document)	QLD—urban and regional	Years 3,4, and 5	Survey, attendance, English grades, and NAPLAN results	Links to Indigenous community groups to deliver workshops on Indigenous arts, music, and culture, a creative community project and early reading program for home reading support

What the Literacy Programs Tested

Table 10.2 provides a snapshot of the kinds of literacy skills that were focused on in each of the programs. It highlights the privileging of some literacy skills over others.

Table 10.2 Using literacy theory to map skills taught in programs

Features of recognized literacy theories			
Program	Decoding (language mechanics)	Understanding context of texts and using a variety of texts	Critical understanding of texts, their purposes, and how/why they work in society
ABRA	✓	✓	Multiliteracies Despite being an ICT program, no focus on reading skills required in ICT programs and no discussion on multiliteracies skills
Bilingual	✓	✓	Code-switching identified issues with students' understanding the need to code-switch in specific contexts. No evidence of outcomes for this kind of literacy
DI	✓	✓	
MultilIT	✓	✓	
NALP	✓	✓	
PALL	✓	✓	
LR,RL	✓	✓	Suggests skills being taught, but no evidence of explicit testing of this kind of literacy

Note: Adapted from Table 7, in "Indigenous student literacy outcomes in Australia: a systematic review of literacy programmes", by A. Gutierrez, K. Lowe and John Guenther, 2019, *Asia-Pacific Journal of Teacher Education*, doi:10.1080/1359866X.2019.1700214, p. 16

Decoding of texts in relation to the mechanics of language and more mechanical aspects of comprehension strategies was evident in all programs. There was a dominance of testing on areas such as vocabulary, word recognition, phonemic awareness, and comprehension skills. Most programs provided evidence of students developing their skills in understanding structures and features of texts and purposes for texts (e.g. report is an informative text, narrative entertains, and other generic understandings). There is a clear absence of evidence across almost all programs in relation to critical understanding of how texts work, varied representations and interpretations of texts, and how and why texts have particular impacts on people, cultures, and events. There was also a significant gap in evidence around the teaching of multiliteracies skills.

What Does this Say About Programs that Focus on Indigenous Literacy Teaching?

It is important to credit the reported successful results of most of the programs in relation to the teaching of explicit phonemic, word awareness, and other early code-breaking literacy skills. There is also evidence provided illustrating success in the areas of generic and structural awareness in some of the highly scaffolded pedagogical models. What was disturbing, however, was the lack of evidence provided in the papers that demonstrates students are being encouraged to think critically about texts and their places in the world and also the gap in relation to developing understandings of multimodal texts. Texts can represent people and groups in ways that need to be questioned or exclude people and groups in a way that disempowers. People and groups can also use texts to challenge mis/representations. Luke (2018), a prominent and internationally regarded literacy researcher, highlights the importance of finding the right balance in literacy programs:

[I]n the zero-sum game of curriculum and schools—if you want to shape and apprentice a literate habitus that spells perfectly or memorises vocabulary, this can be done—but to the exclusion of other roles, practices or resources of the literate person. (Luke, 2018, p. 2)

Yes, these students need to be able to decode; having control of the dominant language is an important way to access power. However, we should not bypass opportunities to scaffold understandings in the other literacy practices.

If there is a continual insistence on designing Indigenous student literacy programs to solely focus on the basics and code-breaking, this reflects a deficit model of literacy in which the assumptions made about low socio-economic and marginalized students are that they can only handle basic literacy practices and skills (Luke, 2018). From this systematic review it appears most of the literacy programs that have been successful in receiving large government funding do focus heavily on code-breaking skills. One might ask why this is so, especially considering decades of research into literacy for disempowered youth (see, e.g., Griesharber et al., 2011; Luke et al., 2011) and research into Indigenous student schooling (e.g. see Fogarty et al., 2018; Guenther et al., 2013; Nakata et al., 2012) which argue for connection to lived realities and intellectually stimulating content that encourages critical thinking.

One reason governments, and those who own the intellectual property for these programs, may continue to promote these programs is because they often provide quantitative evidence of success in literacy. Governments like to see numbers and standardized testing which show impact. However, as shown in this chapter, most of the programs only provide quantitative evidence of literacy impact for a narrow definition of literacy. There only appears to be one program that provides evidence of other domains of literacy, being the *Reading to Learn: Learning to Read* program (Rose, 2011). Providing evidence of the impact of the other dimensions of literacy can be difficult. As Luke (2018) argues, the intention of the four resources model (particularly critical literacies) was not to “prescribe or normalize a specific teaching method or approach” (p. 4); hence it was not designed for applying standardized testing models. On the other hand, testing code-breaking and comprehension skills quantitatively on a large scale is simple in comparison, and a large number of tools already exist to assist with data collection.

Implications

That leaves us with the question of how can education systems, schools, and educators move forward? Some important points for consideration arose from the research assessed in the systematic review and other research in the field of literacy and Indigenous student education. It is emphasized that school-community partnerships (e.g. see Daniel, 2011; Lowe, 2017; and the Principals as Literacy Leaders with Indigenous Communities [PALLIC] publications, Johnson et al., 2014; Riley & Webster, 2016) are essential for programs focusing on Indigenous education. These publications highlight the multifaceted complexity of literacy learning, particularly in remote and rural communities. They also argue for contextualized literacy programs that take into account the local environments, events, and cultures, which are better understood if school leaders and staff have strong partnership connections to parents and the community. Specific examples of contextualized literacy programs and community partnerships do exist in publication and can provide a model for this work. For example, ‘The Honey Ant Readers’ (James, 2014) project created a partnership between local schools and communities to develop bilingual community stories for use in their classrooms. Utilizing partnerships to develop local literacies can assist in helping students to explore their identities and places as they relate to multiple other contexts, such as representations in national and global contexts.

The systematic review also highlighted other gaps due to a dominant focus on mechanical language skills in standardized testing. It is the authors’ opinion that policy advisors and politicians (as policymakers) should broaden their interpretation of ‘literacy’ and consider approaches that allow contextualized and balanced literacy curriculum. Rather than the continual tunnel vision on aspects of literacy that are easy to ‘test’, the focus instead should be on how to increase school and teacher agency and professionalism in making appropriate place-based research literacy decisions about their school context. As Luke (2018) suggests “high quality, high equity systems (Luke et al., 2013) like Ontario, are characterised by

high levels of teacher professionalism, and moderate levels of central prescription” (p. 9). This means providing opportunities for leaders and teachers to develop their skills in designing balanced place-based literacy programs and in implementing meaningful teacher/school/community-led research projects to inform whole school literacy planning. Also, it would be wise to take note of suggestions that will help move Indigenous literacy discourse away from deficit discourses, such as Fogarty et al.’s (2018) identification of the ‘strengths based approach’, which they argue can “provide a possible starting point for the development of literacy approaches that are more fully inclusive of community and local practices” (p. 193). A strengths-based approach focuses on empowering the individual by valuing their strengths, and viewing the acquisition of new skills as an opportunity to increase strengths, rather than viewing a lack in particular skills (often defined by the dominant culture) as being deficit.

Conclusion

In summary, the papers assessed in this systematic review provided an insight into the kinds of literacy programs that have been implemented with the aim of improving Indigenous literacy outcomes. The strongest finding from this assessment was the dominant focus in most programs on mechanical and structural (or code-breaking) aspects of language, with little consideration of other important literacy skills or contextual considerations. It is important for researchers and educators in the literacy and Indigenous fields of education to continue to emphasize the importance of balanced approaches to literacy that are context based. In addition, there is a need to fill the gaps in the research, beyond the early years, particularly senior secondary, and in spaces such as urban and Western Australian geographical contexts. It is also important to push for leaders and teachers to have training across all aspects of literacy, and research skills; time; and agency to become professional decision-makers who can build effective local partnerships and programs.

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11

What Next? Building on the Evidence of Teaching and Learning Mathematics for Aboriginal and Torres Strait Islander Students

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Introduction

As for all students, experiencing success when learning mathematics is empowering for Indigenous students. It can also contribute to more informed everyday decision-making, with the potential to disrupt

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intergenerational social and economic disadvantage (Council for the Australian Federation, 2007). Mathematics and numeracy education have been at the forefront of Australian education policy agendas and program initiatives for a number of years. The Australian government has expressed a desire for all students to learn mathematics and become numerate at school (Council Of Australian Governments [COAG], 2008). Policy documents such as the *Closing the Gap Report* (Department of Premier and Cabinet [DPMC], 2020) and the *Through Growth to Achievement Report* (Gonski et al., 2018) have identified numeracy as a priority among a range of efforts to address the issue of Indigenous disadvantage. *Closing the Gap* set specific targets on numeracy outcomes in 2008. The goal to “halve the gap” [note: not close it] for Indigenous children in numeracy was set to be achieved within a decade and a number of projects were initiated to explore and address key issues in schools with respect to the teaching and learning of mathematics. In the *Through Growth to Achievement Report*, Australia’s policy roadmap for achieving “educational excellence”, numeracy is cited multiple times as being a critical skill for all students to possess if Australia is to achieve an excellent and equitable education system (Gonski et al., 2018).

However, comparative analyses based on national and international assessments that measure mathematical literacy [numeracy] (e.g., NAPLAN; PISA; TIMSS¹) have consistently highlighted continuing disparities between Indigenous and non-Indigenous students (COAG, 2008; Thomson et al., 2014). The Prime Minister’s most recent *Closing the Gap Report* states that while the goal to “halve the gap” has, in itself, driven some improvements in student numeracy learning outcomes, much more work is required (DPMC, 2020). While there has been an increase of 4–12 percentage points in numeracy achievement, an estimated 17–19% of Aboriginal and Torres Strait Islander² learners are still performing below the Australian government’s national benchmark for numeracy achievement (DPMC, 2020). These figures come without sufficient explanation as to why a decade of government funding has

¹ NAPLAN: National Assessment Program Literacy And Numeracy; PISA: Programme for International Student Assessment; TIMSS: Trends in International Mathematics and Science Study

² In this chapter, we use the terms “Aboriginal and Torres Strait Islander” and “Indigenous” often interchangeably.

failed to deliver more significant improvements for Indigenous students' learning. What is clear is that policy imperatives alone cannot redress inequitable education outcomes for Indigenous students in mathematics.

By sharing insights generated via a systematic literature review, this chapter examines what has been learned through the research over a 12-year time frame (2006–2017). This body of work has created a useful evidence base, with clear implications for policy and practice. This evidence base must inform future funding and research directions in ways that align with updated policy targets. Understanding the nature and findings of mathematics education research that has been funded and reported on over the past decade is critical to identifying what those responsible for the education of Aboriginal and Torres Strait Islander students might do differently. The research question that drove the systematic literature review was: What are the strategies for teaching mathematics that could support Aboriginal and Torres Strait Islander learners? The research was undertaken by two of the authors (Miller & Armour, 2019). In total, 28 research papers were included in the analysis.

About the Systematic Literature Review Process

Central to this study was the goal to compile a detailed report of research exploring the teaching and learning of mathematics for Aboriginal and Torres Strait Islander learners, with an emphasis on ways to support positive outcomes in mathematics and numeracy. The presentation of the findings will illuminate (1) the research design of the studies undertaken, including the methodology, location, and participants of the study and (2) teaching strategies that have been identified and recommended as supporting positive outcomes in mathematics.

Researcher's Positionality

This chapter is written by two Indigenous (Armour and Shay) and two non-Indigenous researchers (Miller and Sawatzki) who are deeply

committed to educational equity and the sovereignty and self-determination of Aboriginal and Torres Strait Islander peoples. In undertaking this research, we take a strengths-based perspective, focusing on positive educational stories, rather than “gaps” or deficit perspectives. Drawing success stories based on evidence of the factors that contribute to them can provide informative examples to inspire future teaching and learning directions in diverse contexts. We also acknowledge that there is a long way to go with the foregrounding of Indigenous voices in the research. Although it is beyond the scope of this review to analyse who is undertaking the research, we observed that much of the current body of research overlooks the role of the voices of Indigenous people as researchers and research participants. Regardless, this focused review of the work that has been done to date tells an important story that can build improved research practices that are inclusive of all voices, particularly those voices that are typically marginalised.

Method

This study draws on a protocol-driven and quality-focused methodology (Bearman et al., 2012; Gough, 2007) that aligns with the collective systematic reviews undertaken in this book and other publications from the Aboriginal Voices Project (see Chaps. 1 and 2). Relevant literature was searched for and compiled across 10 databases (A+ Education, AEI-ATSI, EBSCO, ERIC, Family ATSI, Indigenous Australia database, Indigenous collection database, MathEduc, Scopus, Web of Science). There were four key research concepts, drawn from the research question, which were central to the systemised search: (1) identifying cultural groups; (2) numeracy and/or mathematics; (3) school type; and (4) teaching and learning. There was variation for each key research concept (keywords; subject headings) as defined by the thesaurus attached to each database. There were no defining parameters for publication dates. The publications that were retrieved from the initial search were then examined against the exclusion criteria developed as part of the protocol for the study.

As this study focuses only on empirical peer-reviewed publications, theoretical papers and reports were excluded. This means that the methodology employed has eliminated important theoretical work from Aboriginal and Torres Strait Islander authors in the field of mathematics education (e.g. Matthews et al., 2007). In addition, it is acknowledged that at times not all publications in the social sciences are accessible from databases. While a wide range of databases were utilised, it is recognised that some journals and conference papers were not captured. From the studies that were examined, the main participants were teachers and students. This means that we did not capture or study the important role that parents can have as educators in teaching and learning of mathematics (e.g. Ewing, 2014). Finally, search terms may have impacted on the specificity of the search. Mathematics education has a diverse set of concepts and terms for specific areas of mathematics which can yield very large and unmanageable data sets. We acknowledge that the use of different terms may have led to accessing additional studies.

