

Race Ethnicity and Education



ISSN: 1361-3324 (Print) 1470-109X (Online) Journal homepage: https://www.tandfonline.com/loi/cree20

Achievement gaps in Australia: what NAPLAN reveals about education inequality in Australia

Margot Ford

To cite this article: Margot Ford (2013) Achievement gaps in Australia: what NAPLAN reveals about education inequality in Australia, Race Ethnicity and Education, 16:1, 80-102, DOI: 10.1080/13613324.2011.645570

To link to this article: https://doi.org/10.1080/13613324.2011.645570





Achievement gaps in Australia: what NAPLAN reveals about education inequality in Australia

Margot Ford*

School of Education, University of Newcastle, Newcastle, Australia

Drawing on approaches used by Gillborn (2008), this article examines results from the most recent version of Australian national testing (NAPLAN) in Years 3, 5 and 9, operating since 2008. It analyses the inequality of achievement between indigenous and non-indigenous students in the States and Territories, with particular reference to New South Wales (NSW) and the Northern Territory (NT). It frames an analysis by using the concept of locked-in inequality, one element within Critical Race Theory (CRT) in education. Whilst there is an achievement gap between indigenous and non-indigenous students in all States, in the NT it is a staggering fifty percentage points or more in reading, writing and numeracy across all Year levels currently tested. This article argues that there has not been any significant change to indigenous education outcomes in comparison with their non-indigenous cohorts, since the introduction of government funded education in the NT. Locked-in inequality has been deep and long-lasting in the NT and unless significant changes take place, this is set to continue.

Keywords: indigenous education; locked-in inequality; achievement gap; Australian education; national testing

Introduction

All around me are do-gooders and no-hopers – can I say this? Whitefellas. Balanda. They all seem to be one and the same sometimes: talking, talking, talking – smothering us – but with no vision to guide them; holding all the power, all the money, all the knowledge of what to do and how to work the white world....

And the 'gap' that politicians now talk of grows larger as we speak.... I don't think anyone except the few of us who have lived our lives in the Aboriginal world understand this task that is called 'closing the gap'. There is no one in power who has the experience to know these things. There is not one federal politician who has any idea about the enormousness of the task.... No one speaks an Aboriginal language let alone has the ability to sit with a young

^{*}Email: Margot.Ford@newcastle.edu.au

man or woman and share that person's experience and find out what is really in their heart. They have not raised these children in their arms, given them everything they have, cared for them, loved them, nurtured them. They have not had their land stolen, or their rights infringed, or their laws broken. They do not bury the dead as we bury our dead (Yunupingu 2009, 37).

For decades reports have discussed the serious under-achievement of indigenous students in the Northern Territory (Hughes & Aboriginal Education Policy Task Force 1988; Collins and Lea 1999). Various programs have been suggested and trialed, but there has been little in the way of systematic tracking over time with regard to the combination of elements that would be the most effective for continuing and substantive improvement. One reason for this is that short-term projects expect instant results and usually when this is not delivered, funding is cut. Furthermore there is a dearth of discussion about underlying social issues such as institutional racism that may inform, if not underpin the problems.

Suggestions that tests are culturally inappropriate (Jorgensen 2010) and not in indigenous languages (Devlin 2010) have been accepted arguments for poor results for many years. Similarly tests are seen to be conceptually and linguistically foreign (Wigglesworth and Simpson 2009). These arguments are more invidious, because they appear to be culturally sensitive. That is not to say these are important elements in effective education for indigenous children, but dismissing test results on this basis can serve government departments with excuses rather than action. Since the introduction of National Australian Program in Literacy and Numeracy (NAPLAN) in 2008, results continue to show very poor educational outcomes for indigenous students, especially in the NT.

In this article CRT in education will be used as a frame to discuss NAPLAN results for States and Territories in Australia, paying particular attention to the NT and as a comparison, NSW. It follows the techniques used by Gillborn (2008) to examine assessment regimes, focusing specifically on achievement gaps. Ideas of locked-in inequality and institutional racism are especially useful to keep in mind throughout the discussion to follow.

This article will provide a brief discussion of CRT in education, followed by an explanation of national testing in Australia, arguing that important information about inequalities in achievement is not emphasized. It will examine educational outcomes for indigenous students in the past in the NT, before focusing upon more the recent NAPLAN results, with attention to the inequality of achievement between indigenous and non-indigenous students.

Critical Race Theory

CRT is an approach that focuses on white hegemony, critiquing governance, policy and enacted social practices that adversely impacts upon people of

colour (Delgado and Stefanic 2001; Crenshaw et al. 1995). Although it does not preclude analysis based on other classed or gendered forms of oppression, the focus on race reminds us of the history of ethnic and racial institutionalized discrimination. In Australia, governments sanctioned actions to take children away from their families (Rintoul 1993; Pilkington 1996), to incarcerate people (Cummings 1990), to deny indigenous people proper wages for work (Kidd 1997), and deny access to a proper education (Miller 1986; Ford 1998). The basis of these deeply discriminatory policies was steeped in racialised discourses that were applicable only to indigenous People and can be named institutional racism. These relatively recent events means the legacy of these policies are writ large on the contemporary land-scape and are not merely artifacts of history.

Within the context of unequal power relations CRT focuses on white control of processes and practices, in other words the mechanisms of white domination within the political, economic, legal and educational spheres. CRT expands the notion of *White Supremacy*, not just in reference to extremism, so that, '[it] is seen to relate to the operation of forces that saturate the everyday mundane actions and policies that shape the world in the interests of White people' (Gillborn 2008, 35). It is clear the frustration expressed by Galarrwuy Yunupingu is about the all pervading actions of white people in their own interests, rather than those of indigenous, in this case Yolngu, people of North-East Arnhem Land in the Northern Territory.

Recent CRT critiques 'white privilege' because rather than it being an actively constituted social position, it reflects a passive state and a lack of agency. Rather, '[p]rivilege is the daily cognate of structural domination' (Leonardo 2004, 148) and a powerful aspect of black/white relations. In the Australia context, studies on whiteness have thrown the interrogative lens onto white privilege and the contradictory positions within white liberalism that deny the mechanism of black oppression, whilst upholding approaches that maintain oppression (Hage 1998; James 1997; Moreton-Robinson 2004). Furthermore, 'interest convergence' (Bell 1980, 2000) in CRT refers to the notion that white elites will advocate for improvements for Black and other ethnic minorities only when there is benefits for those white elites.

