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TOWARDS EDUCATIONAL ADVANTAGE IN VERY REMOTE AUSTRALIA. AN ANALYSIS OF 2012 NAPLAN DATA: WHAT DOES IT TELL US ABOUT REMOTE EDUCATION IN THE LAST FIVE YEARS?

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Abstract

For five years, a national testing program has been conducted in Australia. The National Assessment Program provides a basis for measuring improvement against the goals of the 2008 Melbourne Declaration on Educational Goals for Young Australians and subsequently the National Education Agreement, which embodies a range of Council of Australian Governments (COAG) goals and targets, including Closing the Gap targets. After five years it might be expected that the data would show some change.

The Cooperative Research Centre for Remote Economic Participation's Remote Education Systems has used existing publicly available data drawn from the MySchool website to determine what has happened for schools in very remote Australia.

The analysis shows that for very remote schools attendance rates have not changed significantly over the five years. Reading scores at any year have not changed significantly. Numeracy scores have declined significantly for year 3 in schools with greater than 80 per cent Aboriginal and Torres Strait Islander students.

The broader aim of the paper is to question what the findings might mean for the provision of an advantageous education for remote Aboriginal and Torres Strait Islander students. It raises questions about issues of accountability, equity and how success might be better defined.

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Introduction

The purpose of this paper is partly to present an analysis of National Assessment Program – Literacy and Numeracy (NAPLAN) data drawn from the MySchool website (www.myschool.edu.au). The intent is to highlight what, if anything has changed over the five years of testing to date. The focus will be on attendance, enrolments and outcomes for Year 3,5,7 and 9 Reading and Numeracy at schools in the Northern Territory, Western Australia, Queensland, South Australia and New South Wales. There are no very remote schools in the Australian Capital Territory and Victoria. In Tasmania there are three very remote schools, one of which has a high proportion of Aboriginal students. However the numbers of students at these schools is too small to be reported.

Schools in this analysis are divided into two groups: those with above 80 per cent Aboriginal and Torres Strait Islander student populations and those below. Our analysis suggests that at this break point, there are more differences in outcomes.

There are some caveats that should be placed around this analysis. Firstly, because the data does not include all schools—in particular not schools with small enrolments—some caution should be taken about the generalisation of findings across all of very remote Australia. Secondly, the data relating to attendance and enrolment fluctuates considerably over a school year in many very remote communities. Whether the attendance figures given in MySchool are representative of the whole year is open to question. Thirdly, an analysis of school level data may not reflect accurately what happens for particular cohorts within a school. For example, in schools with primary and secondary programs, school attendance data can be quite different for early childhood, primary, middle and senior year groups.

Ahead of the presentation of findings, this paper discusses the policy context in which these data sit. It is important to recognise what the indicators purport to measure. The discussion also focusses on the considerable action that has been directed at remote education over the last five years, both at a national level and through other more tightly targeted programs and initiatives. There is a far more important message to be gleaned from this analysis beyond the 16 tables that are presented. The discussion at the end of the paper is designed to provoke some deeper thinking about the validity of the data and what it really tells us about a good education for remote students.

National testing

National testing for assessment of literacy and numeracy began in 2008. Prior to this, each jurisdiction in Australia assessed literacy and numeracy independently. The primary purpose of the National Assessment Program is described as an instrument that determines whether or not students are succeeding in terms of a range of prescribed outcomes:

> *The National Assessment Program is the measure through which governments, education authorities, schools and the community can determine whether or not young Australians are meeting important educational outcomes.* (Australian Curriculum Assessment and Reporting Authority, 2011)

The Performance Reporting Framework, described in the National Education agreement is designed to provide 'an evidence base to support future policy reforms and system improvements including the aim of better directed resources.' (Standing Council on Federal Financial Relations, 2012, p. 8). National testing has other purposes. It is designed as a tool that will assist school improvement processes:

> *Schools can gain detailed information about how they are performing, and they can identify strengths and weaknesses which may warrant further attention.* (Australian Curriculum Assessment and Reporting Authority, 2011)

Beyond improvement, the National Assessment Program has an accountability function. In theory it

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allows parents to make informed decisions about where they should send their children to school. It also allows governments and other funders to assess whether resources applied are achieving the desired outcomes. The National Assessment Program fits within a broader policy context as a component of the Measurement Framework for Schooling in Australia, which in turn