Figure 11.1 displays a flow diagram of the methodology undertaken, including exclusion criteria (Moher et al., 2009).

The remaining papers were examined by the researchers to determine the relevance and potential contribution of the studies to the research question. Each paper was independently reviewed and summarised by the researchers to examine more closely the theoretical framework, research questions, sample size, participants, research design and methods, and main results of each paper. The ultimate criteria for inclusion was consensus among the research team that the paper be included in the study. Twenty-eight papers were initially considered appropriate for the systematic literature review.

Findings

The analysis of findings is reported in two parts: (1) research design including participants, location, and data collection methods and (2) identified teaching strategies that support Aboriginal and Torres Strait Islander learners.

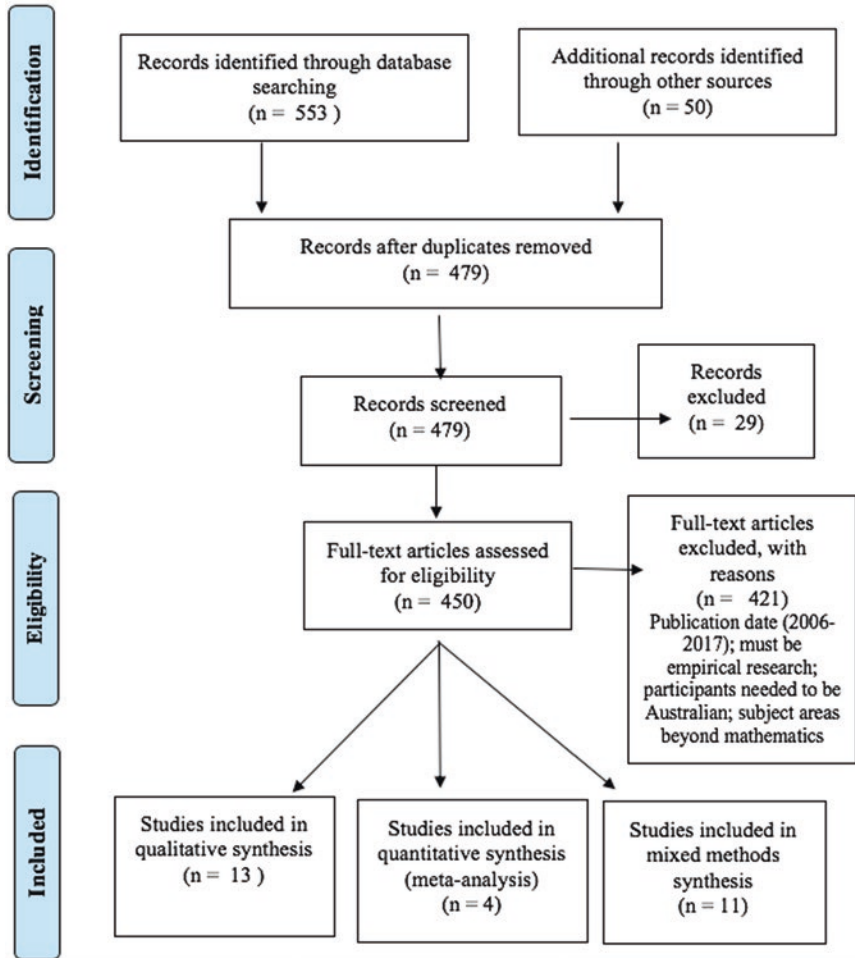


Fig. 11.1 PRISMA flow diagram representing inclusion and exclusion process

Understanding the Research Design

To understand the research designs that have been relied upon and whether these contribute findings that are representative of the broader population, each study's research design, participants, and data gathering techniques were examined. This analysis revealed that 13 studies used a

qualitative design (46.4% of papers); 11 studies adopted a mixed-methods approach (39.2% of papers); and four studies used a quantitative design (14.2% of papers). From this set of papers, there is a prevalence for qualitative research, capturing data from semi-structured interviews.

Table 11.1 presents the participants, research locations, research designs, and methods employed within each of the studies.

Where and with Whom?

The studies reviewed collected data from the following states: Queensland (35.7%), Western Australia (28.5%), New South Wales (17%), and Northern Territory (7.1%). In addition, three studies were multi-site, involving New South Wales and the Australian Capital Territory (see Papic, 2015; Papic et al., 2015) and New South Wales and the Northern Territory (Pegg & Graham, 2013). Two reported studies did not identify the location of their study (e.g. Jorgensen, 2016; Leder & Forgasz, 2012). Over half of the studies report about Queensland and Western Australia because a number of large projects were conducted in these states during this time including RoleM, Yumi Deadly, and Mathematics in the Kimberley. While the search yielded no research papers from Tasmania, South Australia, or Victoria, this does not mean that research was not undertaken in these jurisdictions during this time.

The contexts of the studies included both primary and secondary settings. Early childhood settings were under-represented in the data, with only two studies that examined the teaching and learning of mathematics with children from settings prior to formal schooling (e.g. Papic, 2015; Sarra & Ewing, 2014). One study was reported with a focus on students and teachers from a vocational education training setting (e.g. Ewing et al., 2014).

Across the studies reviewed, the participants included primary and secondary students, teachers, Indigenous teacher assistants (ITAs), principals, parents, and community members. Ten studies focused on multiple participant groups (see Table 11.1)—for example, ITAs, teachers, students, and parents/community members. This demonstrates that researchers sought to include voices from multiple participants to

Table 11.1 Participants, research locations, research designs, and methods employed for the studies

	Author (Year)	Population studies	Location	Research design	Data collection instruments
1	Armour et al. (2016)	20 primary school Indigenous teacher assistants	Queensland	Qualitative	Semi-structured interviews
2	Baturo et al. (2008)	7 primary and 4 secondary Indigenous teacher assistants	Queensland	Qualitative	Observations and informal interviews
3	Edmonds-Wathen (2014)	Senior Iwaidja language consultants, 5 caregivers (parents/grandparents) 8 children 5 teachers	Northern Territory	Qualitative	Task-based interviews
4	Edmonds-Wathen (2015)	5 teachers	Northern Territory	Qualitative	Semi-structured interviews
5	Ewing et al. (2014)	4 teachers/trainers 1 principal 5 students	Queensland	Mixed methods	Questionnaire surveys Semi-structured interviews
6	Grootenboer and Sullivan (2013)	56 Indigenous primary school students years 3–6	North-Western Australia	Quantitative	A task-based, one-on-one interview that focused on mathematical concepts related to measurement
7	Hurst and Sparrow (2012)	4 Aboriginal education officers	Western Australia	Qualitative	Semi-structured interviews
8	Jacob and McConney (2013)	35 primary school teachers	Western Australia	Mixed methods	Pre- and post-questionnaires Follow-up interviews Teacher interviews
9	Jorgensen (2015)	Teachers	Western Australia	Qualitative	Teacher interviews

10	Jorgensen (2016)	16 principals 1 deputy principal 29 teachers 6 Aboriginal education workers 25 teachers	Region not identified (10 remote schools from 1 state) North-Western Australia	Qualitative	Interviews
11	Jorgensen et al. (2013)			Mixed methods	Data were collected through a questionnaire ($n = 25$) that was completed by all the teachers in the participating schools at the start of the project, and video-taped mathematics lessons over the first 2 years of the study ($n = 16$)
12	Kidman et al. (2012)	3 Teacher aides (2 – Indigenous women; 1 man of African descent) 3 secondary teachers	Queensland	Qualitative	General classroom observations Specific classroom observations
13	Leder and Forgasz (2012)	89 Indigenous students from kindergarten—Year 2	Not identified—Part of the Make it Count project Queensland	Mixed methods	Semi-structured interviews Attitude survey—Multiple choice and open-ended items
14	McDonald et al. (2011)	40 primary school teachers	Queensland	Qualitative	Interviews
15	Miller (2015)	2 Year 3 students	Queensland	Mixed methods	Pre-test lesson observations interviews

(continued)

Table 11.1 (continued)

		New South Wales	Qualitative	Interviews and yarning sessions
16	Owens (2015)	New South Wales 16 teachers including principals 4 other staff 8 parents and elders 14 students	Qualitative	Interviews and yarning sessions
17	Papic (2015)	New South Wales Australian Capital Territory (1 centre)	Quantitative	One-on-one pre-test interview
18	Papic (2013)	New South Wales 15 Aboriginal children attending an Aboriginal Children's service 3 teachers	Case study	One-on-one student interview Documenting student learning Focus group session with teachers
19	Papic et al. (2015)	New South Wales Australian Capital Territory (1 centre) From 15 Australian Aboriginal Community Children's services, 66 early childhood educators, 255 children aged 4–5 years in the year prior to formal school (125 children in 2011 and 130 children in 2012)	Qualitative	Photos, observations, children's drawing, and teachers' documentation supported the progression data Teachers' planning documentation— Daybooks and planning documentation throughout the duration of implementation
20	Pegg and Graham (2013)	North Coast Region and the New England Region of New South Wales (NSW), and the Northern Territory 453 middle school Aboriginal and Torres Strait Islander students. There are also non-Indigenous students and comparison participants	Quantitative	Pre-post testing with students PATMath—NSW cohort NT department designed test—NT cohort

21	Sarra and Ewing (2014)	6 children aged 2–4 years old 1 principal	New South Wales	Mixed methods	Diagnostic task-based interviews Interview with principal Photographic evidence School observations Video-taped classroom lesson observations (32 lessons)
22	Sullivan et al. (2013)	16 primary school teachers	Western Australia	Qualitative	Interviews (in English and Kriol) Interviews
23	Treacy (2013)	47 Aboriginal students from kindergarten to Year 3	Western Australia	Quantitative	Pre- and post-intervention tests
24	Treacy et al. (2015)	18 Aboriginal students from Year 1 to Year 11	Western Australia	Qualitative	Student portfolios classroom observations teacher interviews
25	Warren and DeVries (2009)	7 teachers 125 students (14 Indigenous students) Seven prep schools	Queensland	Mixed methods	Pre-post mathematics test Pre-post mathematical language test
26	Warren and Miller (2013)	230 Indigenous students from Prep to Year 1	Queensland	Mixed methods	Pre-post mathematics test Pre-post mathematical language test
27	Warren and Miller (2016)	1738 students (660 Indigenous students) 21 teachers 19 Indigenous teacher assistants	Queensland	Mixed methods	Pre-post mathematics test Semi-structured interviews

(continued)

Table 11.1 (continued)

28	Warren et al. (2010) 17 teachers* 19 Indigenous teacher assistants 430 students (335 Indigenous students)	Queensland	Mixed methods	Teacher surveys Diagnostic mathematics tests for students Attitude surveys for students Observations of classroom practices and student responses Semi-structured interviews and teacher assistants Discussions with teachers Artefacts—Unit plans, lessons examples of student work
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NB: This table appears in Miller and Armour (2019)

understand the phenomena. Also apparent were different sample sizes, from a case study presenting two students' mathematical thinking (e.g. Miller, 2015) to a study which measured the pre- and post-test results of 660 Indigenous primary school students (e.g. Warren & Miller, 2016).

Data Collection Methods

The studies used a range of data gathering techniques. Interviews (e.g. semi-structured interviews and task-based interviews) were the preferred data collection strategy for qualitative and mixed-methods studies (79%). Studies also utilised video-taped classroom observations (e.g. Jorgensen et al., 2013; Sullivan et al., 2013); pre- and post-intervention testing (e.g. Pegg & Graham, 2013; Warren & Miller, 2013, 2016); and attitude surveys (e.g. Leder & Forgasz, 2012; Warren et al., 2010).

Understanding the Evidence for Teaching and Learning Mathematics

The review revealed three major thematic insights for those invested in improving mathematics education for Indigenous students: (1) there is a need for quality and evidence-based professional learning initiatives targeting educators of Indigenous students; (2) there is a need to recognise and empower ITAs; and (3) there is a need to promote research-informed teaching strategies that support Indigenous learners.

Professional Learning for Teachers

As mentioned earlier, government funding during this period prioritised projects that planned to build teacher capacity as a way of supporting Aboriginal and Torres Strait Islander learners in the area of mathematics. As such, the research findings centre on the voices of classroom teachers and their explanations of their professional learning experiences developing their mathematical and pedagogical content knowledge and changing their teaching practice. The projects reported across the literature

included: Make it Count; Mathematics in the Kimberley (MiK); RoleM (Representations, Oral language, and engagement in mathematics); and Yumi Deadly Maths. These studies adopted a whole-school approach where researchers worked alongside schools and communities to implement, design, and trial on-site professional learning. A range of pedagogical frameworks were drawn upon, designed, and implemented to promote effective teaching in mathematics. These studies shared in common a focus on deepening teachers' mathematical content knowledge (e.g. Papic, 2013; Papic, 2015; Papic et al., 2015; Sullivan et al., 2013; Warren et al., 2010; Warren & Miller, 2016) and improving their pedagogical content knowledge. These foci were attended to through the use of culturally rich resources, contextualising mathematics, providing hands-on learning experiences, having high expectations for students, designing lessons with multi-entry points, connecting mathematics to the community, using multiple representations, building mathematical language, encouraging group work, and targeted feedback strategies (e.g. Ewing et al., 2014; Grootenboer & Sullivan, 2013; Jacob & McConney, 2013; Jorgensen et al., 2013; McDonald et al., 2011; Papic, 2013; Pegg & Graham, 2013; Sarra & Ewing, 2014; Sullivan et al., 2013; Warren & Miller, 2016).