CRT and education

By the mid-1990s CRT was being applied to education (Ladson-Billings and Tate 1995; Ladson-Billings 1998). CRT in education critiques among others things the ways students of colour are constructed and therefore counted, and the problematic mechanisms by which students of colour have access to, or are denied access to white knowledge and their own histories (Ladson-Billings 2005). This article will especially focus on the concept of

'locked-in inequality' (Gillborn 2008) and demonstrates how indigenous people in remote areas of Australia will be locked into educational inequality for decades to come unless governments embrace radically different ways of providing education.

'Locked-in inequality' was derived from examining the ways African Americans in particular are consistently and constantly disadvantaged in the systems of law and economics (Roithmayr 2004). According to Roithmayr (2004), poor health and housing, low educational opportunities and economic disparities derive from earlier locked in monopolies, thus contributing to contemporary inequality. The deep-rooted nature of this systemic inequality means it can only be altered with a radical overhaul of current policies and practices. Gillborn (2008, 45) claims that, 'Educational race inequality in England is a form of "locked-in inequality" that is inevitable and permanent under current circumstances.' The same can be said for indigenous students in the Australian context, particularly in the Northern Territory. Hollinsworth (1998) for example, explained systemic bias that neatly encapsulates the cycles of poverty and racial discrimination that is embedded in the ways schools operate.

The history of indigenous education in Australia shows clearly how it served white interests (Miller 1986). Aboriginal people, especially from the remote North and Centre of Australia were deemed uneducable in the early part of the twentieth century. Changes in attitude in the 1930s and 1940s saw education provided up to Grade Three, as indigenous people would, 'be prepared for the simple avocations of life' (Johnston 1937). In return for a Western education, they would be the servants in white households or unskilled labourers, thus demonstrating one of the guiding principles of CRT, namely the aforementioned interest convergence (Bell 1980, 2000). In the first half of the twentieth century, whilst non-indigenous students had free access to primary and secondary education, indigenous students in remote areas such as the Northern Territory only had access to missionary education. The first government funded education for remote indigenous students (constructed in the parlance of the day as 'full-blood' Aborigines) in the Northern Territory did not occur until 1949 (Ford 1998). Secondary education was not widely available in remote areas until the 1980s.

CRT in education helps us to unmask social action in the name of liberalism for what it is. Introducing government funded education was lauded as forward thinking, rather than seen as something that should have been tackled decades earlier. In the twenty-first century, indigenous people in the Northern Territory must contend with an educational history that has never served them well. Locked-in inequality has its roots in a third rate education of the past and the struggles to adequately provide a first rate education in the present.

National assessment in Australia

The research draws heavily on the work of David Gillborn (2008, see chapter 5) in Britain to frame a critique of assessment in Australia. Gillborn presents compelling arguments that assessment is anything but neutral. Supporting claims with examples, he states, 'that the "assessment game" is rigged to such an extent that if black children succeed as a group, despite the odds being stacked against them, it is likely that the rules will be changed to re-engineer failure' (Gillborn 2008, 91). In the confines of this article such a bold claim cannot be made for the Australian context, perhaps because in the case of indigenous students, especially in the NT, there is scarce evidence of educational success as it is measured against mainstream criteria. This is especially true for indigenous students living in remote parts of the NT (NTBOS 2009). What can be presented is evidence of consistent inequality of achievement of indigenous students over time. It is no secret that indigenous students are under-achieving educationally. The scale of the problem is revealed in current NAPLAN results, but mechanisms are used to mask the extent of the under-achievement and these will be discussed below

It seems arguments about a culturally inappropriate test can be co-opted to dismiss poor result rather than seriously examining and changing the content of the tests in the first place, or indeed the curriculum and pedagogical practices. In CRT terms this would be labeled as epistemological racism (Villalpando and Delgado 2002). As Ladson-Billings (2004 in Gillborn 2008, 91) has observed, 'a poor quality curriculum coupled with poor quality instruction, a poorly prepared teacher, and limited resources add up to poor performance on so-called objective tests.'

National testing in Australia was conducted through the Multi-level Assessment Program (MAP) and this was replaced in 2008 by the National Assessment Program in Literacy and Numeracy (NAPLAN). NAPLAN tests all students in Years 3, 5, 7 and 9, corresponding to age 8, 10, 12 and 14 years old respectively, across the five areas of reading, writing, spelling, grammar and numeracy. For the sake of brevity, discussions for this article will exclude the Australian Capital Territory, due to insignificant numbers of indigenous people, and will be confined to Years 3, 5 and 9. More in depth analysis will concentrate on the NT and NSW. Reference to previous MAP testing with regards to the NT will be made.

The results of these NAPLAN tests are available in a series of figures and graphs for easy comparison between State and Territories for 2008 and 2009. (See for example, MCEECDYA 2009a, 10) These results are presented in three different ways for each subject area. In the National Statistics for example, bar graphs show mean scores and achievements as a percentile against the mean for States and Territories and Australia as a whole. A sec-

ond table shows the mean and standard deviation for Australia and each State and Territory.

Finally a third table shows the scores as percentages, calculated against the criteria; 'Below National Minimum Standard' (Below NMS), 'National Minimum Standard' (NMS) and 'Above National Minimum Standard' (Above NMS). The standard for each Year group is set against Band Levels rather than year levels, further complicating an interpretation of results for students and parents. For example, Year 3 results locate the National Minimum Standard at Band Level 2, Year 5 the NMS is Band Level 4 and at Year 9 it is Band 6.

NAPLAN tables have been compiled to compare indigenous and non-indigenous students and students with a Language Background Other than English (LBOTE) with non-LBOTE students. It is also possible to extrapolate results by geolocation. This is defined as Provincial, Remote and Very Remote and is used in the NT (NTBOS 2009).

Whilst a great deal of information can be gleaned from these figures, some information is not so obvious or lacking altogether. Raw data scores are not available, so discussion thus far can only be based on publicly available data presented as averages and percentages. Calculating scores as an average rather than using the median, masks the level of under achievement because the percentage for achievement in each State and Territory is derived from the average of those attaining the NMS and above. The focus is on student success rather than student failure. It is possible to see the percentages of those who did not attain the NMS in the NAPLAN data, but little reference is made to those figures in State and Territory Reports (see for example DETNT 2010, 38, DETNSW 2009, 12).

The device of calculating against the 'National Minimum Standard' also means that there is only one column stipulating 'Below NMS.' This becomes more significant as the results for Years 5, 7 and 9 emerge. The figures show 'Below NMS' percentages, but do not reveal *how far* below the NMS in any given Year cohort. A commensurate series of columns showing Band Level equivalence 'Below NMS' for Year 5 through to 9 would establish the extent of the inequality of achievement.