> *defines national key performance measures for schooling arising from the Melbourne Declaration goals and commitment to action and key performance measures reflecting COAG targets and indicators drawn from the performance reporting framework of the National Education Agreement.* (Australian Curriculum Assessment and Reporting Authority, 2012, p. 4)

The *Melbourne Declaration on Educational Goals for Young Australians* articulates two main objectives:

> *Goal 1: Australian schooling promotes equity and excellence*
>
> *Goal 2: All young Australians become successful learners, confident and creative individuals, and active and informed citizens.*(Ministerial Council on Education Employment, 2008, p. 7)

The goals articulated in the Declaration are broadly consistent with a philosophy of education that goes well beyond a narrow focus on academic performance and transition to employment. They represent education as a vehicle for individual and social achievement, for an inclusive and respectful society, that supports the development of knowledge and skills, but not to the exclusion of other personal and social imperatives. In short the goals represent an array of educational epistemic, moral and political aims (Brighouse, 2009; Robertson, 2009). *The National Education Agreemen*t specifies five outcomes of education that in turn determine the key performance measures referred to above. These are:

> *(a) all children are engaged in and benefiting from schooling; (b) young people are meeting basic literacy and numeracy standards, and overall levels of literacy and numeracy achievement are improving; (c) Australian students excel by international standards; (d) schooling promotes the social inclusion and reduces the educational disadvantage of children, especially Indigenous children; and (e) young people make a successful transition from school to work and further study.(Standing Council on Federal Financial Relations, 2012, p. 6)*

As is demonstrated by the above, the National Assessment Program, which includes NAPLAN, is a tool to support the policy directions, accountability frameworks and goals of education, as determined by Australian governments. Notwithstanding the assumptions about what success or benefit look like, it is clear that the intention of the instrument is to show improvement. Further, it could be deduced that the Measurement Framework should also show how equity and excellence are being achieved.

Interventions designed to address remote educational disadvantage

The *National Education Agreement* signals a commitment to reform of education in the following directions:

> *(a) attract, train, place, develop and retain quality teachers and school leaders and support schools working with their local community; (b) implement a national curriculum; (c) transparent and strengthened accountability to improve student and school performance, including through national reporting on individual schools and the improved collection of and access to nationally consistent data and information required to support the agreed outcomes; (d) raise parental and community expectations of educational outcomes; (e) support teaching and learning in schools through appropriate infrastructure; (f) review funding and regulation across Government and non-government schooling sectors; (g) providing support to students with additional needs; and (h) "Closing the Gap" in educational outcomes between Indigenous and non-Indigenous students. (Standing Council on Federal Financial Relations, 2012, p. 12)*

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The Melbourne Declaration came with a 'commitment to action' to address a number of key priorities, which are reflected in the *National Education Agreement* and which are in turn reflected in a number of National Partnership Agreements including a:

- National Partnership Agreement on Low Socio-economic Status School Communities ($1107m over 5 years to 2013)
- National Partnership Agreement on Improving Teacher Quality ($444m over 5 years to 2013)
- National Partnership Agreement on Literacy and Numeracy ($500m over 5 years to 2013)
- Closing the Gap in the Northern Territory National Partnership Agreement ($184 over 4 years for 'enhancing education' to 2013)
- National Partnership Agreement on Improving Literacy and Numeracy ($242m over 2 years to 2013)
- National Partnership Agreement on the Nation Building and Jobs Plan: Building Prosperity for the Future and supporting jobs now ($14000m under Building the Education Revolution over 3 years to 2011)

Further to these commitments, the Australian Government's *Stronger Futures in the Northern Territory* commits $583 million over 10 years from July 2012 to support education in 23 remote communities (Australian Government, 2012). Beyond these major national initiatives, individual jurisdictions have specific programs and plans to address COAG priorities and a range of other National Partnership Agreements address priorities that overlap with education. These initiatives are complemented by other programs with varying degrees of connection with remote education, and most of which have a high level of government support. They include:

- The National Alliance for Remote Indigenous Schools (NARIS);
- The More Aboriginal and Torres Strait Islander Teacher Initiative (MATSITI);
- The Stronger Smarter Institute;
- Cape York Partnerships (incorporating a range of activities including Cape York Aboriginal Australian Academy and the Family Responsibilities Commission);

To this list, there are numerous smaller, often regional initiatives that have been designed in some way or another to address educational 'disadvantage' among Aboriginal and Torres Strait Islander students in remote communities (see for example Maughan, 2010; What Works: The Work Program, 2012). The intent of all the initiatives and programs listed above is to reduce the disparity in educational and other outcomes between those who live in remote communities and those who do not. While it is fair to say that only a small proportion of the funding goes to very remote schools the intent of the above list is to demonstrate the considerable effort on the part of all Australian governments put into improving outcomes for very remote schools.