Many of the studies reported that through participating in professional learning, teachers gained increased knowledge and confidence to teach mathematics to Aboriginal and Torres Strait Islander learners. However, it is unclear how these positive changes impacted teacher practice and, by extension, students' affective view of mathematics and mathematics learning. Studies that attempted to explore this issue have included collected pre- and post-intervention student assessment data (e.g. Papic, 2013; Papic et al., 2015; Warren & Miller, 2016).

Empowering ITAs in Mathematics Classrooms

Indigenous teacher assistants have an important role in school communities, acting as a conduit between the school, families and caregivers, and the local community (MacGill, 2017; Price et al., 2019; Owens, 2015). Despite this, studies have shown that ITAs experience high levels of

racism, job insecurity, isolation, and limited development opportunities (MacGill, 2017; Price et al., 2019). Additionally, they are under-represented in educational research, with little being researched and reported about their perspectives and work practices. Within mathematics education, there is emerging literature that focuses on the role of the ITA and how professional learning can support their important work with students. Similar to, or in conjunction with teacher professional development programs, the focus on ITAs as research participants has aimed at enhancing their mathematical content knowledge and pedagogical content knowledge and helping them to confidently apply this knowledge to their interactions with students and within professional learning communities (Baturu et al., 2008; Hurst & Sparrow, 2012; Kidman et al., 2012; Warren et al., 2010). Our review of the literature found that by including ITAs as equal partners with teachers in professional learning, their professional identity and role in influencing students' mathematical learning became more strongly established (Armour et al., 2016; Baturu et al., 2008; Kidman et al., 2012; Warren et al., 2010). This can also improve partnerships between teachers and ITAs (Armour et al., 2016).

Research-Informed Teaching Practices That Support Indigenous Learners

A number of research-informed teaching practices were identified as supporting Indigenous learners. These included contextualising mathematics, valuing students' home language, teaching mathematics through structures and multiple representations, and personalising interventions.

Contextualising Mathematics for Students

Many studies highlighted the importance of contextualising mathematics so as to better engage Indigenous students and show them that mathematics is relevant and meaningful to their lives (Grootenboer & Sullivan, 2013; Jacob & McConney, 2013; Sarra & Ewing, 2014). Support is needed for teachers, particularly those working in contexts that are

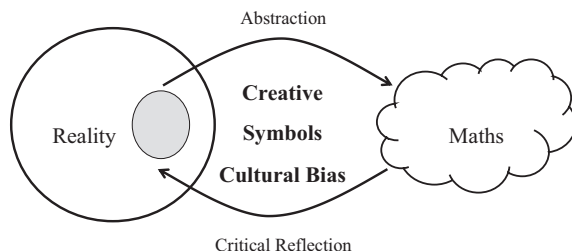


Fig. 11.2 Goompi model. Note. Goompi model appears as Fig. 1 in “Stories and symbols: Maths as storytelling” by C. Matthews, 2009, *Professional Voice* 6(3), p. 47

disparate to their personal life and educational experience, to get to know their students and appreciate their world views (Grootenboer & Sullivan, 2013; Jacob & McConney, 2013). Research indicates that many teachers seek support for more inclusive practices (Jorgensen et al., 2013). Culturally rich mathematics learning experiences and culturally responsive pedagogies have been found to positively impact students’ sense of self and identity as mathematics learners (Ewing et al., 2014; Sarra & Ewing, 2014). Studies conducted by Sarra and Ewing (2014) draw on the Goompi model³ (also known as the RAMR model—see Fig. 11.2) conceptualised by Professor Chris Matthews as a way for teachers to engage students with mathematics drawing on culturally responsive pedagogies. The use of culturally appropriate resources led to a reduction in the cultural, linguistic, and contextual barriers often associated with engaging Indigenous students in learning mathematics, with young learners being very engaged in the learning process (Sarra & Ewing, 2014). Using this model also gave teachers a framework to develop culturally rich resources and a learning environment that focused on developing a deep understanding of mathematics. Examples of pedagogical approaches developed from the Goompi model are *mathematics as story-telling* and *mathematics as dance* (see Matthews et al., 2007; Matthews, 2012; also visit the ATSIMA website <<https://atsimanational.ning.com/>>).

³ In previous publications, this model was named the RAMR model or cloud model. After personal correspondence with the author to seek permission to include the model, Professor Matthews requested the model to be presented with the new title.

Valuing Home Language

Several studies identified that the use of home language for Aboriginal and Torres Strait Islander students in mathematics classrooms can assist with overcoming barriers associated with the technical language of mathematics. Work by Edmonds-Wathen (2014, 2015) showed particular linguistic features that students have within their home vernacular that can be drawn upon to support mathematics teaching and learning. Key to this success is the process of mapping students' home language to mathematical terms in English (Edmonds-Wathen, 2014, 2015; Jacob & McConney, 2013; Jorgensen, 2015; Jorgensen et al., 2013; Treacy, 2013; Treacy et al., 2015). An obvious barrier to this occurring in classrooms is the teacher's own home language, particularly when the classroom teacher is non-Indigenous. Research suggests that by working closely with ITAs, teachers create opportunities for students to code-switch between languages (Jorgensen, 2015; Treacy, 2013).

In addition to adopting home language, studies identify using an oral language approach as a useful pedagogy for teaching and learning mathematics (e.g. McDonald et al., 2011; Warren & DeVries, 2009; Warren & Miller, 2016). These studies emphasise that this approach is more than using oral communication. Rather, an oral language approach involves speaking and listening, comprehending what is being said, understanding the vocabulary being used, and applying this to mathematical contexts. Teachers need to spend time mapping the language to mathematical representations and the hands-on materials to assist students to build their understanding (Warren & Miller, 2016). Importantly, "ensuring students have a range of experiences with the language of mathematics, and the mapping of this language onto Aboriginal English [or other Aboriginal and Torres Strait Islander languages] within contexts that are meaningful for these students" (Warren & Miller, 2013, p. 168) is important for building a deep understanding of mathematics.

Teaching Mathematics through Structures and Multiple Representations

Teaching with a focus on developing a deep understanding of mathematical structures has been shown to support positive outcomes for students (e.g. Jacob & McConney, 2013; Miller, 2015; Papic, 2013, 2015; Sarra & Ewing, 2014; Warren & Miller, 2016). In conjunction with this was a focus on multiple representations of mathematical structures, including using a hands-on approach to teaching mathematics (e.g. Warren & DeVries, 2009; Warren & Miller, 2013, 2016). Research has indicated that “the ability to see the structure of a mathematical concept brings about a relational understanding of the concept” (Warren & Miller, 2013, p. 154).

Personalised Interventions

A unique study by Pegg and Graham (2013) focused on an intervention where intensive instruction was used to support students outside of the classroom. QuickSmart is a commercial numeracy and literacy instructional program where students are withdrawn from the classroom for three thirty-minute sessions a week for a total of 30 weeks. The program focuses on developing student fluency with basic number facts. Indigenous teacher assistants are involved as instructors of the program. Pegg and Graham (2013) reported that there is evidence that this program can support students’ cognitive growth (up to two years) over the program. It is unclear whether this intervention impacts students’ mathematics learning more broadly.

Implications and Conclusion

This review identifies a number of related considerations for policymakers and practitioners. We construct these as a number of recommendations. Throughout this discussion, we consider the key policy frameworks and the affordance of each in terms of driving educational improvement for Aboriginal and Torres Strait Islander learners.

Continue to Fund Educational Research and Support more Inclusive Research Practices

Studies have shown that Indigenous students like maths and believe it is important to prepare them for adulthood (Leder & Forgasz, 2012). Yet while research has tended to focus on teachers' teaching, with some evidence about students' learning, there are few studies that consider the impact of the affective domain on Indigenous students' mathematics learning experiences. The incorporation of research that privileges the voices, aspirations, and imaginations of children and young people (Shay et al., 2019) is an area of research that needs further examination. There is also a lack of data that privileges the voices and lived experiences of Indigenous peoples and much of the funded research continues to be undertaken by predominantly non-Indigenous researchers (Shay, 2016). Future research needs to advocate for a balance of voices, including Indigenous conceptualised research and collaborative research that centres on capturing data sets of students' voices (Shay and Miller, in press). This is particularly important in under-represented groups such as Flexi schools and vocational education and training settings, since Indigenous students are over-represented in these alternative education contexts (Shay & Heck, 2015; Shay, 2018; Shay & Lampert, 2018).

Enact Inclusive Policy Practices

Closing the Gap failed to achieve its aim to halve the numeracy gap between Indigenous and non-Indigenous students within a decade (DPMC, 2020). The results of NAPLAN, a data source that is recognised as being flawed (Wu, 2011), continue to be the only means by which this numeracy benchmark is measured. Researchers have argued equity concerns for Indigenous students in using standardised assessments like this to measure, compare, and contrast Indigenous and non-Indigenous students' achievement, since these tests have been shown to contain items that are culturally and linguistically biased (Klenowski, 2009). While we are hopeful that the studies included in this review may have contributed to improved learning experiences for Indigenous students over the last

10 years, few studies were funded longitudinally or to measure specific policy aims as part of their research design.

Through Growth to Achievement states that numeracy skills are foundational to children's overall success in learning (Gonski et al., 2018), but does not acknowledge the evidence that Aboriginal and Torres Strait Islander students' culture and lived experiences are under-represented in what is taught in schools. The United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP) (United Nations, 2007), of which Australia is a signatory, specifies a number of rights in relation to education. Article 14, Number One, outlines:

Indigenous peoples have the right to establish and control their educational systems and institutions providing education in their own languages, in a manner appropriate to their cultural methods of teaching and learning. Article 14, Number Two states: *Indigenous individuals, particularly children, have the right to all levels and forms of education of the State without discrimination.*

Mathematics education research supports the notion that culture impacts on mathematics learning while the UNDRIP specifies that Indigenous peoples have the right to be provided education appropriate to their cultural methods of teaching and learning. The misconception that mathematics as a discipline can be value and culture free (Presmeg, 2007) has been challenged by many researchers who have shown that mathematics is a cultural product and drawing on a students' culture can enhance their learning in mathematics (e.g. Bishop, 1991; D'Ambrosio, 1985; Matthews, 2012; Sarra & Ewing, 2014). Further, while it has long been recognised that the nature of the mathematics curriculum can limit Indigenous students' mathematics learning, teaching practices are also problematic to the extent that they are not always inclusive (Howard, 1997; Howard & Perry, 2007). The evidence from this review shows that more could be done to develop curricula that supports the embedding of cultural knowledges and methods of teaching into classroom practice. We argue that there is significant potential to better align curriculum and learning experiences so as to make Indigenous learners' experiences in mathematics classrooms more meaningful (Aikenhead, 2001; Cooper et al., 2005).

Build and Sustain Relationships with Communities

The studies reviewed argued that building relationships with families and communities is essential to identifying opportunities for authentic, contextualised mathematics learning. School leaders need to provide opportunities for teachers to develop the knowledge, skills, and confidence to embed Aboriginal and Torres Strait Islanders' knowledge and perspectives into mathematics lessons. A possible way forward is the co-construction of learning experiences with community members, parents, and students (Armour & Miller, 2021). This vision aligns with a shift towards culturally responsive pedagogies in mathematics (Matthews, 2012; Sarra & Ewing, 2014).

Many of the studies reviewed identified that strong relationships between schools and communities are crucial to successful research and professional learning initiatives. The studies also tended to argue that it is necessary that local communities endorse evidence-based programs to ensure that local needs, priorities, and aspirations of and for Aboriginal and Torres Strait Islander learners are met (Shay and Miller in press). However, few researchers articulated how these connections can be fostered. Likewise, studies that advocated for community-generated teaching and learning practices and culturally responsive pedagogies did not articulate how these approaches can be planned for and implemented.

We note that the effects of many educational interventions are short-term and unsustainable (Howard & Perry, 2007). Many of the studies reviewed were conducted over one or two years with very little opportunity to investigate whether positive changes could be sustained long-term. With few longitudinal studies, little is known about the ongoing impact on teaching strategies and student learning for those participating in mathematics intervention programs. We argue that evidence and accountability measures should be in place to ensure excellent education practices for the school community are not only fully supported but sustained beyond project funding time frames (Shay & Miller, 2021).

Empower ITAs through Quality Professional Learning with their Teacher Colleagues

Systems and school leaders also need to support the empowerment of ITAs through quality professional learning. ITAs are imperative in supporting teacher colleagues as well as student learning. However, there have traditionally been unbalanced relationships between teachers and ITAs in terms of authority. Empowering ITAs and having them attend professional learning sessions can transform these relationships. As these relationships grow stronger, there are greater possibilities to have Aboriginal and Torres Strait Islanders' knowledge and perspectives represented in the classroom, generating pride and self-belief among ITAs of the crucial role they have in supporting improved mathematical outcomes for students (Baturo et al., 2007). We note that providing quality professional learning for ITAs can also contribute to the sustainability of educational interventions in schools that have a high turnover of teaching staff (Armour et al., 2016).

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12

Making a Difference in Educational Outcomes for Remote First Nations Students

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Introduction

The outcomes of education for Aboriginal and Torres Strait Islander (First Nations¹) students from remote communities have been cause for some concern. Over the last few decades, multiple reports have highlighted the gap in achievement results for remote students (Harris, 1990; Northern

¹We use the term “First Nations” here to refer to Australian Aboriginal and Torres Strait Islander people, except when quoting literature where “Indigenous” or a particular language group may be described.