However, reporting in NAPLAN may change in the near future. In November 2010, a federal government senate committee has recommended:

- that ACARA (Australian Curriculum and Assessment Reporting Authority) and MCEECDYA (Ministerial Council for Education, Early Childhood Development and Youth Affairs) explore and report publicly on ways in which to use below-average NAPLAN test results as a trigger for immediate assistance aimed at helping individual schools and students perform at appropriate levels.
- that ACARA assess and report publicly on the potential benefits of moving to a system that reports the median rather than the mean

school performance (Senate Education, Employment and Workplace Relations Reference Committee 2010, 1).

Furthermore, whilst results for indigenous and non-indigenous students, and LBOTE/non-LBOTE are available, there is no cross referencing against indigenous and LBOTE. Assumptions can be made that in NSW, Victoria and Tasmania very few indigenous people have English as another language, although some will have knowledge of their local indigenous languages. However, given that indigenous people in the North and the Centre of Australia still speak traditional languages as their first language, especially in very remote regions, there will be proportions of indigenous people who also have LBOTE status. The best that can be done is read the category 'very remote' according to geo-location as code for a group that is in the main indigenous and LBOTE. Clearly tables that show indigenous student achievement coupled with LBOTE status could provide important insights into the extent of indigenous under-performance on this basis. It is possible that not explicitly showing the relationship between LBOTE and indigenous educational outcomes is in the interests of protecting government policy, in this instance the axing of bilingual education in the NT in the 1990s.

There are several other issues with the presentation of NAPLAN results in National and State and Territory reports. It is not possible to discuss educational results between different ethnic or LBOTE groups, so it is impossible to determine if under performance is connected to particular ethnic or cultural groups, apart from indigenous, although this data could be extrapolated. It is also not possible to distinguish between black and white students because students are not racially categorized in Australia. This is a critically important point. Gillborn (2008) makes reference to the difficulties of arguing for the existence of institutional racism as one of the causes of educational under-achievement for ethnic or racialized groups, but in Australia this is made even more problematic, because of the ways groups are constructed and counted in the first place. Although discussion of institutional racism takes place in Australia, referring to institutional racism in relation to under-achievement of indigenous students in Australia is relatively rare, with some exceptions (Hollinsworth 1998; Boughton 1999; Rigney, Rigney, and Hughes 1998: Seddon 2001: Nakata 2010).

Furthermore NAPLAN results begin at Year 3. Having tests in the first three months in school would go a long way to determining how different groups in different locations perform *at the beginning* of formal schooling. Knowing the differences in the first year of school would help to establish inequalities of achievement and the role school plays as well as target funding more effectively in early childhood education. The Labor Government has undertaken to provide universal education for four-year-olds (DEEWR 2010) but without this crucial data, there is no way of knowing how to best direct funding. However, a note of caution is required here. This

is not to advocate a 'teach to the test' mentality, which should not occur in schools, but is even more the case in the pre-school years.

Finally there is minimal focus on achievement gaps in some educational reports, reinforcing a white hegemony and masking the extent of educational inequality between indigenous and non-indigenous students. In the NT report for 2009 the focus was solely upon those achieving the NMS and above (DETNT 2010), with no mention of 'closing the gap,' nor setting specific targets to do so. This is a little odd given national educational goals make specific mention of closing the gap, especially between indigenous and non-indigenous students. The Council for Australian Governments (COAG 2008, 7) for instance agrees, 'to halve the gap in reading, writing and numeracy achievements for indigenous children within a decade' and 'to halve the gap for indigenous students in year 12 attainment or equivalent attainment rates by 2020,' which is referred to by COAG as 'ambitious.' In the NSW DET annual report of performance highlights (DETNSW 2009, 45), however several strategies for closing the gap were set out, and the targets mirrored those set by COAG. The report stated, 'The 2008 achievement gap in reading and numeracy between Aboriginal and non-Aboriginal students is reduced by 50% by 2012 and eliminated by 2016' (DETNSW 2009, 46).

Given COAG has expressed these targets one would expect a specific budget line for indigenous education in the COAG document, and reporting structures both in national NAPLAN results and in State and Territory reportage that specifically addresses the achievement gap, but this is not the case. COAG has allocated \$4.6 billion specifically for indigenous initiatives, 'across early childhood development, health, housing, economic development and remote service delivery' (COAG 2008, 7), with corresponding budget lines for each (COAG 2008, 13), but there is no specific mention of indigenous education. There is a budget line for 'Smarter Schools – low SES,' and one can assume that this would target indigenous students as well as others. So, whilst the Federal, State and Territory governments have set targets to close the achievement gap, there are no clear lines of economic expenditure, or structured reporting mechanisms at the federal level to demonstrate if, when and how these targets will be met. The next section investigates the achievement gap more closely.

Inequality of achievement

Discussing achievement gaps is helpful to establish what real changes have taken place over time in the educational advancement of minoritized groups (Gillborn 2008), because it mirrors the discourses of government about 'closing the gap.' This article uses the same calculation to present the evidence in the Australian context. First, discussion will draw upon the previous MAP results for the NT to illustrate the ways inequality of achieve-

ment was masked in government reports, then more recent NAPLAN results will be analyzed.

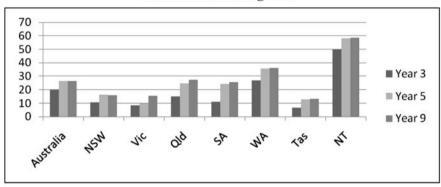
As argued by Ladson-Billings (2005) the historical context of educational under-achievement must be taken into account when examining contemporary conditions. It is clear, that in the first part of last century it was explicit and recorded policy to only offer the most basic education to indigenous people. Move forward 50 years and government reports (Hughes & Aboriginal Education Policy Task Force 1988; Collins and Lea 1999) show that educational outcomes for indigenous students have continued to be significantly low, the depth of which becomes clear when compared to their non-indigenous counterparts. For example, the review of indigenous education in 1998 showed a 51 percentage point difference between indigenous and non-indigenous students for reading at Year 3 in the MAP tests, with 82% of non-indigenous students achieving the national benchmark and only 31% indigenous students doing the same (Collins and Lea 1999, 35). What is even more startling is that only 9% of indigenous English as Second Language students reached the benchmark at Year 3.