The schools of very remote Australia

In 2012 a total of 276 very remote schools in the five jurisdictions of concern, were identified on the MySchool website (excluding offshore islands of Cocos Island, Christmas Island, Norfolk Island, Lord Howe Island and the Bass Strait Islands). Of these, 115 were made up of 80 per cent or less Aboriginal and Torres Strait Islander students. The balance (161) had more than 80 per cent Aboriginal and Torres Strait Islander students. Table 1 shows that of these schools, about one third are in the Northern Territory, but of those schools with more than 80 per cent Aboriginal and Torres Strait Islander students, nearly half are in the Northern Territory.

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Table 1.

Very Remote Schools In NSW, NT, QLD, SA And WA, 2012

Jurisdiction	Very remote schools with up to 80 per cent Aboriginal and Torres Strait Islander students	Very remote schools with more than 80 per cent Aboriginal and Torres Strait Islander students	Total very remote schools	Per cent of all very remote schools	Per cent of all very remote schools with >80 per cent Aboriginal and Torres Strait Islander students
NSW	9	5	14	5.1%	3.1%
NT	8	79	87	31.5%	49.1%
QLD	61	15	76	27.5%	9.3%
SA	8	15	23	8.3%	9.3%
WA	29	47	76	27.6%	29.2%
Total	115	161	276	100.0%	100.0%

Source *MySchool* (Australian Curriculum Assessment and Reporting Authority, 2013)

Why use 80 per cent as a dividing line?

The validity of using 80 per cent Aboriginal and Torres Strait Islander as a dividing line for this analysis may be questioned by some. Table 2 tabulates the number of schools by percentage of Aboriginal and Torres Strait Islander students and attendance rate, as reported by MySchool. The distribution of attendance shifts down as Aboriginal and Torres Strait Islander percentage increases. However, a closer look at the data shows that the median for attendance fluctuates only a little between about 88 per cent and 90 per cent for all schools until the proportion of Aboriginal and Torres Strait Islander students reaches 80 per cent. Above 80 per cent, the median attendance rate drops to 71 per cent. While not wanting to suggest that there is something magic about 80 per cent, there is something markedly different about the schools which reflects the nature of the community in which they fit.

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Table 2.

Distribution Of Per Cent Aboriginal And Torres Strait Islander Students And Attendance For Very Remote Schools, 2012 (Where Both Percentages Are Recorded)

	School attendance (per cent)							
Per cent of Aboriginal and Torres Strait Islander students in schools	30-39	40-49	50-59	60-69	70-79	80-89	90-100	Total schools
0-10				1		7	32	40
11-20						13	8	21
21-30						8	4	12
31-40						6	1	7
41-50					2	1	4	7
51-60					3	4		7
61-70				1	2	3	2	8
71-80				1	2	3	1	7
81-90				4	3	4	1	12
91-100	2	6	29	34	42	26	10	149
Total	2	6	29	41	54	75	63	270

Enrolment trends

Table 3 shows total enrolments for schools with up to 80 per cent Aboriginal and Torres Strait Islander students. Overall enrolments remained reasonably steady up till 2011 when there was a notable decline in Western Australia. Enrolments in Queensland fell steadily over the five years and while enrolments in the Northern Territory and South Australia have tended to increase in the period.

Table 3.

Total Enrolments By Jurisdiction For Schools With Up To 80 Per Cent Aboriginal And Torres Strait Islander Students

Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**
2008	612	1,799	5,330	1,252	5,315	14,308
2009	620	1,510	5,326	1,163	5,661	14,280
2010	403	1,779	5,004	1,179	5,568	13,933
2011	640	1,642	5,065	1,221	5,451	14,019
2012	618	1,778	4,781	1,319	4,671	13,167

Table *4* shows that there has been a steady overall decline in enrolments for schools with above 80 per cent Aboriginal and Torres Strait Islander student population, with year to year fluctuations up and down in particular states. Some of the annual fluctuations are explained by shifts in schools from one group to the other, depending on the proportion of Aboriginal and Torres Strait Islander students enrolled.