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Territory Department of Education, 1999; Human Rights and Equal Opportunity Commission, 2000; Wilson, 2014; Northern Territory Department of Education, 1986; Watts & Gallacher, 1964). Each year in Australia, the Prime Minister's Closing the Gap Report (e.g. Prime Minister and Cabinet, 2020) highlights failures, deficits, and statistics that show little or no change in the results.

Against a bleak picture of limited evidence and a history of apparent failures, this systematic review sought to find out, based on recent credible research and evaluation evidence, what contributes to better outcomes for remote Aboriginal and Torres Strait Islander students. This chapter brings an earlier study (Guenther et al., 2019) which reported data from the period 2006 to 2017 up to date with evidence from the period 2010 to 2020.

Methodology

Review Question

The question used for this systematic review of the literature was “What factors contribute to educational outcomes for Indigenous students from remote communities?”

Factors were conceptualised as influencers of positive or negative outcomes, for example leadership, pedagogy, engagement, health-related factors, and parent participation. *Educational outcomes* were conceptualised as any positive or negative personal, academic, social product of schooling. They included educational attainment, citizenship, success or failure, identity, equity, well-being, and empowerment. *Students* were conceptualised as young people from pre-school (excluding childcare) through

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primary and secondary years of education. Their “schooling” was also understood in terms of participation in boarding schools, hostels, elementary, residential, or independent schools. The focus of this review was on remote *Australian Indigenous students*; those identified as Aboriginal and Torres Strait Islander students from remote and very remote parts of the nation. “*Remote*” students were understood in terms of geographic isolation, from homelands, or from what is sometimes referred to as a “red dirt” context. The review did not consider aspects of rural or regional education.

Databases and Publication Sources

The following electronic databases were searched using available library search tools: EBSCO Education Complete, A+ Education, Eric, ProQuest, PsycInfo, Scopus, and Web of Science. The author’s own EndNote library was searched as well.

Inclusion and Exclusion Criteria

The procedure for identifying articles and their critical appraisal follows the methods detailed by (Lowe et al., 2019) and in Chap. 2. Database searches supplemented by the lead author’s own reference library yielded 1153 articles (after duplicates were removed). Of these 57 came from the lead author’s own library and 1091 came from database searches. A total of 733 papers were excluded based on the inclusion/exclusion criteria listed above, leaving 420 papers. If the paper’s abstract or other bibliographic fields did not describe research, evaluation, or empirical evidence, it was excluded. Similarly, if they did not mention or describe a methodology, papers were filtered out of the included studies. If papers were not peer reviewed or did not respond to the review question, they were excluded. Application of filtering processes reduced the number of included articles from 420 to 53 (see Fig. 12.1).

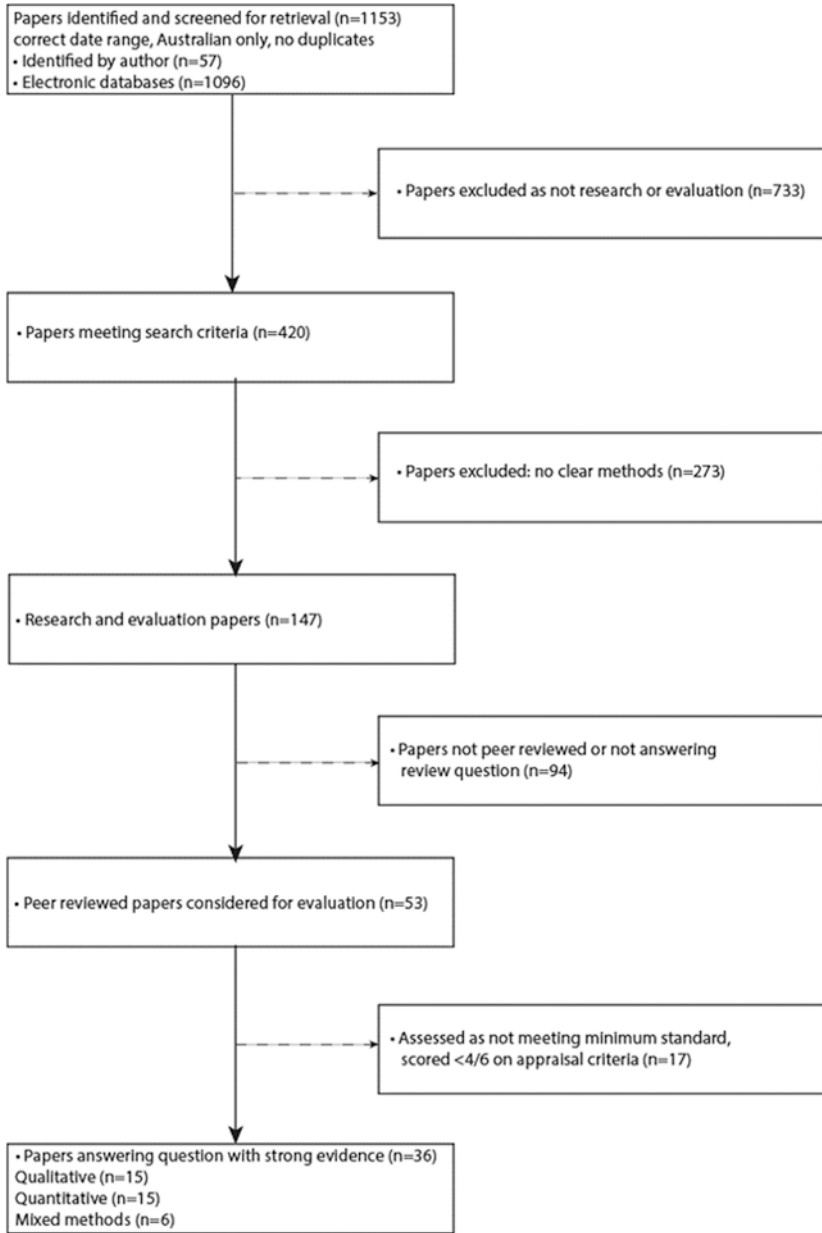


Fig. 12.1 PRISMA flow diagram representing inclusion and exclusion process

Critical Appraisal

For each paper, six criteria were selected. Criteria were chosen to reflect aspects of quality in qualitative, quantitative, and mixed-methods studies. In the review of each paper, a score of 1 was given if the criterion was fully met, 0.5 if the criterion was partially met and 0 if it was not met satisfactorily. Scores were calculated for each paper reviewed. Those that did not achieve a score of at least 4 out of a possible 6 were rejected. From the 53 papers, 17 were excluded, leaving 15 quantitative, 15 qualitative, and six mixed-methods papers.

Methodological Issues: Quantitative Studies

One of the major concerns with some quantitative studies that use standardised instruments is that they often fail to consider the philosophical standpoints of minority groups they are measuring. The assumptions about what defines “success” are challenged in papers by Guenther et al. (2014b), Guenther (2013), and Guenther et al. (2015). The other point to note, which arises from quantitative studies, is that analysis is often conducted where young people are currently engaged at school drawing on their results. This limitation is discussed in the studies on Abecedarian programs (Page et al., 2019; Wolgemuth et al., 2011) and the paper by Dunstan et al. (2017) on affective engagement.

Methodological Issues: Qualitative Studies

Qualitative methodologies are generally built on paradigms of subjective reality. In the case of the studies reviewed here, many of the studies explored peoples’ perceptions. It is noteworthy that in many cases, the perceptions of local people differ from those of non-locals (Guenther et al., 2015; Guenther et al., 2014a). Therefore, success can mean one thing to one group of people and another thing to others.

Findings and Discussion

Limitations of Papers Versus Theses

One feature of this review is the number of papers that are based on post-graduate studies or theses. Thirteen of the 36 papers were based on eight separate post-graduate studies. Seven papers were completed theses. Only one of the post-graduate studies (Wilson et al., 2018) was quantitative and two employed mixed methods (Nutton, 2013; Hunter, 2015). In most cases, these studies ranked highly in the critical appraisal assessments. One reason for the higher scores is the greater opportunity to fully explain methods, findings, and implications, together with ethical considerations and theory. Some of the journal articles scored lower, not because of the quality of the study, but because of the length constraints of journals or book chapters.

What Is Not Discussed in the Papers

There are several important issues that are not discussed in the papers. None of the papers discussed **policy issues** in any depth, though the paper on Direct Instruction implementation by Guenther and Osborne (2020) does raise concerns about the ethics of policy implementation that results in harm to students. Funding, somewhat related to policy, is discussed more as a contextual factor than a causal issue for outcomes. Research on the **impact of funding** for educational outcomes does not appear in the included papers. Systemic issues are seldom discussed in any detail in the papers. For example, no papers focus specifically on **workforce development**. Nor is there a paper that focuses on the impact of **leadership** or pre-service **teacher preparation**. These are all important issues that can have an impact on outcomes for students.

None of the papers discussed remote schooling outcomes as **employment or economic participation**. McInerney et al. (2012) and Guenther et al. (2014a) discuss aspirations for work, but not actual outcomes. Guenther et al., (2014b) draw a link from employment to educational outcomes, but do not make the connection the other way around. None

of the papers discussed schooling outcomes in terms of **language and culture**, though Guenther et al. (2015) point to community perceptions of success in terms of first language learning.

What Factors Contribute to Educational Outcomes for Indigenous Students from Remote Communities?

The outcomes of schooling are defined by the included papers in several ways. We found seven clusters of outcomes. Several papers describe outcomes in academic terms, often as **literacy and numeracy** (Guenther, 2013; Biddle & Cameron, 2012; Lietz et al., 2014). A second cluster relates to **well-being**, often discussed in terms of physical health such as hearing loss (Su et al., 2019) and related issues such as racism and “teasing” (Guenther et al., 2018). A third cluster describes **aspirations** emerging from and contributing to education, particularly related to motivations and choices (Parkes, 2013; Parkes et al., 2015; McInerney, 2012; McInerney et al., 2012). A fourth cluster described outcomes in terms of **equity**, including aspects of access, opportunity, and justice (Silburn et al., 2014). A fifth cluster points to **participation** as an outcome, with elements of attendance, engagement, and retention (Dunstan et al., 2017; Hewitt & Walter, 2014). A sixth cluster relates to **identities**, related to confidence and alignment (or misalignment) to ontological positions (Fogarty, 2010; Gaffney, 2013). Finally, a small cluster of outcomes is described as **relational**, particularly in terms of social networks (Mander, 2012; Biddle & Cameron, 2012). Outcomes then are many and varied. When referring to “success”, few papers specifically defined what this was (except e.g. Guenther et al., 2015), but implied was a combination of the above outcomes.

Moving now to factors that do not contribute substantially to positive outcomes, the papers raise questions about the following approaches. Firstly, **remoteness** is mostly not considered to influence outcomes. Several studies challenge this (for example Guenther, 2013; Guenther, 2015; Biddle et al., 2012; Hewitt & Walter, 2014), and while some studies did find correlations between remoteness and outcomes, some showed positive relationships, such as the study by Dunstan et al. (2017) which

showed remoteness was associated with greater affective engagement. Secondly, **programmatic solutions** to remote teaching or pedagogy are highly dependent on other factors. Even Abecedarian programs (Page et al., 2019; Wolgemuth et al., 2011), which were found to be effective in raising phonological awareness, were dependent on teacher attitudes and acceptance of professional learning. Some, such as Direct Instruction (Guenther & Osborne, 2020), fail to show improvement. Thirdly, of concern is the number of studies that report problems with **boarding schools** and programs (Guenther et al., 2016; Benveniste et al., 2015a, 2015b; Mander, 2012; O'Bryan, 2016; Hunter, 2015). The evidence presented here should raise concerns for policy advisors and funders, who invest significant resources into boarding. Fourthly, we can also be confident from this review that **standardised testing** in the form of NAPLAN will not demonstrate what works well for remote students where “vocabulary items tested may not have been within the life experiences of children in more remote areas” (McLeod et al., 2014, p. 129). Standardised testing at best masks the positive outcomes of students and at worst supports racist or assimilationist expectations of education (Guenther, 2015). Nevertheless, as Guenther and Osborne (2020) demonstrate in their paper on Direct Instruction, analysis of NAPLAN results can demonstrate the ineffectiveness of policies implemented in remote contexts. Fifthly, we can be confident that poverty or so-called **socio-economic disadvantage** is not in itself a barrier to outcomes (Guenther, 2013; Silburn et al., 2014). The studies that do show a link between low socio-economic status and academic performance reflect a range of complementary factors, such as access to resources or the products of other social challenges in communities such as violence, substance abuse, and the malaise associated with lost identities leading to mental illness. Finally, we can be confident that **attendance strategies** do not work (Guenther, 2013). There is no evidence in the papers we reviewed to demonstrate that they work to improve attendance and there is no evidence to show that they work to improve academic performance.

What then can we be confident about in determining the factors that do contribute positively to better outcomes for remote Aboriginal and Torres Strait Islander students?

Parent and community involvement emerged as a theme in many of the studies as a predictor of and indicator of success in remote schools. The evidence suggests that parents who can support their children at school will be more likely to see their children succeed at school (Guenther et al., 2014b; Hewitt & Walter, 2014). Community involvement in schooling implies a degree of ownership and suggests an alignment of values, identities, and knowledge systems. Coupled with this, the evidence points to the importance of **local** employment as local teachers, assistants, and other staff (Wolgemuth et al., 2011; Helmer et al., 2011). These local staff act as a bridge between the community, its families, and the school (Guenther et al., 2015). We noted earlier that attendance strategies do not work. However, when students are **engaged in learning** they learn, whether in or out of school, particularly where it is culturally responsive (Fogarty, 2010). Pedagogies that work with students and support their views of the world are fundamentally important to success (Gaffney, 2013). The attendance “problem” in remote schools points to disengagement and agency. If we accept that local understandings of success are important, then we must accept that local appropriate **curriculum and pedagogies**, fit for the context, are also important (Rioux et al., 2018). **First language literacy** is an important predictor of second (or English) language literacy success, demonstrating the need for bilingual programs in remote communities (Wilson et al., 2018). The **importance of history** was highlighted by Povey and Trudgett (2019). They argue “that listening to Aboriginal lived experiences and perceptions of western education from the past will better inform our engagement with the delivery of equitable educational opportunities for Aboriginal students in remote contexts in the future” (p. 75).