This article now shifts to what has occurred in indigenous education in the NT since 2000. Although outcomes for indigenous students, particularly in remote areas have always been dire, significant improvements are now being claimed by the authorities. For example, in the Strategic Plan for Indigenous education in 2006 (DEET NT 2006a, 4), it is claimed there was an, 'Increase in the number of indigenous students achieving national benchmarks in literacy and numeracy' between 2001 and 2005. This is based on actual number of students taking the MAP tests in reading and numeracy. The report shows that in Year 3, 30 students in very remote areas achieved the national benchmark for reading and in 2005 that had risen to 80 - an increase of 167%. The increase in Year 5 was 92% and in Year 7 92% (DEET NT 2006a, 4). By merely showing improvements within the indigenous cohort, it may look impressive but it masks the scale of underachievement, compared to the non-indigenous cohort. The percentage of indigenous students attaining national benchmarks for reading in 2006, by Year 3 is only 20%, therefore still leaving a massive 80% below the benchmark. The DEET Annual Performance Report for 2005/6 (DEET NT 2006b, 5) shows that in 2003/4 there was an achievement gap of 49 percentage points between Nonindigenous and indigenous students in Year 3 reading, and in 2005 it had narrowed marginally by 4 percentage points. Year 5 fared little better with the difference in reading in 2003/4 of 43 and in 2005 50 percentage points. It is clear there had been no significant change in the achievement gaps between non-indigenous and indigenous students in the last ten years.

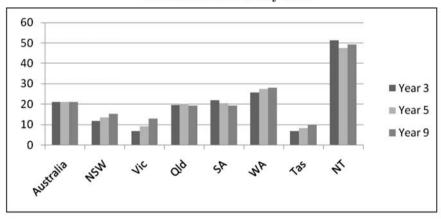
The NAPLAN results from 2008 and 2009 show there is still no change in the outcomes for indigenous students compared to their non-indigenous counterparts in the NT. The NAPLAN data is much more detailed than in the previous MAP testing and it is useful to compare the NT with other

Table 1. Achievement gap: percentage points between indigenous and non-indigenous students in Australia, States and NT. Sources: MCEECDYA 2009a, 2009b, 2009c.

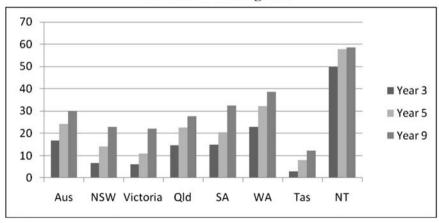




NAPLAN Numeracy 2009



NAPLAN Writing 2009



States Tables below illustrate the achievement gaps based on the percentage differences, both for States and Territories and by Band Level. For example, these are presented as percentage point differences in Table 1 for those achieving the 'National Minimum Standard and Above' in reading, writing and numeracy.

In 2009, across every State and Territory there was an achievement gap between indigenous and non-indigenous students across every Year group for reading writing and numeracy. Tasmania consistently has the smallest achievement gap and the NT the highest. There follows a closer analysis of inequality of achievement in three ways, as students progress through school, how that inequality continues over time, using the NT as an example, and finally how the extent of the achievement gap for those performing 'Below NMS' is currently masked.

NAPLAN achievement gaps by school year

By Year 3 inequality of achievement is already a very significant gap for reading, writing and numeracy between indigenous students and their non-indigenous counterparts. In 2009, the national gap for reading was 19.7 percentage points, for writing 16.7 and for numeracy 21.2 percentage points. In terms of actual percentages what this means is that nationally 94% of non-indigenous students achieved the NMS or above, compared with 75% of indigenous students by Year 3 (MCEECYDA 2009a, 10). Those States and Territories with the greatest proportion of indigenous Australians in remote regions show the widest achievement gaps by Year 3, as shown in Table 1.

Western Australia has gaps of 27.1 and 22.8 percentage points for reading and writing respectively and 25.7 for numeracy by Year 3. Although the gap is still unacceptably high in Queensland, it does fare much better with gaps of 14.9 and 14.6 for reading and writing and 19.6 for numeracy. This is in contrast with Year 3 in Victoria and Tasmania where the achievement gap is under ten percentage points for reading, writing and numeracy, although NSW comes close with a 10.5 percentage point gap for reading, 11.5 for numeracy and 6.7 for writing.

Across every State and Territory there is a significant widening of the achievement gap between Year 3 and Year 5 of approximately ten percentage points, for example in Queensland and the NT, or just below this as in NSW (see Table 1). This is maintained through to Year 9 with further widening of the achievement gap, showing that indigenous students remain significant under-performers compared to their non-indigenous peers from Year 5 onwards.

Table 2 shows the percentages as well as the percentage point difference for the NT. Already by Year 3 the achievement gap is huge, but in Year 9 this has widened even further in literacy. Curiously there is a very slight

Table 2. NAPLAN 2009 percentages and achievement gap for Year 3 and 9 in NT non-indigenous/indigenous at or above NMS.

	YEAR 3							
	Reading*		Writ	ing**	Numeracy***			
Non-indigenous	% 89.9	GAP	% 95.2	GAP	% 94.4	GAP		
Indigenous	39.9	-50	45.4	-49.8	41	-51.4		

Sources: *MCEECYDA 2009a, 10; **2009c, 19; ***2009b, 46.

			YE	EAR 9		
	Reading*		Wri	iting**	Numeracy***	
Non-indigenous	% 90	GAP	% 84.8	GAP	% 94.4	GAP
Indigenous	32	-58.4	26.3	-58.2	45.2	-49.5

Sources: *MCEECYDA 2009a, 172; **2009c, 181; ***2009b, 208.

Table 3. NAPLAN 2009 percentages and achievement gap for Year 3 and 9 in NSW non-indigenous/indigenous at or above NMS.

	YEAR 3							
	Reading*		Wri	ting**	Numeracy***			
Non-indigenous	% 96	GAP	% 97.5	GAP	% 96.0	GAP		
Indigenous	85.8	-10.5	90.8	-6.7	84.1	-11.9		

Sources: *MCEECYDA 2009a, 10; **2009c, 19; ***2009b, 46.

	YEAR 9								
	Rea	iding*	Wri	ting**	Numeracy***				
	% GAP		%	GAP	%	GAP			
Non-indigenous	94.3		89.9		96.1				
Indigenous	78.2	-16.1	67.1	-22.8	80.9	-15.2			

Sources: *MCEECYDA 2009a, 172; **2009c, 181; ***2009b, 208.

increase in the percentage of indigenous students achieving in numeracy, but given the scale of the discrepancy it is not significant.

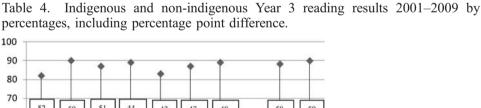
If this is compared to NSW (see Table 3), where the largest numbers of indigenous students live, although with very few numbers with English as a LBOTE, it will demonstrate the challenges in the NT. However, NSW also has its own challenges. The inequalities of achievement for reading and numeracy are still unacceptably high, and increase considerably by Year 9. The gap in writing is perhaps the most significant jump with one third of

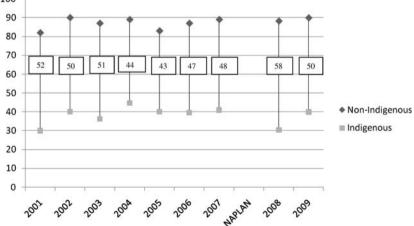
indigenous students unable to attain the NMS at Year 9, compared with one tenth at Year 3.