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Table 4

Total Enrolments By Jurisdiction For Schools With Above 80 Per Cent Aboriginal And Torres Strait Islander Students

Year	NSW	NT	QLD	SA	WA	Total
2008	208	7,949	4,017	736	4,510	17,420
2009	191	7,485	4,092	807	3,907	16,482
2010	404	7,902	4,109	810	3,771	16,996
2011	229	8,171	3,799	797	3,520	16,516
2012	215	7,939	3,571	792	3,841	16,358

Table 5 shows an overall tendency for declining school size in very remote schools. In all jurisdictions except Queensland, the average school size for schools with up to 80 per cent Aboriginal and Torres Strait Islander students is larger than for those with more. It should be noted though that the numbers are affected in Queensland by large multi-campus schools of Tagai State College in the Torres Strait and Western Cape College on Cape York.

Table 5.

Average School Population For Very Remote Schools

	Average school population by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average school population by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average school population by jurisdiction for all schools
Year	NSW	NT	QLD	SA	WA	Total	NSW	NT	QLD	SA	WA	Total	
2008	68	200	89	139	190	124	52	103	251	53	90	108	115
2009	69	216	89	129	195	125	48	95	256	58	80	102	111
2010	58	222	86	147	186	126	67	99	228	54	79	102	111
2011	71	205	84	153	182	122	46	102	237	53	75	101	110
2012	69	222	78	165	161	114	43	100	238	53	82	102	107

Attendance

Table 6 shows attendance rates as recorded on MySchool for the five years to 2012. For schools with more than 80 per cent Aboriginal and Torres Strait Islander students, New South Wales and Western Australia have achieved a sustained increase in attendance. The results in 2012 for the other jurisdictions were below the five year average. However, using a student's t-test, the overall attendance rates for schools with more than 80 per cent Aboriginal and Torres Strait Islander students has not changed significantly ($p<.05$). The differences for New South Wales and Western Australia are similarly not significant. The decline in South Australia is not significant either.

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Table 6.

Average Attendance Rates By Year And Jurisdiction For Very Remote Schools

	Average per cent attendance rate by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average per cent attendance rate by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average attendance rates by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	87	81	90	88	85	88	74	63	78	74	71	69	77
2009	87	87	90	89	85	88	76	69	79	67	71	71	78
2010	91	86	90	90	85	89	82	71	82	71	75	74	80
2011	86	84	90	89	86	88	81	69	82	69	74	72	79
2012	86	82	90	89	85	88	86	66	79	66	75	70	78
2008-2012	87	84	90	89	85	88	80	68	80	69	73	71	78

Reading and numeracy outcomes

The focus of the analysis presented here is on two NAPLAN measures: reading and numeracy. Other NAPLAN measures could have been added, but of all the available measures, these two look set to remain in the suite of tests, based on the 2012 Measurement Framework (Australian Curriculum Assessment and Reporting Authority, 2012). The intent of the analysis was to look for statistically significant change: is there any significant differences in the 2012 data when it is compared to the five years. To this end student t-tests were used to determine if the 2012 data set was substantially the same as the data set for the five years—or not.

Reading

Table 7 shows average year 3 reading scores for very remote schools for the five years to 2012. The results show an increasing trend for those schools with less than 80 per cent Aboriginal and Torres Strait Islander students but no overall change at all for those schools with greater than 80 per cent Aboriginal and Torres Strait Islander students. Using a t-test to compare the 2012 data with the five years, shows that the results are not significantly different ($p<.05$) for either group. The difference for South Australia is similarly not significant ($p<.05$).

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Table 7.

Year 3 Reading Scores By Year And Jurisdiction

	Average year 3 reading scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 3 reading scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 3 reading scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	367	379	352	370	350	356	289	183	251	286	257	217	280
2009	383	366	355	417	360	366	274	216	296	301	277	248	297
2010	389	374	363	345	356	361	257	207	319	291	274	247	291
2011	328	334	364	391	364	362	266	203	294	270	282	241	294
2012	383	356	370	396	367	370	279	209	278	240	276	238	294
2008-2012	370	363	360	384	359	363	270	204	288	279	274	239	292

Table 8 shows average year 5 reading scores for very remote schools for the five years to 2012. Again, the 2012 results for the schools with up to 80 per cent Aboriginal and Torres Strait Islander students appear to be slightly above the five year average while the results for the other schools is below the five year average. The differences are not significant for either group of schools.