Finally, students’ **health and well-being** are important priorities for learning (Su et al., 2019; Franck et al., 2020). Without attention to these important factors, the mistakes of schooling reported earlier—particularly in the boarding school literature—will be repeated.

Significance for Policy

We noted earlier that issues of policy research did not emerge in the systematic review. However, many of the studies which we reviewed were a

direct result of policies implemented by governments over the last 10 years. “Closing the Gap” has dominated the landscape of remote education interventions in this ten-year period. The Closing the Gap targets and measures focus on a handful of issues related to schooling: attendance, early years learning, and Year 12 completion along with literacy and numeracy. Much of the focus of research then has been on understanding factors that will contribute to improvements in these areas. One of the important outcomes of the studies we examined is that many of the assumptions of policy advisors and politicians are challenged. The assumption that improved attendance is the causal factor that will lead to better outcomes is one myth that has largely been debunked. What we have found is a range of factors that would be a better focus of policy design and implementation. These factors include the need for local employment in schools, the role that health and well-being play in learner engagement, the significance of first language learning, of culturally responsive pedagogy and curriculum, and taking account of local histories. The outcomes that attention to these aspects of remote education might bring may not include higher attendance, but they will almost certainly include better engagement in learning, improvements in community capability, better governance, and more socially just education for remote communities.

There are some cautions in the findings too. The evidence of investment in programs that have increased harm to students is of concern. Boarding school initiatives, which have taken young people out of their communities as a solution to the Year 12 achievement gap, have been demonstrated to cause harm, and much of the research that is now coming into the public domain is concerned with how to ameliorate that failure. The failure of Direct Instruction is another cautionary finding, which points to ethical concerns when vested interests control policy agendas despite evidence showing failure.

Finally, the narrow focus on research directed at closing the gap outcomes leaves other issues such as Aboriginal workforce development, school leadership, governance, pre-service teacher preparation, teacher retention, post-school pathways, and issues related to curriculum and pedagogy largely untouched by research. Additionally, while we have seen some research on the nexus between health, well-being, housing, and

education in this systematic review, the challenge for policy implementers is to bring these together in practice. How do we, for example, ensure that health professionals and educators work together to address issues of hearing impairment, which was reported in one of the papers. And how do we ensure that education leads to economic benefit beyond the school years? It is one thing to have the evidence of what works and what does not work; it is another to act on it.

Conclusion

This systematic review has explored the factors contributing to outcomes for remote Aboriginal and Torres Strait Islander students. Across the many issues addressed in 36 included studies, the complexity of the context becomes apparent. Many of the studies examined reported on what fails to produce outcomes—or what produces negative outcomes. The review raises questions about whose outcomes matter. “Outcomes” to many commentators within the hegemonic power structures that define education policy are tightly configured around literacy, numeracy, retention, transition to higher education, and transition to jobs. There are many other outcomes that this review uncovers. These are clustered under headings of equity, health and well-being, aspirations, participation, identities, and relationships.

The factors that contribute to improved outcomes—particularly those defined from a community perspective—are focused on parent and community involvement, attention to health, well-being, local employment, appropriate curriculum, and pedagogies and strategies that build engagement in learning. While the review has uncovered much evidence, there remain important gaps in the literature. For example, the contributions of leadership, funding, policy, workforce development, and pre-service teacher preparation are largely ignored. The economic outcomes of remote education are also largely ignored, as are the outcomes of language and culture.

So what does this all mean for parents of students and teachers in remote schools? First and foremost, the findings show how important parent and community engagement is. Schools must therefore find ways

of including parents in supporting schools and community members more generally must be engaged in governance and teaching processes. Culture and context is also fundamentally important in remote schools. Learning needs to be relevant and culturally responsive—and there is good evidence from this review to show the importance of incorporating language and culture through teaching and learning both in and outside the classroom. The review also highlights the need to be vigilant against one-size-fits-all approaches which may work elsewhere, but do not work in remote contexts.

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13

What's the Problem Represented to Be? Analysing Indigenous Education Policy as Discourse

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Introduction

As many commentators have pointed out, deficit discourses continue to permeate Aboriginal¹ education, through policies, curriculum, pedagogy, and day-to-day practices of schooling (Burgess & Cavanagh, 2016; Buxton, 2017; Gillan et al., 2017; Lingard et al., 2012; Maxwell et al., 2018; Patrick & Moodie, 2016). This chapter examines how Aboriginal and Torres Strait Islander students, families, communities, and cultures are represented in key New South Wales (NSW) Government policy documents pertaining to Aboriginal education. It adopts a poststructural perspective that focuses on how problems and solutions are represented

¹ The authors note that terms broader than “Aboriginal” are often more appropriate in the Australian context, including “First Nations” and “Aboriginal and Torres Strait Islander peoples”. In this chapter, we have sought to maintain consistency with the New South Wales context and policies from that jurisdiction, which exclusively refer to “Aboriginal” education <https://education.nsw.gov.au/teaching-and-learning/aec>

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in the policies themselves (Bacchi & Goodwin, 2016). This approach scrutinises the unexamined ways of thinking lodged in policy documents and enables the identification of the underlying assumptions upon which these policies rely. We argue that what is written in these documents has important implications for Aboriginal students, families, and communities because they make particular ways of thinking appear sensible, logical, and even desirable (Heller, 1996).

In contrast to mainstream approaches to policy analysis, which tend to focus on policy development (who is involved in policymaking and what interests they bring to bear) or on policy enactment (how policies actually do or do not ‘solve’ particular problems), our approach to the NSW policies focused on the concepts, categories, classifications, and arguments in policy documents themselves in order to explore the reproduction of deficit discourses. We employ the term “discourse” in the poststructuralist, rather than linguistic, tradition (Bacchi, 2000; MacLure, 2003). Following Foucault, discourses are “*socially produced forms of knowledge that set limits upon what it is possible to think, write and speak about*” specific social practices (Bacchi & Goodwin, 2016, p. 35, emphasis in original). In this sense, we continue a tradition of critical analysis by problematising the discourses embedded in policies, reviews, and strategies aimed at addressing inequitable educational outcomes by illustrating how issues of Indigenous education are given particular meaning in policy texts in Australia in the twenty-first century.

Our discussion draws on examples from three key policy documents in New South Wales (NSW):

- The NSW whole-of-government OCHRE Plan (Aboriginal Affairs NSW, 2013)

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- The state Aboriginal Education Policy (AEP) (NSW Department of Education and Training, 2020)
- Aligned to OCHRE and the AEP, the Connected Communities strategy (CCS) (NSW Department of Education and Communities, 2012).

All of these policies can be understood as attempts to reform Aboriginal students' educational experiences in NSW. Their stated aims include such things as improving educational outcomes and well-being (NSW Department of Education and Training, 2020), strengthening Aboriginal identity, and supporting local decision-making (Aboriginal Affairs NSW, 2013). Yet, as we demonstrate, these otherwise worthy goals depend on problematising Aboriginal students and communities and shoring up the power of governments to reshape and control people's lives.

Poststructural Policy Analysis and the WPR Approach

Conventional policy analyses focus on the extent to which policies have “solved” the “problems” that have already been established. Another way of thinking about Indigenous education policy is to examine how policies themselves produce problems. Vass (2014), for example, has pointed to the failure of successive policies and reviews of the education of Aboriginal and Torres Strait Islander students to bring about greater improvements in achievement and experience. He argues that this is due in part to the problematic deficit discourse of Aboriginal and Torres Strait Islander peoples embedded in these policies. Using Critical Race Theory, he argues for reframing the “problem” to be addressed in policies as the racialised nature of Indigenous education and affairs in Australia.

Our policy analysis applied the “What's the problem represented to be” (known as WPR; see Bacchi, 2009) approach to identify and interrogate key *problematisations* in NSW Aboriginal education policies (Bacchi, 2009; Bacchi & Goodwin, 2016). Bacchi's WPR approach to policy analysis can assist with this kind of unpacking and reframing. WPR is a Foucauldian approach to policy analysis that questions the

common view that the role of governments is to solve problems that sit outside them, waiting to be addressed. Rather it considers how policies produce problems as *particular kinds of problems* (Bacchi & Goodwin, 2016, p. 14). As Bacchi (1999, p.21) explains, “every postulated ‘solution’ has built into it a particular representation of what the problem is, and it is these representations, and their implications, we need to discuss”.

WPR applies the following questions to the texts of specific policies:

1. What is the “problem” represented to be?
2. What deep-seated presuppositions or assumptions underlie this representation of the “problem” (*problem representation*)?
3. How has this representation of the “problem” come about?
4. What is left unproblematic in this problem representation? Where are the silences? Can the “problem” be thought about differently?
5. What effects are produced by this representation of the “problem”?
6. How and where has this representation of the “problem” produced, disseminated, and defended? And how can it be questioned, disputed, and disrupted? (from Bacchi, 2009, p. 2 and Bacchi & Goodwin, 2016, p. 20)

The WPR framework assists in uncovering deep-seated and underpinning assumptions in policies. Importantly, this does not refer to the assumptions, beliefs, or biases of policymakers or other stakeholders. Instead the interest is in the kinds of cultural premises and values that enable statements made in policy documents to “make sense”. Bacchi (2009, p. xv) provides the example of the 1972 Australian policy statement on Aboriginal health in the Northern Territory to illustrate the importance of standing back from policy statements and asking questions about the assumptions that lodge within them. The 1972 policy paper identified “semi-nomadic life” as an explanation for the high incidence of child mortality and, by implication, proposed solutions that involved Aboriginal people adopting to “settled lifestyles” (Bacchi, 2009, p. 6). Clearly, such a proposal rests on unstated, deep-seated assumptions about the value of Western societies and ways of living.

Bacchi (2009, p. 1) notes that “the way in which the ‘problem’ is represented carries all sorts of implications for how the issue is thought about

and for how the people involved are treated, and are evoked to think about themselves". For example, Goodwin (2011) argues that the way in which problems were represented in the Northern Territory Emergency Response (NTER) policy not only portrayed Aboriginal people and communities as irresponsible and unable to govern themselves but also produced a new spatial category in Australian policy: "prescribed communities" (i.e. those communities subject to the wide-ranging set of new policies). In turn, reflecting on what is not problematised—what is deemed to be unproblematic—raises perspectives that are silenced within policies. This kind of scrutiny provides the possibility of challenging representations that are deemed to be harmful or otherwise go unnoticed. Because this approach is based on a poststructural epistemology, there is also a requirement that policy analysts reflect on their own deeply held assumptions and presuppositions and question the realities their analyses produce.

The WPR Approach and Indigenous Education Policy

A growing number of researchers are using the WPR approach to analyse education policies. For example, Patrick and Moodie (2016) deployed WPR in their analysis of the history of Indigenous education policies in Australia. They found the approach fit for purpose, which was to explicate "the problematic, dominant, enduring representations of Aboriginal and Torres Strait Islander learners and education in policy over the past 50 years; identify the effects of these policy discourses; and present a case for a shift in thinking" (Patrick & Moodie, 2016, p. 170). Similarly, Maxwell et al. (2018) integrated Bacchi's (2009) WPR policy analysis with critical race theory to interrogate the positioning of Aboriginal and Torres Strait Islander histories and cultures as a cross-curriculum priority (CCP) in the Australian Curriculum. Here they were interested in investigating the "problem" for which the CCP was offered as a solution. They describe the utility of the WPR approach in the following way:

Above all, this approach facilitates recognition of the ‘Aboriginal and Torres Strait Islander education problem’ as an analytic one; that is, it does not exist as a problem independent of education policy, but rather is *represented* as problematic by policy authors who simultaneously present an intersection of policies purporting to offer solutions to priority problems (Maxwell et al., 2018, p. 163, emphasis added).

The *Final Report of the Northern Territory Indigenous Higher Education Policy Review* also draws on the WPR approach as a key part of the post-structural analysis undertaken. The authors, Street et al. (2018, p.11), state that: “We adopted WPR as a framework through which to analyse our findings as we wished to interrogate the rarely-considered assumptions that underpin Indigenous higher education policy creation, review and development”. In each of these examples, the WPR approach shifts analyses of education policies to the acts of governing (through these policies), rather than “the governed”, and in particular to their racialized (and racializing) acts of governing. This means policy writers and the policy text are being scrutinised rather than the subjects of the policies, which in this case are Aboriginal peoples and their cultures. In our case, the WPR approach enabled us to identify and interrogate the key problematisations that appear in NSW Aboriginal education policies and to reflect on aspects of racialised governing that may otherwise be taken for granted. It led us to question the deployment of concepts such as “community capacity building”, “equal partnerships”, and “educational success” and ask new questions about governing through responsibilisation and the promotion of “language and culture”. The analysis thus shows the workings of deficit discourses or, more accurately, the “*deficit-isation*” of Aboriginal students, communities, and culture through policy.

