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Deficit metrics in Australian Indigenous education: through a media studies lens

Kerry McCallum ^(D)^a, Tess Ryan ^(D)^b and Jo Caffery ^(D)^c

^aNews and Media Research Centre, University of Canberra, Bruce, Australia; ^bMelbourne Based Academic, Writer and Consultant of Biripi Country, Australian Catholic University, Fitzroy, Australia; ^cFaculty of Education, University of Canberra, Bruce, Australia

ABSTRACT

Journalistic news values and digital technology align with education policy and practice to construct a narrow world of Indigenous educational achievement and contribute to a discourse of negativity, failure and disempowerment. Digital technologies have enabled the online publication of educational performance that is a valuable source of news for journalists and editors. In this virtual world, Indigenous students are numerically ranked and publicly compared to their 'mainstream' peers. Despite significant criticism of the educational trend towards high-stakes testing and league tables there has been little investigation into the role of news media in the reporting of Australia's National Assessment Program – Literacy and Numeracy (NAPLAN). This article takes a media studies lens to examine the measurement and comparison of Indigenous school performance through the online publication of NAPLAN results and the My School website. A textual analysis of 143 news reports about Australian Indigenous students' NAPLAN results over an eightyear period from 2010 to 2017 found that Australia's news media told the story of Indigenous educational performance through a language of measurement and failure. This focus on deficit metrics fails to question the underlying assumptions of educational testing and comparison and perpetuates a discourse of deficit in Indigenous education.

KEYWORDS

Media; deficit discourse; Indigenous education; data justice; Indigenous policy; Australia; NAPLAN

Introduction

In a virtual mediated world, the values of news and the affordances of digital technology align with education policy and practice to construct a narrow world of Indigenous educational achievement. Journalists contribute to making public the numerical ranking and comparison of Indigenous students with their 'mainstream' peers. This article supports a body of research critical of the trend towards new managerialism in Australian Indigenous policy and education, arguing the Closing the Gap (CTG) policy framework and National Assessment Program – Literacy and Numeracy (NAPLAN) high-stakes testing regime have

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CONTACT Kerry McCallum 🖾 Kerry.mccallum@canberra.edu.au

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'rendered statistical' contemporary Australian Indigenous education (Altman & Fogarty, 2010, p. 112; Bellchambers, 2014). Altman and Fogarty (2010, p. 112) have argued Indigenous policy frameworks such as Closing the Gap have become so reliant on statistical measurement that they have become 'abstractions divorced from the lived reality of Indigenous subjects'. While there has been significant criticism of league tables and the trend towards numerical comparison in education (Grek, 2009; Thompson & Mockler, 2016) and of NAPLAN as a measurement tool for educational achievement in Australia (e.g. Lingard, Sellar, & Savage, 2014; Vass, 2013), there has been little investigation into the role of media and journalism in the routine public discussion of Indigenous education. Taking a media studies lens, we focus on how educational and policy trends have coincided with advances in digital technology and data journalism to enable the measurement, comparison and publicity of school performance, and how this focus on 'deficit metrics' (Sullivan, 2016) has contributed to a discourse of negativity, failure and disempowerment in Australian Indigenous education.

In a digital media environment, Government websites and news media reporting are important sites of mediated educational discourse. Australia's *My School* website (https://www.myschool.edu.au/) enables the collation and publication of Australian student achievement metrics from the high-stakes NAPLAN test. As a digital media platform, *My School* operates as an informational subsidy available not only to parents and authorities but to media organisations and journalists. Gans (1979; Gandy, 1982) termed this provision of information by a third party a 'news subsidy'. NAPLAN results offer an appealing, pre-constructed story that aligns with dominant news values, enabling journalists to represent the complexities of Indigenous education through narrow numerical comparison.

A textual analysis of media reporting of Australian Indigenous students' NAPLAN results over an eight-year period from 2010 to 2017 undertaken for the Deficit Discourse in Indigenous Education and Prevalence of Deficit Metrics¹ projects reveals how the routines of data gathering, analysis and representation retell a story of deficit in Indigenous education. Our analyses identify a relentlessly negative discourse in relation to First Nations communities, schools and individuals in news media discussion. News is framed around Indigenous performance understood almost exclusively as the results of NAPLAN testing. Stories persistently emphasise failure; failure of Indigenous children to meet the educational standards of their non-Indigenous peers; failure of government policy; and the failure of Indigenous Australia to measure up to the mainstream. We question why the voices of Aboriginal or Torres Strait Islander teachers, families and children are rarely heard in this mediated discussion of Indigenous education. We conclude that the confluence of educational measurement and its mediated representation contributes to a discourse of deficit in relation to Indigenous education and fails to guestion the underlying assumptions of educational testing and comparison. This is ultimately a story of data justice, whereby the unquestioned acceptance of numerical 'facts' can further perpetuate structural inequalities and injustice (Hintz, Dencik, & Wahl-Jorgensen, 2018).