This is a serious educational situation for indigenous students, not just in remote areas but for those living in Eastern seaboard States like NSW. The longer an indigenous student remains at school there is an increasing likelihood of doing worse in terms of educational achievement compared to non-indigenous students. Economic prospects will remain grim for indigenous people as long as these deep educational inequities remain. In the next section an examination of educational achievement over time also reveals that if educational approaches remain the same, this situation is unlikely to alter.

Locked-in inequality

According to NAPLAN results, between 2008 and 2009 in Australia there have been some slight improvements nationally as well as some widening in achievement gaps, but this is not consistent. It is of course unlikely that dramatic changes would occur over the space of one year, so the discussion will now focus on the NT where figures over nine years from 2001 to 2009 show that inequality of achievement has remained relatively static. Results for the MAP tests from 2001 to 2007, and NAPLAN results for 2008 and 2009 in Table 4 show the results for Year 3 reading.





Sources: 2001-2007 NT Board of Studies Annual Reports (MAP Benchmarks) 2008-2009 Ministerial Council for Education, Early Childhood Development and Youth Affairs (NAPLAN National Minimum Standard and Above).

The results between 2001 and 2007 are from the MAP test, which showed benchmark equivalence only, whereas NAPLAN results from 2008 are results of those attaining the benchmark (NMS and Above). Although there were two different tests, it is interesting to note that even with a change in test in 2008, there was little difference in results for non-indigenous students, but there was a sharp drop for indigenous students, which adjusted to 2007 levels the next year. Generally the inequality of achievement in 2009 is similar to 1998 results (Collins and Lea 1999) even with different testing mechanisms.

In the NT participation rates were significantly increased between 2008/9 (NTBOS 2009). Up to 85% participated in 2008 and this increased up to 97% in 2009. 'With a dramatic increase in student participation, it was surprising that there was no significant decrease in performance when comparing 2008 and 2009 NT performances' (NTBOS 2009, 11). The results between 2008 and 2009 show that there has been decreases of the achievement gaps at Year 3, slightly less at Year 5, but by Year 9 there has actually been a further widening of the gap to a staggering 58.4 percentage points in reading (MCEECDYA 2009a). There is a similar story for numeracy, and in writing by Year 9 the margin again has increased.

By this trend the goal of COAG to halve the gap in reading, writing and numeracy by 2020 is unobtainable, unless fundamental changes take place in indigenous educational practices, especially in remote areas of the NT. What is in no doubt is that 'locked in inequality' (Roithmayr 2004; Gillborn 2008) as demonstrated by Table 4, is set to continue for indigenous students, especially in the NT. In the next section performances 'Below NMS' will be discussed, because these figures hide another story.

Table 5. NAPLAN percentages below National Minimum Standard for indigenous (I) and non-indigenous (NI) students in reading and numeracy in 2008/9, NSW, NT and Australia across Years 3, 5 and 9.

	Australia%			Ne	w Sout	h Wa	les%	Northern Territory%				
	2008		20	009	20	2008 2009		009	2008		2009	
	NI	I	NI	I	NI	I	NI	I	NI	I	NI	I
Reading												
Year3	4.9	29.7	3.4	22.7	3.5	15.2	2.7	12.2	10.8	68.5	8.1	58.7
Year 5	6.0	34.8	5.3	31.0	5.0	21.4	4.5	20.5	10.0	73.1	8.6	67.4
Year 9	4.8	27.5	5.3	31.0	4.5	16.7	5.1	20.3	5.9	60.7	7.0	66.1
Numeracy												
Year 3	2.4	19.4	3.2	23.9	1.9	10.1	2.7	13.9	2.5	46.5	5.8	57.6
Year 5	4.6	29.1	3.2	23.5	4.1	20.1	2.8	16.0	7.2	60.6	5.0	52.9
Year 9	4.2	25.7	2.8	23.0	4.1	18.6	3.2	17.6	4.5	52.4	3.4	53.2

Sources: Reading 2008 (MCEECDYA 2008a), Reading 2009 (MCEECDYA 2009a) Numeracy 2008 (MCEECDYA 2008b), Numeracy 2009 (MCEECDYA 2009b).

Table 6. NAPLAN 2009 percentages and achievement gap for Year 9 in NSW and NT non-indigenous/indigenous below NMS.

		NSW YEAR 9							
	Reading*		Writing**		Numeracy***				
Non-indigenous Indigenous	% 5.1 20.3	GAP +15.2	% 9.4 31.4	GAP +22.0	% 3.2 17.6	GAP +14.4			
		iding*	NT YEAR 9 Writing**		Numeracy***				
	%	GAP	% %	GAP	%	GAP			
Non-indigenous Indigenous	7.0 66.1	+59.1	13.1 72.2	+59.1	3.4 52.3	+49.8			

Sources: *MCEECYDA 2009a, 172; **2009c, 208; ***2009b, 181.

Performances 'below the national minimum standard'

The achievement gaps between indigenous and non-indigenous students that attain the 'National Minimum Standard and Above' is devastating for the educational progress for indigenous students, especially those in the NT. Achievement gaps for those 'Below NMS' are very similar to those in Table 1, in terms of percentage point disparities, but to gauge the true scale of the issue and the extent the education systems are failing indigenous students, Table 5 sets out the actual percentages of indigenous and non- indigenous students 'Below NMS' in the NT, NSW and Australia. For the Year 3 cohort, 'Below NMS' attainment is the equivalent of Band Level 1 and translates as those performing at the equivalent of first year in school or indeed less. It is these figures that COAG wish to highlight in the NAPLAN results of the future. There is currently little emphasis in State and Territory Reports on those who do not meet the minimum standard.

Across all States and Territories and across all Year levels in Reading and Numeracy, there is considerably higher numbers of indigenous students below the National Minimum Standard than their non-indigenous counterparts. There has been a slight improvement between 2008 and 2009 in reading, but a worrying downward trend in numeracy. For example, in 2009, in the NT by Year 3, 8.1% of non-indigenous students were performing 'Below NMS,' whereas for their indigenous counterparts 58.7% were in the same position for reading (MCEECDYA 2009a). This means that nearly six in 10 indigenous students are reading only very basic texts, even although they have been in school for two and a half years. As a comparison in NSW, only 2.7% of non-indigenous students are 'Below NMS' but 12.2% indige-

nous students are in that position (MCEECDYA 2009a). It is a very similar story in numeracy (MCEECDYA 2009b).