Racialised Governing through NSW Aboriginal Education Policies

We applied the WPR approach to three NSW Government texts associated with Aboriginal education. These three policy documents (using the various nomenclatures of “Plan”, “Policy”, and “Strategy”) cascade from

the whole-of-government OCHRE Plan to the agency-specific Department of Education Aboriginal Education Policy and then to one very specific Department of Education strategy. In detail, these are:

1. The OCHRE Plan. This is the overarching NSW state government policy, introduced in 2011 “to improve education and employment outcomes for Aboriginal people in NSW” and to enhance service accountability to support these goals (Aboriginal Affairs NSW, 2013, p. 7). It was designed to set the context and tone for all other government policies in this area.
2. The Aboriginal Education Policy, which sits within a broader policy framework that became OCHRE, focuses specifically on education and providing direct guidelines and strategies to schools, teachers, and communities. The stated goal of this policy is that all staff and students should develop greater knowledge of Aboriginal peoples, histories, and cultures while simultaneously improving Aboriginal student outcomes (NSW Department of Education and Training, 2020). Consulting with Aboriginal communities is seen as central to achieving these aims.
3. The Connected Communities strategy, which sits within, but independent from the state AEP Policy (and now aligned to OCHRE), is currently a flagship strategy in Aboriginal education and attempts a holistic approach to connecting Aboriginal and non-Aboriginal families and communities to their local schools. Fifteen schools in ten communities consisting of significant numbers of Aboriginal students and high levels of disadvantage participate in the strategy and considerable financial and human resources are committed to improving student outcomes in these schools (NSW Department of Education and Communities, 2012).

These policies were examined to identify recurring themes about the positioning of Aboriginal students and their families, their knowledge, their educative capacity, and their educational trajectories. This analysis identifies two problem areas of how “subjects” are made—in this case, the Aboriginal student and the Aboriginal community and a further three problems which investigate how “objects” are made, in this case,

“governing through the construct of success”, “governing through language and culture”, and “government as ‘saviour’” of infantilised and deficit-ised Aboriginal communities.

Problematism Students and Families, Exonerating Schools and Institutions

By examining the policy texts and asking the WPR questions, underlying assumptions about what and who the problem is, begin to emerge. For example, early in the OCHRE Plan, the statement, “By laying the stepping stones leading from school to work early on, students will be able to see the value of school more clearly...” (p. 4), *implies* that Aboriginal students do not see a value in education and, by implication, do not plan for their future economic participation. Central to the policy representation is a view that Aboriginal students and their errant “attitudes” are the problem that education policy needs to address. In addition, in this representation, it is assumed that schools are best placed to support the social inclusion of children and young people, a view that can be contrasted with alternative claims, for example, that inclusion in a society premised on Indigenous elimination is better understood as assimilation (Hickling-Hudson & Ahlquist, 2003).

The OCHRE Strategy (Aboriginal Affairs NSW, 2013, p.16) implicitly casts the Aboriginal student as lacking in their engagement with their schooling or commitment to learning, in turn representing the student as the problem. Similarly, in the AEP,

- Strategy 1.6.2 states its purpose is to “Engage and motivate Aboriginal students for successful participation in education”.
- Strategy 1.6.3 states its purpose is to “Encourage Aboriginal students to pursue personal excellence, including a commitment to learning” (NSW Department of Education and Training, 2020).

In the Connected Communities strategy, one of the goals is to ensure that “Aboriginal families and community members are actively engaged

in the school” (NSW Department of Education and Communities, 2012, p. 4). These statements all work on the assumption that Aboriginal students are not engaged, motivated, or committed to their own success in education. By being placed in the subject position in the statements, students and families are implicitly attributed responsibility for this problem. Alternative representations of the “problem” could be constructed in ways that attribute responsibility to schools and the education systems.

In the Connected Communities strategy, Aboriginal children are represented as developmentally delayed: “Aboriginal children are increasingly developmentally ready to benefit from schooling – in their physical health, social competence, emotional maturity, language and cognitive skills and communication” (NSW Department of Education and Communities, 2012, p. 3). The assumption is that Aboriginal children may be “behind” when they commence school, positioning them within a deficit discourse from the beginning of their education. It also produces a non-Indigenous standard of developmental readiness against which they are measured and found to be lacking. This has in the past (and sometimes still does) determined which class level Aboriginal children are placed in, and they often remain at this level regardless of progress. This problem representation has its roots in earlier discourses about Aboriginal children’s inferior capabilities in the Western system, and the production of annual statistical reports on “developmental” measures reinforces this positioning (Gillan et al., 2017). This positioning is one of the ways Aboriginal children can become locked into underachievement.

Like the problematisation of Aboriginal students as lacking—in values, in motivation, in commitment, in development—Aboriginal families and communities are also problematised. In the OCHRE policy, Aboriginal communities are represented as in need of empowerment: “*Local Decision Making* will empower Aboriginal communities to take responsibility for their own futures. It will drive greater capacity amongst local leaders and organisations and foster stronger Aboriginal communities that make decisions around government service delivery” (Aboriginal Affairs NSW, 2013, p. 4, emphasis in original). Throughout the documents there are 24 references to the need for improved Indigenous “community capacity” as the “solution”, implying that the problem is a *lack of capacity* to “take responsibility” or “foster strong Aboriginal

communities". For example, in Section 1.7 of the Aboriginal Education Policy, "Working together to build capacity within Aboriginal Communities", it is stated that: "The department will work with other government agencies and non-government organisations to build capacity within Aboriginal communities to ensure that Aboriginal people participate as equal partners in education" (NSW Department of Education and Training, 2020, p. 4). Despite this seemingly democratic rhetoric, the statement again represents the problem as Aboriginal *lack of capacity* to participate as equal partners.

By proposing the building of Aboriginal community capacity as a "solution" to integrate more broadly into the economy, Aboriginal communities who fail to actively participate are cast as problematic. Within this construct, the power exerted over Aboriginal people through educational, social, and economic political exclusion is left unproblematised. Instead these policies construct the problem with an underpinning view that it is Aboriginal people rather than the government and its agencies who are the ones lacking capacity, unable to establish productive relationships, and unwilling to engage in the economy (Lea et al., 2011; Pholi et al., 2009). In contrast, Maxwell et al., (2018) has identified how neo-liberal discourses have deeply infected policy. Indeed, there is a global and vociferous critique of neo-liberalism's assumptions that economic, social, and cultural empowerment of marginalised communities is the precursor to participation in the economy/state (Franklin et al., 2004).

In a number of statements (1.1.6, 1.2.4, 1.3.3), the Aboriginal Education Policy reinforces the importance of working in partnership with Aboriginal families and communities. Inherent in these statements is an assumption that partnership building is possible *without* tackling systemic change in school culture and structures. Similarly, there is no recognition that partnership requires a relationship based on trust and reciprocity (Lowe & Howard, 2010). While evidence suggests that authentically developed partnerships can be a powerful tool in breaking the cycle of school and community mistrust and resistance (Lonsdale, 2011; Lowe, 2017), other evidence has identified the negative impact on teachers and Aboriginal families alike when this social capital project is poorly developed or seen to be an attempt to "control" local resistance to poor policy articulation and marginalisation (Hayes et al., 2009; Muller,

2012; Woodrow et al., 2016; Stacey, 2017). Therefore, it is difficult to imagine the possibility of equality in these partnerships until structural, historical, and relational issues are at least acknowledged or until redress is attempted by a purposeful reconciliation initiated by the institution.

What is also left unproblematised in the representations of “improved” Indigenous/non-Indigenous community and government relationships is the trend in the last two decades of concerted efforts by governments to take control of every aspect of Aboriginal lives (e.g. in efforts to “Close the Gap” and the NTER) which has actively worked against Aboriginal peoples and communities’ efforts to initiate and implement their own solutions (Lovell, 2014). Often, the solutions suggested by Aboriginal communities have a strong emphasis on cultural integrity, identity, and consensus governance, yet these values and modes of operation are often deemed by governments to be non-essential and counterproductive or do not meet the criterion for funding. Such policy positions are hardly conducive to good relationship building.

Policy and the Contemporary Colonial Project

The OCHRE Plan (Aboriginal Affairs NSW, 2013) acknowledges the consequences of histories of colonisation have caused in Aboriginal communities. In particular, the policy identifies that there is a “need for healing” in Aboriginal communities, to overcome “inter-generational trauma and loss ... in order to achieve real change and improve the everyday lives of Aboriginal people” (Aboriginal Affairs NSW, 2013, p. 11). OCHRE accepts the potency of community trauma, which it acknowledged is manifest across all levels and generations, but positions communities as traumatised and students as culturally bereft. This works to simultaneously acknowledge and reinforce harmful legacies, for example:

the consequences of successive government policies have been powerlessness and a loss of control over their own lives; a loss of purpose and an inability to fulfil responsibilities for themselves, their families and their community; the undermining of community leadership and decision mak-

ing structures; and the continuing devaluing of their culture and identity. (Aboriginal Affairs NSW, 2013, p. 11)

Given that communities are positioned in the document as being unable to support their own success, how then are teachers tasked with the responsibility to educate Aboriginal students, placed within these policies? While teachers are entrusted with the task of “educating” these students, there is little emphasis given to what these teachers should do or not do. The OCHRE plan has no references to the role, training, or needs of the classroom teacher. The AEP and the CCS each have minimal focus on teachers, with the AEP (NSW Department of Education and Training, 2020) listing a series of six professional attributes and skills seen to affect the learning outcomes of Aboriginal students in Section 1.6 and the CCS one bullet point (NSW Department of Education and Communities, 2012, p. 2). By contrast it is significant that many teachers have limited pedagogic skills that address the specific needs of students, have limited knowledge about Aboriginal students and their communities, and have even less epistemic knowledge about the place and importance of local culture and ontological connectedness to country (Lloyd et al., 2015; Fogarty & Schwab, 2012).

The policies contained limited ideas of what counts as Indigenous student success. While the AEP suggests success will be achieved through a commitment “to improving the educational outcomes and wellbeing of Aboriginal and Torres Strait Islander students so that they will excel and achieve in every aspect of their education” (2020, Section 1.1.1). Similarly, the singular reference in the CCS asserts that: “Aboriginal students [will] increasingly achieve at or above national minimum standards and overall levels of literacy and numeracy achievement are improving” as a consequence of the enactment of this policy (2011, p. 4). Although there are few statements about Aboriginal student success, this does not mean that these policies are not invested in particular outcomes for Aboriginal students. In fact, these policies represent “success” not in educational terms but within a particular discourse of economic success that is supported through cultural well-being (Aboriginal Affairs NSW, 2013, pp. 11–12). The OCHRE plan in particular sees student and community success through the prism of economic engagement. Here, students and their

families are identified as being incapable of shifting the trajectory of socio-political disaffection as a consequence of being unable to overcome “inter-generational trauma and loss” (Aboriginal Affairs NSW, 2013, p. 11) and consequently are economically marginalised.

The OCHRE plan aims “to support strong Aboriginal communities in which Aboriginal people actively influence and fully participate in social, economic and cultural life” to “grow local Aboriginal leaders” and for communities “capacity to drive their own solutions” and “focus on creating opportunities for economic empowerment” (2013, p. 5). This flows from the OCHRE Ministerial foreword, which suggests the purpose of schooling involves, “laying the stepping stones from school to work” and helping students to “see the value of school more clearly” and providing opportunities for “mentoring and incentives” that “will ensure our future Aboriginal leaders stay on track to employment and fulfilling lives” (Aboriginal Affairs NSW, 2013, p. 4). One narrative sitting within the policy is that students’ access to an Aboriginal language and culture program will reduce the impact of intergenerational trauma. However, this is seen not as an end within itself but is rather an attempt to reduce resistance to school and open “pathways to opportunity” for “economic participation” strengthening “economic independence” (Aboriginal Affairs NSW, 2013, p. 17) and, implicitly, to reduce dependence on government welfare.

Governing through Language and Culture

If the economy is the driving priority of policy, then how do the highly visible yet contentious issues of language and cultural revival sit within these policies? It is clear from the outset that all three policies have a particular way of representing Aboriginal peoples’ cultural aspirations, their fears for the survival of their languages and cultural knowledge, and the impact of the loss of this knowledge on their ontological survival (Altman & Fogarty, 2010; Lowe, 2011). These are issues of deep disquiet in communities. Government has long known about Aboriginal aspirations for the revival and use of local Aboriginal languages. With many reports noting the depth of these hopes (Hoskins et al., 2000; Marmion et al., 2014).

Consequently, there should be little surprise that each policy acknowledged the importance of cultural and/or language programs to students' sense of identity and consequent engagement with school. The AEP (NSW Department of Education and Training, 2020, 1.1.5) notes that "The strength, diversity, ownership and richness of Aboriginal cultures and Custodianship of Country are respected, valued and promoted", while one of the CCS key deliverables is that "Aboriginal students and communities report that the school values their identity, culture, goals and aspirations" (2012, p. 4). Yet neither policy includes a strategy to achieve these aims. OCHRE goes a step further stating that "revitalising language and culture will help motivate younger and older Aboriginal people to learn traditional languages, both within their communities and in schools" (Aboriginal Affairs, NSW, 2013, p. 4). As per the Minister's foreword: "if we place culture and language at the heart of their journey and if we focus on education, employment and transparent service delivery, we will make faster progress towards our goal" (Aboriginal Affairs, NSW, 2013, p. 4). All three policies move effortlessly from acknowledging the importance of language and culture to Aboriginal communities, student identity, and well-being to an overarching presumption that such goals are about facilitating student integration into the economy.