Table 8.

Year 5 Reading Scores By Year And Jurisdiction

	Average year 5 reading scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 5 reading scores by jurisdiction for schools greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 5 reading scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	432	445	450	428	442	441	370	267	338	328	337	302	374
2009	437	459	458	469	458	456	342	279	348	351	333	309	377
2010	486	433	454	435	439	447	379	286	376	349	337	319	376
2011	450	434	435	468	428	435	296	282	381	368	352	317	365
2012	438	477	454	455	441	452	350	264	357	360	335	302	364
2008-2012	445	452	450	450	442	446	344	276	360	353	339	310	371

Table 9 shows average year 7 reading scores for very remote schools for the five years to 2012. As before, any differences for 2012 results for either group or any jurisdiction are not significant when compared with all results for the five years.

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Table 9.

Year 7 Reading Scores By Year And Jurisdiction

	Average year 7 reading scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 7 reading scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 7 reading scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	448	516	498	504	490	498	435	359	396		407	377	423
2009	463	534	501	536	497	505	407	366	432	392	413	387	439
2010	474	508	516	518	500	509	456	378	431	425	424	403	454
2011	466	539	510	522	510	512	425	366	440	426	428	398	446
2012	466	508	500	505	507	502	411	345	431	392	428	386	438
2008-2012	463	519	506	517	502	506	422	363	428	410	421	391	441

Table 10 shows average year 9 reading scores for very remote schools for the five years to 2012. As before, any differences for 2012 results for either group or any jurisdiction are not significant when compared with all results for the five years.

Table 10.

Year 9 Reading Scores By Year And Jurisdiction

	Average year 9 reading scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 9 reading scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 9 reading scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	520	527	551	562	531	543		397	441	436	463	428	481
2009	499	588	537	558	544	546		379	469	461	433	416	467
2010	488	546	539	559	508	532	455	413	466	451	456	435	476
2011	535	550	544	588	543	555	427	399	477	399	443	418	474
2012	517	509	534	555	498	524	472	375	458	249	451	399	453
2008-2012	512	542	541	565	523	540	445	393	462	405	449	419	470

It should be noted that the number of results in each year grouping declines progressively as Table 11 demonstrates. This is largely due to the greater number of primary schools than high schools in the sample. The smaller number of results does affect the probability that significant differences will be observed.

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Table 11.

Number of results recorded for all schools over five years, Reading

Schools	YEAR 3 READING	YEAR 5 READING	YEAR 7 READING	YEAR 9 READING
>80 % Aboriginal and Torres Strait Islander	383	357	308	174
<= 80% Aboriginal and Torres Strait Islander	281	286	242	137

Numeracy

Table 12 shows average year 3 numeracy scores for very remote schools for the five years to 2012. The table shows that overall the results for 2012 are lower than for the five years. For those schools with greater than 80 per cent Aboriginal and Torres Strait Islander students the difference using a student's t-test *is* significant ($p<.05$). The difference is significant for the Northern Territory ($p<.1$) and for Queensland ($p<.05$) schools with greater than 80 per cent Aboriginal and Torres Strait Islander students. The differences for those schools with up to 80 per cent Aboriginal and Torres Strait Islander students are not significant.

Table 12.

Year 3 Numeracy scores by year and jurisdiction

	Average year 3 numeracy scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 3 numeracy scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 3 numeracy scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	360	394	357	357	360	361	309	257	266	307	282	267	310
2009	348	368	342	398	358	356	260	226	273	299	270	247	293
2010	326	376	364	340	361	360	290	244	299	292	261	259	297
2011	341	368	362	373	358	361	299	265	315	269	296	280	316
2012	367	361	341	354	344	347	314	230	258	212	278	247	290
2008-2012	349	373	353	365	356	357	294	244	282	275	276	260	301

Table 13 shows average year 5 numeracy scores for very remote schools for the five years to 2012. As for the reading results, any differences for 2012 results for either group or any jurisdiction are not significant when compared with all results for the five years.

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Table 13.