Although NSW is clearly doing a great deal better than the NT, there is still a troubling increase in the numbers of indigenous students unable to attain the NMS between Year 3 and 5 in reading. There is an 8.3 percentage point jump between Year 3 and 5 for indigenous students, whereas for non-indigenous students there is only a 1.9 percentage point difference.

Finally, Table 6 compares NSW and the NT in Year 9 across reading writing and numeracy as a demonstration of outcomes towards the senior school – one year below what is the equivalent GCSE year in Britain. It is clear in NSW there is a great deal to be done to close that gap by 50% by 2012. To completely close it by 2020 will take considerable resources, but this is nothing compared to what must be done in the NT.

Given that educational attainment is a strong indicator of future successful employment, it is clear that for many indigenous students in the NT this will be denied. The cycle of economic, social and educational disadvantage seems set to continue. From a CRT perspective there is ongoing institutional racism, a systemic discrimination with embedded long-term inequality as the institutional norm. The next section will identify the issues for indigenous students in the NT as it is clear that current policies based on the figures presented will not narrow the gap in any substantive way.

Issues in indigenous education

When examining the reasons why the achievement gap is so wide between indigenous and non-indigenous students in the NT, there are many suggestions. Perhaps the most important is the axing of bilingual education in the 1990s in the face of fierce opposition from indigenous people and linguists (Devlin 2010; Simpson, Caffery, and McConvell 2009). This significantly changed pedagogical practices, removing the role that Aboriginal teachers, teacher aides and other Aboriginal auxiliary staff could play in schools in brokering connections between an Aboriginal world view and a non-Aboriginal world view. The primacy of teaching and learning in English was re-established alongside the mechanisms of white domination and control.

Clearly related to the demise of bilingual education, because by its very nature it is also bi-cultural, are other elements including, different ways of learning (Harris 1990; Lambe 2003; Jorgensen 2010), poor attendance and students retention (Taylor 2010), motivation of indigenous learners (McInerney 1995), culturally inappropriate curriculum content (Seddon 2001) and fundamentally different epistemologies and ways of being (Christie 1993; Semali and Kincheloe 1999; Nakata 2010). Furthermore, research delves into associ-

ated health issues such as the conductive hearing loss of over 80% of students at any one time (Howard 2004).

An analysis drawing on CRT allows an interrogation into inequities, based on racialised grounds. In the NT one stark inequity is that government funding in terms of teacher/student ratios is set at the same level in remote indigenous schools as mainstream schools in urban areas. However, classes with students with a language other than English in urban areas have a much smaller teacher/student ratio. In remote areas almost 100% of students would have English as a second, third or even fourth language. It is worth restating here that COAG budgeted over \$4 billion for indigenous initiatives, but did not have an explicit indigenous education budget line.

In Australia there has been a resurgence in positioning Western ways of knowing and doing as superior and arguments that socially critical literacy and pedagogy is ineffective (Donnelly 2007) with commensurate arguments that there are inherent problems within indigenous cultural practices, attitudes and beliefs that prevent them from achieving in our modern day society (Sutton 2009). This is a clear example of white hegemony reasserting its position, in the wake of discourses from the 1970s to the 1990s, which claimed a position of Aboriginal self-determination and an increased level of control by Aboriginal people over their own affairs.

With the introduction of the Northern Territory Emergency Response (NTER) in 2007 the debate shifted yet again. The NTER was positioned as a pragmatic solution for indigenous people even if it was at the cost of basic human rights and social justice (Ford 2009). The Northern Territory Intervention, as it became known was prompted by *Ampe Akelyernemane Meke Mekarle* ('Little Children are Sacred') Report (Wild and Anderson. 2007), which itself was prompted by reports of widespread child abuse in communities. This resulted in legislation in the form of the Northern Territory National Emergency Response Act, 2007. Written into this Act was an exemption from Australia's Racial Discrimination Act and Anti-Discrimination Act, thus officially acknowledging the systematic discrimination of a specific racially marked group. It targeted 73 indigenous communities in the NT and several measures were put in place after an initial show of strength by uniformed soldiers and police entering some communities.

One controversial measure was income management, applying to everyone without exception receiving unemployment, disability or family support
benefits from the government in those communities. Half of all government
payments were siphoned off to be spent only at designated shops. These
were large supermarkets often located far from the communities and resulted
in people spending large amounts of money on travel to buy groceries only
to find they had no money to return to their communities.² The justification
for this was that there would be less money to spend on alcohol and gambling in the community. Although the original 'Little Children are Sacred'
Report emphasized change taking place through dialogue with communities,

the measures of the Intervention were imposed in draconian ways. Bureaucratic solutions create bureaucrats and \$70 million was earmarked in the 2008/9 budget to administer income management as well as over \$30million for business managers and another \$32 million 'to provide critical enabling support and infrastructure for the continuation of the NTER' (Family, Housing, Community Services and Indigenous Affairs [FaHCSIA] 2008). This could be constructed as an example of interest convergence (Bell 2000), whereby a great deal of money is being spent on indigenous issues, but the largest budget lines are devoted to paying public servants to administer the policy at various levels (Ford 2009).

These arguments are setting up yet more oppositional false binaries (Yosso 2005): functional/dysfunctional communities and cultures; traditional back to basics education/critical pedagogy; bilingual/monolingual education; indigenous learning/non-indigenous learning; Western/Aboriginal epistemologies and world view and human rights/pragmatic solutions. The arguments ignore the unequal power relations between indigenous and non-indigenous people, the under-valuing of indigenous knowledge, and the lack of agency as indigenous people struggle to be heard. CRT enables us to recognize that dominant ways of thinking and doing will trump minority or socially disadvantaged perspectives. Current practices and policies, couched in liberal rhetoric, are entirely inadequate in the face of locked-in inequalities of achievement.

The achievement gaps in the NT between non-indigenous and indigenous students are scandalous. The elements that would help improve outcomes have been known about for a long time, but an ad hoc implementation has been the norm. There has been no rigorous intensive longitudinal study to establish which of these elements are associative or causal, what approaches work for whom or even to set targets in the NT to track change or improvement.

CRT encourages us to look beyond the binaries and indigenous people have been suggesting options for a long time. Both-ways education was a concept developed by the Yolngu of North-East Arnhem Land (Wunungmurra 1989) and subsequently applied as a driving principle at the Batchelor Institute of Indigenous Tertiary Education. Debate about precisely what constitutes both-ways education has been on-going. Ober (2009, 39) defines it this way:

Both-ways education is about drawing on and acknowledging skills, language, knowledge, concepts and understandings from *both* indigenous and Western knowledge systems. It's about everything that makes up an indigenous person's identity, and then finding a bridge from this knowledge to link into new Western academic knowledge (emphasis added).