Government as Saviour

Applying the WPR analytical strategy enables us to see how these policies have subtly shifted an explicit discourse of rights and well-being (Aboriginal Affairs NSW, 2013, p. 18; NSW Department of Education and Training, 2008, 1.1.1) to one that legitimates policy action as the "logical" response to "problems" of student and community deficit, disempowerment, disability, and ignorance. Aboriginal people are framed through a narrative of weakness, un-wellness, and incapacity and, as a consequence, in need of a saviour who understands and succours their needs by leading them to a future of hope, cultural revival inclusion, education, and employment. In the policy documents we have analysed, this is clearly seen as a role for government. The clearest articulation of this role is seen in the way that OCHRE represents "healing" as a response

to powerlessness (Aboriginal Affairs NSW, 2013, p. 11). Here we see representations of Indigenous community capacity paralysed by history and lack of control. This theme of “government as saviour” positions the state as being the only means by which Aboriginal communities can achieve change, however slow, and then only change which is understood to economic participation and financial success.

Conclusions

Our policy analysis shows how Aboriginal students are rendered problematic in documents ostensibly intended to improve their outcomes. Students and communities are subtly but evidently represented as being incapable, too damaged, or unwilling to affect the changes needed to succeed at school. Such positioning of students, their families, and their communities has the discursive effect of making them solely responsible for the totality of their academic outcomes and schooling experiences. Conversely, schools, teachers, and the education system are not represented as responsible for the problem. What was identified in the policy texts is that student underachievement is assumed to be the outcome of parental socio-cultural and economic dysfunctionality, and those students and families, as the “subjects of policy” as culturally adrift, bereft of real knowledge and language. Thus, having an Indigenous identity is situated within a deficit discourse of failure. The effect of these propositions is that success at school and in the economy is incompatible with Indigenous identity. Consequently, the inherent weaknesses of errant communities require the guidance of government to secure their salvation through enabling economic participation. Within these policy documents, the economy permeates all aspects of social, political, and cultural activities and a failure to engage with it is read as a failure or unwillingness to associate with the state itself.

Our critique identifies the insidious ways in which the discursive construction of government as the saviour of Aboriginal communities appears to seem both logical and desirable. We suggest this may be because “policies” are regarded so neutrally, even though they are deeply implicated in furthering the state’s attempts to control Aboriginal people. Ultimately,

this discourse positions government as managers of Aboriginal lives and communities, re-constructing their identities through government sponsored language and cultural programs, all for the purpose of bringing about economic integration and social assimilation.

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14

The Foundations Required for First Nations Education in Australia

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Introduction

In the earlier chapters of this volume, we read about hundreds of examples of empirical evidence that, combined, provide ample justification for policy action. There is evidence on the impact of racism, community engagement, professional learning, leadership, and curriculum on

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teaching and learning for Aboriginal students across Australia. The evidence of statistics repeatedly shows ongoing disparities between First Nations and non-Indigenous learners (Department of Premier & Cabinet [DPMC], 2020). Educational disparities and First Nations powerlessness originate from British invasion and denial of Indigenous humanity to take possession of Australia under the legal doctrine of *terra nullius* (land belonging to no one). Massacre, Eurocentrism, ignorance, and epistemicide are settler tools to erase Indigenous existences and replace them with settler grammars (Calderon, 2014; de Sousa Santos, 2007) that keep in place Indigenous dependency and underachievement. Previous chapters examine teachers' lack of awareness of Indigenous ability throughout history and the failure of reform attempts.

Equally, we read about evidence of effective pedagogy, of strategies that work to improve literacy and numeracy, and of factors that contribute to better outcomes for remote students. With all this evidence, why then do we still have “gaps” that need closing and numerous problems that seem to defy resolution? Part of the answer is that the challenges for schools and educators go beyond the school gate. Another part of the answer lies in the failure of researchers to translate knowledge into practice and policy. A third answer lies embedded in the philosophical and theoretical assumptions that underpin ideas about what outcomes are valued in education, research, and policy. A misalignment of these assumptions increases the likelihood that evidence—even high-quality evidence—will be ignored, selectively interpreted, or redirected in policy and practice. In part the issue centres less on the evidence itself but on the positionality of stakeholders involved in research, policy, and practice. In this chapter, we explore three foundational assumptions that underpin knowledge translation from research to policy and practice. We then synthesise the argument from proposition, to premise, to truth and its application with an understanding that “all educational propositions and policies have some normative—some might say ideological—framing or foundation” (Bridges, 2017, p. 108).

Positionality

We begin by acknowledging our own positionalities as researchers, authors, and practitioners.

Guenther regards himself as an outsider—an artefact of colonialism, with all the baggage that goes with that—in the space of Aboriginal education. Yet, he finds himself invited to share with and learn from Aboriginal people he works with, largely due to the good grace of these colleagues.

Rigney, as one of Australia's most respected Aboriginal educationalists, understands the schooling experience of Aboriginal children as that which fixes “inferiority deficit” to their talents. Aboriginal children are disproportionately affected by the normalising of Anglo-Euro centric onto-epistemology into school practices. He contends that Aboriginal children are silenced when their histories and identities are erased or marginalised from school. Change requires the need to move beyond reductive pedagogies that constrain their talents to achieving success.

Osborne is an entangled outsider educator and researcher with some access to insider capital through living and working in Anangu (Pitjantjatjara/Yankunytjatjara) communities, language proficiency, and familial relationships.

Lowe is a Gubbi Gubbi man from southeast Queensland. He is a Scientia Indigenous Fellow at UNSW, working on a community- and school-focused research project on developing a model of sustainable improvement in Aboriginal education. Kevin has had extensive experience as a classroom teacher, curriculum writer, educational administrator in schools and TAFE, and a university lecturer and researcher. He has developed expertise in working with Aboriginal community organisations on establishing school programs, including Aboriginal languages, Indigenous curriculum content implementation, and whole-school planning. Kevin has undertaken extensive research across many key areas of schooling for Indigenous students. He has worked with colleagues to establish the Aboriginal Voices project in support of developing a new culturally nourishing teaching framework to help teachers effect more productive ways of teaching Aboriginal and Torres Strait Islander students.

Moodie is a Gomeroi woman with family links to northern New South Wales and negotiates an insider/outside being through complex complicity with settler colonial institutions. She considers education systems that are

not designed within—or with regard to—Indigenous world views to be inherently and necessarily erasive, functionally indistinct from settler carceral systems in their aim to incapacitate Indigenous control of land.

Evidence-Based Policy or Policy-Based Evidence?

In establishing our foundational assumptions, we do not suggest that knowledge enactment from research to policy and practice is a one-way street, but neither is it dichotomous. Rather the role of research in government policy (and policy guiding research) is complex and contested (Cairney, 2019). Researchers may desire to impact policy and program design, but in reality we are entangled in a system where “evidence” is not just about research, and where it is, it can become a tool to justify a particular policy position. Bridges et al. (2009) suggest that the “notion of research providing a basis for policy is especially problematic insofar as it suggests that the process begins with research which then points to the required policy” (Kindle Location 186–187). They go on to suggest that:

Research may arouse interest, provoke debate, confirm prejudice, give new insight, challenge pre-existing beliefs but it will never stand alone in its informing of policy and will rarely even be the predominant informing resource, simply because there is already so much ‘information’ of one sort or another embodied in policy systems and in policy-makers themselves. (Bridges et al., 2009, Kindle Location 191–193)

Truth, which we might hope research supports, is itself a very slippery concept that has its own theories (Bridges, 2017; David, 2004). Even with all the research that has been presented in this volume, there are still gaps. One reason there are gaps is because the research needed is not funded. Evidence providers more often than not will go with the money, and the money is often where the policy is (Thorntwaite & O'Neill, 2019). Governments, with their particular ideological positions, tend to fund more research or evaluation that aligns with their philosophical positioning than research that aligns with culturally responsive

alternatives (see e.g. in Australia: Dollery, 2018; Guenther & Osborne, 2020; Thornthwaite & O'Neill, 2019; Rigney & Hattam, 2017).

One of the key messages that arises from this volume is that research should represent the standpoint of those who are researched. So, the issues we face as knowledge brokers are not simply about research knowledge for policy and practice; they are also about knowledge of and for participants and stakeholders in order to provide solutions for their benefit (including community members, parents, Elders, teachers, students, bureaucrats, and other end users of education and education research). Their assumptions and understandings of truth are fundamentally important not only in terms of research for policy design but equally in the application of knowledge from policy implementation through to service delivery and service use.

Foundational Assumptions

We now turn our attention to three foundational assumptions that underpin effective knowledge translation, particularly as it relates to research about Indigenous education. These coalesce around shared understandings of aspiration and its attendant epistemologies, axiologies, and ontologies; about the role of power relations in powerful education; and about curriculum and pedagogical theory.

Aspiration and Epistemological, Axiological, and Ontological Alignment

Indigenous education tends to occupy fixed social spaces that reveal ideological assumptions about the purposes of education. Often with minimal scrutiny, the neoliberal language of *opportunity*, *choice*, *outcomes*, *futures*, and *success* flows from the pages of digital and other texts as a call to action. Policymakers, administrators, leaders, and practitioners gather around the honeypot of performance indicators, newly funded initiatives, and structures for planning, evaluation, and accountability as each new era of policy is announced. For decades now, the inevitable “new”

policy directions recycle programmatic branding and add renewed vigour to *improve outcomes*, *close gaps*, and *make a difference*, but these shifts have seldom broken away from the philosophical and ideological starting points that continue to deliver underwhelming even devastating results. One assumption that underpins these policy initiatives is that all Australians have a uniform set of aspirations—that what it means *to know*, *to value*, and *to be* are shared across Australia, and these values are expressed through the indicators we count at census time (Australian Bureau of Statistics [ABS], 2016), in Closing the Gap Reports (DPMC, 2020) and in measures of progress (ABS, 2013). The Uluru Statement from the Heart (Referendum Council, 2017) has drawn attention to important ideas about voice, power, inclusion, and First Nations participation in decision-making to improve outcomes in First Nations communities. But these ideas, although still not fully taken up in political spheres, have not permeated Indigenous education sufficiently to prise policy focus from its settler colonial philosophical foundations and relocate the conversation towards Indigenous epistemologies and aspiration.

In remote education policy, an unwavering commitment to large-scale investment into attendance-focused strategies continues to produce lower attendance rates (Guenther, *in press*). Continued funding of decontextualized, pre-packaged English-language instruction programs has led to poorer outcomes (Guenther & Osborne, 2020). And despite evidence of increased local engagement and employment in schools positively impacting both attendance and outcomes (Guenther et al., 2016), first language programs and remote teacher training pathways have been ground to dust over the last 30 years (Nicholls, 2005; Devlin et al., 2017), despite unwavering local community support for local language, educators, aspirations, and knowledge to be centred in schools (Osborne et al., 2013; Minutjukur & Osborne, 2014; Devlin et al., 2017). The evidence of failure in educational policy is a reflection of misalignment of the ontological realities, the axiological values, and epistemological systems that differentiate the position between policymakers from their subjects: First Nations Peoples.

First Nations scholars continue to argue that more nuanced knowledge engagements are needed for all Australian students and that current pedagogical and curriculum models are not adequately positioned towards

justice for power-marginalised students (Moodie, 2019; Lowe & Yunkaporta, 2018). This means that students from “other” cultural and knowledge foundations (through family, language, culture, and community) can easily find their confidence evaporate as they encounter a misalignment with the knowledge and cultural assumptions that inform dominant classroom pedagogies and curriculum. It is important that wider public debates about the need for First Nations voices to be powerful in shaping policy and service provision are applied to the experiences of First Nations students in schools. Anangu Educator Katrina Tjityai (Osborne et al., 2013) reframes the notion of “closing the gap” to explain that confidence is central to the success of Anangu children in school and that student confidence is strengthened by drawing the supports of teachers and family around the young person:

There are many gaps in our children’s spirits and they can’t close them on their own. Schools can do much to help all the children, both young and older... When a child is afraid, he can’t learn. This is the way we can close the gaps.

The child is in the middle and his family are around him. When the family surrounds the child, they can help him...

Our children need to learn together with us as one spirit. Our spirits are like a solid rock for them to stand on. It is only when they are standing together with us that they can stand firm without falling. (Osborne et al., 2013, p. 12)

And further, Tjityai describes student confidence and learning as a relational and spiritual process: “The things we say, our knowledge, our practices, they take them into their spirit and all of these things are kept totally in their spirit” (Tjityai & Osborne, 2014, p. 27).

How could starting from Tjityai’s preconditions for knowledge that sticks (learning outcomes, Tjityai & Osborne, 2014, p. 28) remake our approaches to pedagogies and curriculum for Indigenous children in Australian schools? This requires a significant shift in the foundational axiological and ontological assumptions about what schooling is for and the kinds of aspirations that can be strengthened in this process, and can

only be possible if the power of the child's family network and community is centred in pedagogical models.

Power Relations and the Role of Education as an Agent of Change

But if we were to think that addressing the issues of failure is limited to re-aligning philosophical differences, we would be mistaken. Education and its relation to "schooling" are often uncritically and intrinsically associated with power or empowerment. The House of Representatives Standing Committee on Indigenous Affairs (2017) report is a good example of this: the term "power" is used to describe education in the title, but there is little critical engagement of this concept in the body of the report. Who holds the power, how students and communities access the power, and who exerts and who subverts power are unresolved in the report. That education can be powerful is not disputed, but regardless of the theoretical tools we use to understand power, Indigenous powerlessness is always embedded in settler colonial education systems. According to Michel Foucault, power is not a thing that is possessed by individuals. Rather individuals are vehicles of it or places for it; power is discursive (Ball, 2013, p. 30). It exists in "relations of power" (Watkin, 2018, *Kindle Locations 763–795*). Surveillance is another key concept used by Foucault to describe the processes of discipline within institutional contexts (such as army, schools, and factories). As an instrument of control, surveillance extends to the surrounding context as well: "Basic schooling not only disciplined the children, but it also needed to initiate the surveillance of the parents to ensure that they contributed to their children's upbringing" (Raffnsøe et al., 2016, p. 186).