Year 5 Numeracy scores by year and jurisdiction

	Average year 5 numeracy scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 5 numeracy scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 5 numeracy scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	412	441	435	434	433	434	389	332	348	374	362	345	389
2009	438	465	449	460	455	453	388	330	368	383	371	352	397
2010	492	451	460	439	440	451	387	323	376	354	354	343	391
2011	454	438	448	465	438	446	318	346	398	374	367	359	395
2012	444	479	446	444	441	447	338	329	370	375	363	345	388
2008-2012	444	457	448	448	442	446	361	333	371	372	365	349	392

Table 14 shows average year 7 numeracy scores for very remote schools for the five years to 2012. The difference between 2012 and the five year average is not significant for those schools with less than 80 per cent Aboriginal and Torres Strait Islander students. No significant differences were observed at the jurisdiction level or for schools with more than 80 per cent Aboriginal and Torres Strait Islander students.

Table 14.

Year 7 Numeracy scores by year and jurisdiction

	Average year 7 numeracy scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 7 numeracy scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 7 numeracy scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	460	517	506	509	504	506	420	388	423	393	433	403	437
2009	466	539	509	541	499	509	422	394	423	411	426	407	453
2010	471	508	517	522	500	510	435	387	439	418	422	408	453
2011	458	535	511	529	507	511		390	430	419	416	405	448
2012	461	497	497	498	505	499	434	379	435	349	431	403	442
2008-2012	463	517	507	520	503	507	429	388	431	397	425	405	447

Table 15 shows average year 9 numeracy scores for very remote schools for the five years to 2012. Any differences for 2012 results for either group or any jurisdiction are not significant when compared with all results for the five years.

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Table 15.

Year 9 Numeracy scores by year and jurisdiction

	Average year 9 numeracy scores by jurisdiction for schools with up to 80 per cent Aboriginal and Torres Strait Islander students						Average year 9 numeracy scores by jurisdiction for schools with greater than 80 per cent Aboriginal and Torres Strait Islander students						Average year 9 numeracy scores by jurisdiction for all schools
Year	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	**NSW**	**NT**	**QLD**	**SA**	**WA**	**Total**	
2008	505	541	553	552	532	543		424	467	460	480	453	495
2009	514	602	550	562	555	557		441	489	478	469	459	500
2010	505	564	555	565	532	548	447	425	470	457	457	442	492
2011	523	559	546	591	526	550	461	428	480	454	454	444	491
2012	540	548	542	568	529	544	467	447	485	462	462	462	498
2008-2012	517	562	549	566	535	548	458	434	479	464	464	452	495

Table 16 shows the number of numeracy results recorded for each year group over the five years. As might be expected the numbers drop off significantly over the high school years. This is partly due to the probable movement away from remote schools to boarding facilities in regional and urban areas. It is also partly due to the lower attendance rates, particularly for the mainly Aboriginal and Torres Strait Islander schools. It is also partly due to the smaller class sizes in the senior years, which mean that the threshold for reporting is not achieved in a lot of cases.

Table 16.

Number of results recorded for all schools over five years, Numeracy

Schools	**YEAR 3 NUMERACY**	**YEAR 5 NUMERACY**	**YEAR 7 NUMERACY**	**YEAR 9 NUMERACY**
>80 % Aboriginal and Torres Strait Islander	376	355	312	173
<= 80% Aboriginal and Torres Strait Islander	279	281	244	139

Discussion and conclusions

Beyond the detail of the analysis presented here, which overall shows little significant change, with the notable exception of the decline in results for Year 3 numeracy, there are a number of messages that should be considered. *Firstly*, in terms of resources applied, there has probably never been a time in the history of Australia where financial resources have been targeted as much as they have in the last five years, to address some of the major concerns of education. The concerns as expressed in the goal statements of the Melbourne Declaration are ambitious and laudable. The financial commitment over the last five years has also been ambitious.

Secondly, despite the breadth of goals expressed in the Melbourne Declaration, the Measurement Framework for Schooling is focused on a very narrow subset of these, 'on student participation, achievement, attainment and equity' (Australian Curriculum Assessment and Reporting Authority, 2012, p. 5). There is an assumption in the measures that they will capture the array of intended outcomes from schooling. If for example, students are to become 'active and informed citizens' (Ministerial Council on Education Employment, 2008, pp. 8-9), to what extent do the measures reported on here, capture this outcome?