Martin Nakata has long been an advocate of overcoming these binaries and is also one of the few willing to still name racism as an issue in the mix. Nakata (2010, 55) states:

These knowledge systems can be viewed as *irreconcilable* on cosmological, epistemological or ontological grounds as they are most often described though the international discourse on indigenous knowledge. *Or* they can be viewed in terms of their entanglements, synergies, and the shared conversations that can occur around the common interests explored through them (emphasis in original).

He argues cogently that *both* knowledge systems must be given their due status, 'We need to privilege both in the appropriate context for appropriate purposes' (Nakata 2010, 56).

It is hard to imagine an education system that has failed a cohort of students so badly. Indeed there is some indication that indigenous people in Australia are worse off against a range of social indicators than their counterparts in other first world countries, such as Canada and New Zealand (Cooke et al. 2007). Academics such as the Torres Strait Islander, Martin Nakata, together with concepts such as both-ways education, provide the foundations for thinking about indigenous education radically, in the sense of returning to its roots. We would do well to heed their words.

Acknowledgements

I would like to acknowledge the valuable input that Professor David Gillborn has made to this article.

Notes

- 1. The median is derived from arranging the lowest to highest marks and taking the one in the centre as the average mark. The mean in NAPLAN takes the sum of percentages for NMS and Above and divides by the number of band levels presented.
- 2. The issues of the NT Intervention are complex. To view Julia Nimmo's documentary *The Intervention, Katherine NT* go to http://www.abc.net.au/tv/documentaries/interactive/intervention/

References

Bell, D. 1980. Brown vs Board of Education and the interest convergence dilemma. Harvard Law Review 93: 518–33.

Bell, D. 2000. Brown vs Board of Education: Forty-five years after the fact. Ohio Northern Law Review 26: 1–171.

Boughton, B. 1999. Strategies to overcome institutional racism in education: A submission to the Collins review of Aboriginal education in the NT. Alice Springs, Northern Territory, Australia: Menzies School of Health Research.

- Christie, M. 1993. Exploring Aboriginal alternatives to Western thinking. *Education Australia* 22: 6–8.
- Collins, B., and T. Lea. 1999. Learning lessons. An independent review of indigenous education in the Northern Territory. Darwin: NT Government Press. http://www.det.nt.gov.au/ data/assets/pdf file/0005/7475/learning lessons review.pdf.
- Cooke, M., F. Mitrou, D. Lawrence, E. Guimond, and D. Beavon. 2007. Aboriginal wellbeing in four countries: An application of the UNDP'S Human Development Index to Aboriginal Peoples in Australia, Canada, New Zealand, and the United States. *BMC International Health and Human Rights* 7, no. 9: 1–39.
- Council of Australian Governments (COAG). 2008. Communique, 28th November 2008. http://www.coag.gov.au/coag_meeting_outcomes/2008-11-29/docs/communique 20081129.rtf.
- Crenshaw, K., N. Gotanda, G. Peller, and K. Thomas, eds. 1995. *Critical race theory: The key writings that formed the movement*. New York: New Press.
- Cummings, B. 1990. *Take this child: From the Kahlin Compound to the Retta Dixon children's home*. Canberra: Aboriginal Studies Press.
- Delgado, R., and J. Stefanic, eds. 2001. *Critical race theory: An introduction*. New York: New York University Press.
- Department of Employment, Education and Training (DEET NT). 2006a. Indigenous education strategic plan 2006–2009. Darwin: Northern Territory Government. http://www.det.nt.gov.au/_data/assets/pdf_file/0013/5125/IndigenousEducationStrategicPlans2006-09 full.pdf.
- Department of Employment, Education and Training (DEET NT). 2006b. DEET annual report 2005/6 Darwin: Northern Territory Government. http://www.det.nt.gov.au/__data/assets/pdf_file/0005/4667/deet_annual_report_2005-2006_performance_reporting.pdf.
- Department of Employment, Education and Workplace Relations (DEEWR). 2010. Early childhood policy http://www.deewr.gov.au/Earlychildhood/Policy_Agenda/ECUA/Pages/home.aspx.
- Department of Education and Training Northern Territory (DETNT). 2010 annual report 2009. Darwin: Northern Territory Government. http://www.det.nt.gov.au/about-us/publications/annual-report-200910.
- Department of Education and Training New South Wales (DETNSW). 2009. Performance highlights government schools. Sydney: New South Wales Government https://www.det.nsw.edu.au/detresources/about-us/how-we-operate/annual-reports/yr2009/detar09perfrep.pdf.
- Devlin, B. 2010. The decision to curtail Northern Territory bilingual-biliteracy programs in 2008 and to introduce a new policy in 2009: A brief synopsis. http://languageseducation.com/devlin101104.pdf.
- Donnelly, K. 2007. *Dumbing down: Outcomes based and politically correct the impact of the culture wars in our schools.* Prahran, Victoria: Hardie Grant Books.
- Family, Housing, Community Services and Indigenous Affairs (FaHCSIA). 2008. Budget 2008/9 closing the gap between indigenous and non-indigenous Australians. http://www.fahcsia.gov.au/about/publicationsarticles/corp/BudgetPAES/budget2008-09/Documents/Minsterial%20Statement/appendix2.htm.
- Ford, M. 1998. The implementation of government funded Aboriginal education in the Northern Territory from 1949 to 1955. In *Connections and disconnections*, eds. S. Parry and T. Austin, 284–305. Darwin: NTU Printery.
- Ford, M. 2009. In your face. A case study in post multicultural Australia. Darwin: CDU Press.