Utilised in the right way, education at all levels can have a liberating social impact for people who are marginalised or oppressed (Freire, 1970). Mayo, describing education and power in the context of Gramscian theory, suggests that:

powerful knowledge... should be taught in a way that also makes the learners aware of its ideological basis and biases' transmitted in a way that is

shared ‘with others across the social spectrum, rather than jealously guarding it as some prized individual possession. (Mayo, 2015, pp. 53–54)

Schools can be sites of powerful resistance against the hegemony, places where “transgressive knowledges ... can re-envision the margins as places empowered by transformative resistance” (Yosso, 2005, Kindle Location 2876). Commenting on Foucault’s use of the term “counter power”, Raffnsøe et al. (2016) argue that:

...it is necessary to perceive such opposition as an activity and as a mutually antagonistic relationship in which the two parties affect and create each other. We may therefore speak of a kind of “counter power” that rejects existing use while seeking to free itself and create a liberated space. (Raffnsøe et al., 2016, p. 51)

But education can have a more sinister role, in Gramscian terms, as a vehicle for “consent and coercion” through “organic intellectuals” (Scatamburlo-D’Annibale et al., 2018), and indoctrination or brainwashing (Bailey, 2010). It can perpetuate inequality and discriminatory/racist colonising structures (Bang et al., 2018) while maintaining a veneer of white “Niceness” (Castagno, 2014). Education can be used for deliberately assimilative purposes (Battiste, 2013) and for cultural and knowledge reproduction (Apple, 2012) and therefore limit its benefit to those being educated. Social capital is often described as an outcome of education, where students, by virtue of their knowledge, gain access to networks of power, but as Bourdieu suggests those with inherited social capital “regulate the conditions of access” (Bourdieu, 1986, p. 251) to their networks to ensure that their accumulated capital is not threatened. Taking a sociological position, Muller and Young (2019) distinguish between knowledge of the powerful (KOTP) and powerful knowledge (PK). The distinction is important for an understanding of the impact (or the potential impact) of education for First Nations students, particularly in the context of colonisation. Battiste (2013, Kindle Location 2082), in her discussion about “Eurocentric education”, argues that: “Colonialism as a theory of relationships is embedded in power, voice, and legitimacy. In Canada, it has racialized Aboriginal peoples’ identity, marginalized

and de-legitimated their knowledge and languages, and exploited their powerlessness in taking their lands”. In summary, settler colonialism uses its instruments of power, surveillance, and control to ensure that First Nations are either wholly excluded or have limited access to networks and resources that would allow for self-determined processes and outcomes.

If knowledge is a commodity which can be acquired as a private good or investment, in the way the human capital theory (Becker, 1993) understands it, then acquisition of that knowledge will be restricted to those who have the resources to be able to afford it. If knowledge is a public good, then it can be shared more equitably to produce transformative change (see also Battiste, 2013, Chap. 10). This kind of PK recognises the generative capacity of power. But importantly in order to be generative, with potential to produce benefit, the relations of power must be supportive; Muller and Young (2019) assert that “no knowledge... can remain innocent of power relations” (p. 208). That is where teachers play an important role: “Teachers are crucial mediators of the transformative capacity of PK in their subjects” (Muller & Young, 2019, p. 210). Lowe et al. (2020) agree, adding that the system itself must change, such that “the levers of power must be willing to cede control of Indigenous lives” (p. 11).

So how can systems build this kind of transformative education, particularly given the colonial stranglehold on power? Teachers are key, as Muller and Young (2019) suggest. But to be clear, one of the challenges remains building a First Nations education workforce: teachers and education support workers who understand the dynamics of power and can work with First Nations students to effect transformation. Non-Indigenous teachers also need to understand the dynamics of power and work to better engage with students to ensure schooling does not perpetuate mistakes of the past (Guenther et al., 2021). If teachers are important, so too are their pedagogies. Promotion of PK in schools should encourage first language learning, embedding the ontologies, epistemologies, and axiologies of culture, as discussed above. Curriculum has a role to play too, and as Apple (2012) argues, is still used as an instrument to “reproduce unequal societies”. Australia is not immune from this kind of reproduction, where curriculum largely ignores the

topics of racism and discrimination in favour of the “Nice” (Castagno, 2019) white alternative of “diversity” and “inclusiveness” (Parkinson & Jones, 2019). Transformation requires a decolonisation of curriculum. And beyond that the colonial instruments of surveillance and control must be dismantled in favour of structures that cede power to First Nations communities, parents, and educators. This involves a reconsideration of pedagogy and curriculum.

Pedagogical and Curriculum Theory

The teacher as pedagogical expert is critical to the schooling experience for active student participation as citizens. However, why has so little expert teaching taken place in Indigenous classrooms despite a policy decade of closing the gap on schooling disparity? Hayes et al. (2017) contest what constitutes “pedagogy” and what knowledge counts as “official curriculum” and show how pedagogy is narrowed under neoliberal standardised testing that perversely frames inequality as an individual problem. In outlining how structural school inequality operates, Delpit (1988) theorises how dominant “codes” and “rules” are normalised as anti-minority, and thereby alienating First Nations potential. The projection of whiteness onto Indigenous abilities and aspirations establishes an impossible and unrealistic version of perfection that cannot be met by the Indigenous learner. When Indigenous children are defined as the problem, rarely are pedagogies, curricula, and school environments acknowledged as structural barriers to achievement.

In settler/invasor colonial nations across the Pacific Rim, Indigenist epistemologies and culturally responsive education theory provide conceptual resources for advancing a “strong” version of pedagogical practice that have been too often marginalised in Australian policy work, notably when compared to Native-American and Maori Studies. Indigenist epistemologies in Australia, central to Rigney’s (2006) leading research, foreground pedagogical re-design that empowers students, reinforces the integrity of cultural knowledges, and privileges Indigenous voices and interests through community partnerships. Three Indigenist ideas are

critical if teacher co-construction of curriculum and pedagogy with First Nations parents is desired:

1. Decolonising knowledge production and transmission (Rigney, 2001, 2006)
2. Representing Indigenous epistemologies and ontologies as embodied, reciprocal, and ecological (Arbon, 2008)
3. Reinstating the authority of Indigenous ways of knowing, being, and doing alongside other global epistemic views (Martin, 2008)

Indigenist theory reinforces the Delpit advice to teachers to teach children “codes” and “rules” fixed to learning that draws on their expertise and strengths as experts of their own life worlds. Put simply, teachers who practically seek to incorporate student life worlds and culturally specific ways of knowing into classroom pedagogy and curriculum shift practice away from cultural assimilation to cultural maintenance.

Culturally responsive pedagogies (CRP) globally are accepted as a hopeful strategy to improving academic success for First Nations peoples (Castagno & Brayboy, 2008; Bishop, 2019), yet are poorly understood in Australia (Morrison et al., 2019). Drawn from critical theory and informed by Deweyian and Vygotskian constructivist ideas, CRP views learning as holistic, anti-deficit, and socially and culturally mediated (Gay, 2018). Ladson-Billings’ (1995, p. 160) formative CRP research to improve learning outcomes for African-American children advocates three teaching practices for students to obtain: academic success; develop cultural competence; and develop a critical consciousness to improve their lives. The Assembly of Alaska Native Educators (Alaska Native Knowledge Network, 1998, 1999) CRP versions promote the teaching of multiple world views; anti-deficit; content related to local community and the diverse world; instruction and assessment building on students’ cultures and linguistic strengths; learning environments utilising local sites; and family partnerships for learning. By way of a working definition, American Geneva Gay (2018, p. 32) defines culturally responsive pedagogies as teaching “to and through [students’] personal and cultural strengths, their intellectual capabilities, and their prior accomplishments”. For Gay (2018, p. 32), “Students of color come to school having

already mastered many cultural skills and ways of Knowing. To the extent that teaching builds on these capabilities, academic success will result”.

In other words, the more localised, inclusive, and supportive that teachers are, the lower the incidence and intensity of Indigenous student disengagement. Culturally responsive pedagogy is not “cultural celebration” but connects the cultural and linguistic repertoire of students to meaningful learning. The longitudinal project *Toward an Australian Culturally Responsive Pedagogy* project funded by the Australian Research Council by Rigney and Hattam (2017) has identified five provocations towards an Australian culturally responsive pedagogy (see also Rigney et al., 2020; Morrison et al., 2019):

- High intellectual challenge
- Learning strongly connected to children’s life worlds
- Recognition of culture as an asset to learning
- Critical reflection and/or taking an critical activist orientation
- Providing students with opportunities to perform their learning to an audience/ and to experimenting with multimodal literacies

Across these five ideas the child is viewed as a curious, agentic, competent learner that possesses cultural and linguistic intergenerational intelligences brought from home to school. Teachers build relationship-based, child-led inquiry learning environments towards a positive climate for learning. These have been found to have the strongest impact on children’s learning for success though cognitive, cultural, and developmental stretch and challenge. Teachers using CRP graft curriculum content onto children’s interests and cultural funds of knowledge. Learning involves child as expert and researcher of their own life worlds. The teacher too is a researcher of their practice and a co-constructor of learning in partnership with children to improve outcomes for all learners. The child learns best when the school setting incorporates, validates, builds, and bridges culturally familiar prior knowledge and languages. What this means for teachers is the need to recognise the rich diversity of the child’s identity and cultural and linguistic capabilities brought from home as strengths that promote learning success, pride, belonging, and safety. The Rigney and Hattam (2017) project shows how the normalisation of the cultural

background of learners in school by redesigning pedagogies has a high impact on student disposition and engagement. The recognition of culture as an asset to learning by the teacher resets the relational ontology and epistemological contract in class towards the strengths of the Indigenous learner for improved achievement. These then improve school–community relations. Despite the absence of access to school or household wealth, poor and diverse families are rich with funds of linguistic and cultural knowledge that are unrecognised and or underutilised in all educational sectors (Moll et al., 1992). Australian CRP has originated in the domestic policy context marginalised from teachers’ core business of classroom pedagogy and curriculum. In this light, there remain considerable challenges for those teachers attempting to integrate student life world knowledge and the official curriculum.

From Proposition and Premise to Evidence and Policy

We have considered three foundational assumptions that underpin what could be termed a “good” education (Biesta, 2020) for First Nations students. In summary, we see that a good education will:

1. Align itself to the epistemological, axiological, and ontological positions of students, their families, their community, and their country
2. Redirect power to learners in ways that transform lives for the better—on their own terms
3. Employ teachers who are able to apply the resources of curriculum and the practices of pedagogy in a culturally responsive way

This is in effect our statement of proposition or truth statement (Bridges, 2017; see Chap. 12) from which we argue. As discussed earlier, policy actors and politicians may offer different propositions from which their existing and proposed interventions are based. What is important to recognise here is that the proposition we present is based on First Nations Voices. The premises of our argument for a “good” education are found in the evidence presented throughout this book, but the evidence on its

own counts for very little. It is contestable, and as discussed earlier in this chapter, policymakers will always selectively use evidence to maintain their own positions of power and control. However, Indigenous education remains a thorn in the side for these same policymakers because it is their policy that has failed to deliver. The hope of First Nations education has not materialised (Guenther, 2021), nor have the magic bullets of one-size-fits-all strategies like Direct Instruction delivered on their promise to deliver improvements in NAPLAN scores (Guenther & Osborne, 2020). The Prime Minister's Closing the Gap reports are an annual embarrassment, which for more than a decade have simply listed failure after policy failure. Yet against this background of hopelessness and failure, there is an opportunity.

Conclusion

The opportunity here is to craft a logical argument based on our propositional assumptions and the volumes of research evidence which are the premise for the argument. The argument describes action. Action is required by teachers, school leaders, bureaucrats, politicians, and all those who have a stake in education. Current Indigenous education policy is to a large extent reflected in the universal goals and actions represented in the Alice Springs (Mparntwe) Education Declaration (Education Council, 2019), which asserts that

All Aboriginal and Torres Strait Islander young peoples must be empowered to achieve their full learning potential, shape their own futures, and embrace their cultures, languages and identities as Australia's First Nations peoples. (Education Council, 2019, p. 16)

We do not disagree with this statement, but the question is how do we arrive at that result? The evidence reported in this volume gives us some strong directions. But it certainly is not about more of the same or trying harder to do the same things better. Nevertheless, those of us in the research community must craft our arguments, and use the tools of social and legacy media, publications, lobbying, and relationship-building if we

hope to support policymakers to shift from often flawed assumptions towards what we know a “good” education is. There are no guarantees this will work to achieve better policy because the powerful control truth and evidence can still be based on false premises. But this is our challenge. For those of us who are practitioners of education, the onus is on us to draw on evidence that affirms the ontological, axiological, and epistemological positioning of our students and so craft schooling systems that meet First Nations aspirations.

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Appendix: Positionality Statements

Chapter 6 Neil Harrison

I have been working as a non-Indigenous teacher and researcher in Indigenous education for 40 years. I grew up on a farm in a small country town in western Victoria. I started my teaching career at Numbulwar school, Northern Territory, and after working in the Territory for 24 years, I moved to New South Wales to take up positions at the University of New England and now at Macquarie University.

Chapter 6 Kevin Lowe

I am a Gubbi Gubbi man from Southeast Coast Queensland. I have had 50 years' experience in education, including 26 years as a teacher in urban, regional, and remote NSW high schools, 13 years as state manager of Indigenous education and curriculum, and 7 years in higher education, first at Macquarie University and then at the University of New South Wales. I am the lead investigator of the Aboriginal Voices and the Culturally Nourishing Schooling project.

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