'Deficit metrics' in Indigenous education: NAPLAN and its critique

Sullivan (2016) introduced the term 'deficit metric' to describe assessment and measurement tools that produce knowledge about a group's achievement, progress or activities in ways that emphasise the presumed failures or deficiencies of that group. He argues that deficit metrics in Indigenous policy are not natural or inevitable but have been constructed as a policy tool in the increasingly managerial educational policy framework that has shaped the past decade of Indigenous affairs in Australia. Educational performance has been identified as a key indicator of the Australian government's Closing the Gap Indigenous policy framework since 2008 (Australian Government, 2018). Of note is the suite of Closing the Gap educational targets that closely map evidence of Indigenous educational achievement against the results of the annual NAPLAN test (closingthegap.niaa.gov.au). According to Altman and Fogarty (2010), Closing the Gap represents an 'increasingly complex, managerial and technical approach to addressing undeniable Indigenous disadvantage' (see also Bellchambers, 2014; Lingard, Creagh, & Vass, 2012). Shore and Wright (2015, p. 22) refer to this practice as 'governing by numbers' (see also Rose, 1991). They argue the reduction of 'complex processes to simple numerical indicators and rankings' are for purposes of management and control. 'At the heart of this process is an increasing fetishisation of statistical measurement and competitive ranking' (p. 22).

The move to metricise Australian Indigenous education is part of a global movement that has seen the rise of high-stakes testing and a culture of comparison whereby school systems are increasingly managed through the results of, and comparisons between, individual and school test results (Fogarty, Riddle, Lovell, & Wilson, 2017; Grek, 2009). In Australia, NAPLAN is a key measure through which governments, education authorities, schools and the community can determine whether or not young Australians are meeting educational outcomes (Guenther, 2013). NAPLAN results are made public through the Australian Curriculum, Assessment and Reporting Authority (ACARA) My School website and are used as evidence of the success or failure of the Closing the Gap educational targets (Ma Rhea, 2013). As Gorur (2013, p. 220) explains, in line with international trends, NAPLAN and My School were promoted as central tools for tackling inequities in the Australian education system by constructing a national data infrastructure for measuring and diagnosing disparities in student achievement (Lingard et al., 2014). Thompson and Mockler (2016) found that despite some strongly held criticisms of NAPLAN, school principals demonstrated a 'desire for the data', a positive disposition towards the testing regime, and a trust in audit culture (p. 14).

Journalism and the 'digital turn'

While a wide body of literature identifies the increasing prominence of deficit metrics in policy and educational practice (see Lingard et al., 2012; Lingard et al., 2014; Wiggles-worth, Simpson, & Loakes, 2011), there has been little research connecting this with mediated public discussion (cf. Mockler, 2016). We contend that media studies can offer a critical lens on the discursive construction of deficit metrics in Indigenous education through the publicity of the NAPLAN educational testing regime. Three interlinked phenomena show the prevalence and impacts of deficit metrics in media representation of Indigenous education: prevailing news values in relation to Indigenous people and issues; the rise of data journalism; and the production of news by governments.

Indigenous education has long been a 'bad news' story for Australian journalists. The media studies concept of news values is useful to explain this narrow representation of

complex phenomena. There is a long tradition of research in journalism studies showing that crisis, drama and conflict are key values that drive reporting and sales (Gans, 1979; Harcup & O'Neill, 2017; O'Neill & Harcup, 2018). Common news values include negativity, surprise, contrast, and magnitude. In addition, journalists favour stories that they can follow up and stories that fit the news organisation's agenda. Hall (1973, p. 235) argued that although the news values of mainstream journalism may appear to be a 'set of neutral, routine practices', they actually form part of an 'ideological structure' that privileges the perspectives of the most powerful groups within society. McCallum and Waller (2017) demonstrated how journalists' relentless pursuit of negative news about Indigenous peoples and issues has provided mainstream news audiences and policy-makers with a diet of bad news about Indigenous affairs.