- Gillborn, D. 2008. Racism and education. Coincidence or conspiracy? Abingdon: Routledge.
- Hage, G. 1998. White nation. Fantasies of white supremacy in a multicultural society. Annandale, NSW: Pluto Press.
- Harris, S. 1990. *Two way Aboriginal schooling: Education and cultural survival.* Canberra: Aboriginal Studies Press.
- Hollinsworth, D. 1998. Race and racism in Australia. 2nd ed. Katoomba, NSW: Social Science Press.
- Howard, D. 2004. Why we need more Aboriginal adults working with Aboriginal students. *Australia Journal of Teacher Education* 29, no. 1: 14–22.
- Hughes, P., Aboriginal Education Policy Task Force. 1988. *Report of the Aboriginal education policy task force*. Canberra: Government Press.
- James, R. 1997. Rousseau's knot: The entanglement of liberal democracy and racism. In *Race matters. Indigenous Australians and 'our' society*, ed. G. Cowlishaw and B. Morris, 29–52. Canberra, ACT: Aboriginal Studies Press.
- Johnston, LF. 1937. Aboriginal welfare: Initial conference of Commonwealth and state Aboriginal authorities held at Canberra, 21–23 April 1937. Canberra, ACT: Commonwealth Government Printer.
- Jorgensen, R. 2010. Structured failing: Reshaping a mathematical future for marginalized learners. In *Shaping the future of mathematics education: Proceedings of the 33rd annual conference of the Mathematics Education Research Group of Australasia*, ed. L. Sparrow, B. Kissane and C. Hurst, 26–35. Fremantle: MERGA. http://www.merga.net.au/documents/MERGA33 Keynote Jorgensen.pdf.
- Kidd, R. 1997. The way we civilise: Aboriginal affairs The untold story. St. Lucia, QLD: University of Queensland Press.
- Ladson-Billings, G. 1998. Just what is critical race theory and what's it doing in a *nice* field like education? *International Field of Qualitative Studies in Education* 11: 7–24.
- Ladson-Billings, G. 2004. New directions in multicultural education: Complexities, boundaries, and critical race theory. In *Handbook of Research on Multicultural Education*, 2nd ed., ed. J.A. Banks and C.A.M. Banks, 50–65. San Francisco, CA: Jossey-Bass.
- Ladson-Billings, G. 2005. The evolving role of critical race theory in educational scholarship. *Race Ethnicity and Education* 8, no. 1: 115–9.
- Ladson-Billings, G., and W.F. Tate. 1995. Toward a critical race theory of education. *Teachers College Record* 97, no. 1: 47–68.
- Lambe, J. 2003. Indigenous education, mainstream education, and native studies: Some considerations when incorporating indigenous pedagogy into native studies. *American Indian Quarterly* 27, no. 1/2: 308–24.
- Leonardo, Z. 2004. The color of supremacy: Beyond the discourse of 'white privilege'. *Educational Philosophy and Theory* 36, no. 2: 137–52.
- McInerney, D.M. 1995. Achievement motivation and indigenous minorities: Can research be psychometric? *Cross Cultural Research* 29, no. 3: 211–39.
- Miller, J. 1986. Koori: A will to win. The heroic resistance survival & triumph of black Australia. North Ryde, NSW: Angus & Robertson.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA). 2008. NAPLAN results reading indigenous and non-indigenous 2008. http://www.mceecdya.edu.au/verve/ resources/NAPLAN2008-Indig-Reading.pdf.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA). 2009a. NAPLAN reading indigenous and non-indigenous 2009. http://www.mceecdya.edu.au/verve/_resources/NAPLAN2009-Indig-Reading.pdf.

- Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA). 2009b. NAPLAN numeracy indigenous and non-indigenous 2009. http://www.mceecdya.edu.au/verve/ resources/NAPLAN2009-Indig-Numeracy.pdf.
- Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA). 2009c. NAPLAN writing indigenous and non-indigenous 2009. http://www.mceecdya.edu.au/verve/resources/NAPLAN2009-Indig-Writing.pdf.
- Moreton-Robinson, A. ed. 2004. Whitening race. Essays in social and cultural criticism. Canberra, ACT: Aboriginal Studies Press.
- Nakata, M. 2010. The cultural interface of islander and scientific knowledge. *Australian Journal of Indigenous Education* 39, no. S: 53–57, Supplement.
- Northern Territory Board of Studies (NTBOS). 2009. NAPLAN results 2008 and 2009. http://www.det.nt.gov.au/__data/assets/pdf_file/0019/8551/NT_NA-PLAN results2008 2009.pdf.
- Ober, R. 2009. Both ways: Learning from yesterday, celebrating today, strengthening tomorrow. *Australian Journal of Indigenous Education* 38, no. supplement: 34–9.
- Pilkington, D. 1996. Follow the rabbit proof fence. St Lucia, QLD: Queensland University Press.
- Roithmayr, D. 2004. Locked in segregation. *Virginia Journal of Social Policy and the Law* 12, no. 2: 197–259.
- Rigney, D., L.I. Rigney, and P.A. Hughes. 1998. Report on Aboriginal students and the South Australian Certificate of Education (SACE). Adelaide, Australia: Yunggorendi, First Nations Centre for Higher Education and Research, Flinders University of South Australia.
- Rintoul, S. 1993. *The wailing: A national black oral history*. Port Melbourne: William Heineman.
- Seddon, T. 2001. National curriculum in Australia? A matter of politics, powerful knowledge and the regulation of learning. *Pedagogy, Culture & Society* 9, no. 3: 307–31.
- Semali, L.M., and J.L. Kincheloe. 1999. Introduction: What is Indigenous knowledge and why should we study it? In *What is indigenous knowledge?: Voices from the academy*, ed. L.M. Semali and J.L. Kincheloe, 3–58. New York: Falmer Press.
- Senate Education, Employment and Workplace Relations Reference Committee. 2010. http://www.aph.gov.au/Senate/committee/eet_ctte/naplan/report/b02.pdf.
- Simpson, J., J. Caffery, and P. McConvell. 2009. Gaps in Australia's indigenous language policy: Dismantling bilingual education in the Northern Territory. AIATSIS Discussion Paper Number 24. http://www.aiatsis.gov.au/research/docs/dp/DP24.pdf.
- Sutton, P. 2009. The politics of suffering. Indigenous Australia and the end of the Liberal consensus. Melbourne: Melbourne University Press.
- Taylor, J. 2010. Demography at work. Schooling work and Aboriginal population density change at Wadeye. CAEPR Working Paper 64/20. http://caepr.anu.edu.au/system/files/Publications/WP/CAEPRWP64.pdf.
- Villalpando, O., and B.D. Delgado. 2002. A critical race theory analysis of barriers that impede the success of faculty of color. In *The racial crisis in American higher education*, ed. W. Smith, P. Altbach, and K. Lomotey, 243–70. New York: SUNY Press.
- Wigglesworth G., and J. Simpson. 2009. NAPLAN language assessments for indigenous children in remote communities: Issues and problems. http://www.linguistics.unimelb.edu.au/research/projects/ACLA2/JW_JS_Naplan_2009.pdf.

- Wild, R., and P. Anderson. 2007. Ampe Akelyernemane Meke Mekarle. (Little children are Sacred Report). http://www.inquirysaac.nt.gov.au/pdf/bipacsa_final_report.pdf.
- Wunungmurra, W. 1989. Dhawurrpunaramirr: Finding the common ground for a new Aboriginal curriculum. *Ngoonjook: A Journal of Australian Indigenous Issues* 2, no. 12: 8–21.
- Yosso, T.J. 2005. Whose culture has capital? A critical race theory discussion of community cultural wealth. *Race Ethnicity and Education* 8, no. 1: 69–91.
- Yunupingu, G. 2009. Tradition, truth and tomorrow. *The Monthly* 41, December 2008–January 2009: 32–40.