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Thirdly, following on from the above, because 'accountability' is behind the measurement framework (seeStanding Council on Federal Financial Relations, 2012, pp. 7-8), there will be a tendency to focus on those indicators that are measured rather than those that are not—even though they are explicitly articulated in the Melbourne Declaration. Effectively, the broad vision of education is distilled into a focus on 'student participation, achievement, attainment and equity' (Australian Curriculum Assessment and Reporting Authority, 2012, p. 5) and therefore measures of attendance, enrolment, academic performance, and retention. The measures of equity are based on student and parent characteristics (such as gender, Indigeneity, location, disability), not on the provision of education services or on teaching and learning delivery. They do little more than reinforce the discourse of disadvantage rather than building a discourse of educational advantage (see Guenther et al., 2013).

Fourthly, the imperative of accountability—based as it is on a narrow set of indicators of success (or failure)—works against principles of school autonomy. While the measurement framework suggests that key performance measures must be 'relevant and of interest to the public' (Australian Curriculum Assessment and Reporting Authority, 2012, p. 5), it seems that what is relevant is determined by the system, not the school and its community. International analysis of performance data suggests that 'there is a clear relationship between the degree of curricular autonomy a school system offers its schools and the system's performance' (OECD, 2010, p. 41) the evidence is less clear when autonomy is limited to allocating resources.

Fifthly, at some point in time questions must be raised about the return on investment in remote education, based on the outcomes as they are reported by the system itself. It was noted earlier that the purpose of measuring and reporting these outcomes is to show progress or improvement. The analysis presented here shows that there has been no progress and on one measure, regress, over the last five years.

Sixthly, this analysis should help us question whether the repeated bearing of bad news in remote education matters. Indeed, should educators care? More importantly, the questions we should be asking are about what really matters for students in very remote communities. If the system is really interested in measuring progress, it is clear that NAPLAN is too blunt an instrument to do the job (at least on its own) in remote communities. Can we dare to be creative enough to begin measuring other indicators of progress or success?

Finally, an obvious question that emerges from this analysis is 'why is it so?'. The assumptions of the system to date appear to place blame on socio-economic disadvantage, service delivery concerns and teacher quality (based on the emphasis of the various National Partnerships). However, there could be other things at play which explain the lack of apparent progress. Some of these may be about the indicators themselves, but others may relate to cultural assumptions about what successful schooling and aspiration are, and whether the system's assumptions are congruent with those of the local community.

There is a real need for a new language that acknowledges the advantages of a 'good' education for remote students. While there is no point in trying to dismiss or ignore failure or disparity, there is equally not a lot of point in continuing to pour ever more resources into a system that shows no improvement. If educators only looked at NAPLAN results they would be inclined to give up! However, there are successes in remote education—successes that qualitatively look very much like the aspirations of the Melbourne Declaration goals. Within the Remote Education Systems projects we can point to multiple examples of success where students

- *are creative, innovative and resourceful, and are able to solve problems in ways that draw upon a range of learning areas and disciplines*
- *are well prepared for their potential life roles as family, community and workforce members*
- *understand and acknowledge the value of Indigenous cultures and possess the knowledge, skills and understanding to contribute to, and benefit from, reconciliation between*

Indigenous and non-Indigenous Australians (Ministerial Council on Education Employment, 2008)

The findings of the RES project to date suggest that:

- parents are **keen to see their children succeed** and generally recognise the value of education but they struggle to make sense of reports that assign Es to students and will get no value at all out of individual NAPLAN reports on their children's progress;
- students **engaged in learning** are far more important than students attending every day;
- **resilience and confidence** are more important precursors to engagement in learning than socio-economic advantage;
- the language of **aspiration and success** should encompass a broad range of imagined futures, beyond measures of success that limit the scope of success to a degree, a new house and a better paying job;
- **learning for the real world** of remote communities is as important for students, parents and carers as is learning for the unreal world of life in the mainstream of non-remote Australia;
- a good education for remote students will open up **choices, opportunities and hope**, and those choices can be created equally well by learning that happens in boarding schools or community schools;
- and **life-long learning** should be supported and celebrated outside the limiting scope of the K-12 years of compulsory education.

Would it not be more productive for parents to know how their son Billy is progressing in learning; how his resilience and confidence is growing; what hopes and dreams he should be looking towards; how his learning will help him contribute to his community and what choices he may have in and beyond school, rather than giving him an E on his report card.

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