Changes in the digital media environment are a second factor contributing to the appeal of NAPLAN results for contemporary journalists. Writing for the Digital Journalism journal, Lewis (2015) says journalism is being transformed by data-centric phenomena. Data journalism is defined as a hybrid form of journalism that incorporates statistical analysis, computer science, visualisation and web design, and reporting (Coddington, 2015, p. 334). It builds on the earlier tradition of 'precision journalism' that promotes objective and statistical reporting (Meyer, 1973). According to Coddington (2015, p. 331), the affordances of digital technology have enabled journalists, who have traditionally privileged the textual and the visual over the numerical, to broaden their skillset and incorporate complex quantification into their journalism. They argue that '[t]his wave of quantitatively oriented journalism has ... great potential to broaden journalism's ability to make democratic institutions more responsive and legible to the public ... ' (p. 332). However, Hintz et al. (2018) alert us to a celebratory mindset in terms of digital media's potential contribution to democracy. When applied in the context of Australia's colonial history and contemporary politics, what might appear as incidental or inevitable developments in journalism can be seen as embedded in a colonial history of racism, with significant and detrimental ongoing impacts.

The final thread relates to the common appeal of statistics, numbers and comparisons to both journalism and government. It is here that the alignment between NAPLAN and the reporting of Indigenous affairs coincides. Herbst (1998) critiqued the prevalence of statistical measurement in the development of opinion polling, including its alignment with journalistic norms and news values. She drew on Foucault (1977) to argue that the appeal of statistical comparison complements the journalistic standard of 'objectivity'. We can see here the irresistible appeal for journalists of the cycle of NAPLAN testing, publication of results, and reporting as a routine bad news story, backed up by statistics and numbers. Furthermore, in a news environment where journalists are increasingly constrained by diminishing resources, newsrooms can readily access digital comparison tables produced by ACARA, and published on its My School website, to produce predictable but newsworthy stories. Franklin (2004, p. 256) describes what he refers to as the 'packaging of politics' and journalists' growing preoccupation with reporting educational matters through 'a predictable and narrow agenda including the publication of the perennial round of school league tables'. The media studies concept of mediatisation refers to the relationship between changes in the media, and changes in society and politics (Couldry & Hepp, 2013; Hjarvard, 2013). Rawolle and Lingard (2014) draw on the

mediatisation framework to show how changes in educational policy and practice link with changing practices within journalism and the media:

The development and/or promotion of league tables of performance and other instruments of comparison, by which individual schools, groups of schools, or even whole school systems are compared, has provided an ongoing source of content for journalists in multimedia outlets. (pp. 599–600)

Our close examination of the language used to convey Indigenous NAPLAN results further contributes to the understanding of the emerging but under-researched mediatisation concept in educational studies.

Reporting educational performance

Before turning to our analysis of media reporting of Indigenous NAPLAN results, it is important to note that the Australian news media has long presented schools and teachers in a negative light, in line with similar trends in Britain and the United States (Baroutsis, 2016; Hattam, Prosser, & Brady, 2009; Stack, 2007). In the context of Indigenous education, Schwab (2012) laments that so much media and policy attention is focused on what is 'wrong' with Indigenous education, rather than figuring out what is going right and how to replicate it. A small body of research has considered the representation of educational testing in mainstream news media. In her critical discourse analysis of one newspaper's reporting of an inquiry into Queensland schools, Thomas (2003) demonstrated how the newspaper constructed a 'preferred' discourse about educational crisis and failure. Stack (2007), in a critical discourse analysis of media reporting of the results of two international tests, found that the media interpretation reflected that of business and political elites. She found news media represented the results as a 'failure of marginalised students' rather than a 'failure of society to address systemic discrimination' (p. 100). Consequently, journalists rarely examine alternative approaches to the 'problem'. Lingard et al. (2014) analysed NAPLAN and the Programme for International Student Assessment (PISA) as technologies of governance that rearticulate equity as a measure of performance and ultimately reinforce discourses of economic rationality in education.

The launch in 2010 of the *My School* website (myschool.edu.au), which publishes school NAPLAN results in an easily accessible, comparable, digital form, has attracted intense media and academic attention. News media outlets have used the data to construct 'league tables' which compare the performances of ostensibly similar schools, for example in particular geographical areas or similar socioeconomic demographics. Gorur (2013, p. 220) explains how the introduction of NAPLAN as a common assessment system helped develop common metrics and build an infrastructure that could provide the necessary tools and resources for policymakers, education systems and parents to take part in a common educational market (Gorur, 2013, p. 220). In turn, the *My School* website was developed to make information about schools available to parents and the general public. Mockler (2013, p. 7) found that newspaper editorials about the *My School* website at its inception and launch positioned the media as the protectors of the public interest against the self-interested teachers, unions and governments (see also Shine, 2015). She notes that NAPLAN league tables are newsworthy and their

production and publicity are likely to attract readers and sell more advertising for media outlets. Mockler's frame analysis of newspaper editorials identified three dominant, interplaying narratives of Distrust, Choice and Performance. Throughout the editorials, the preferred narratives work together to provide a strong justification for *My School* and the ensuing league tables of which the prime beneficiaries are the newspapers themselves (Mockler, 2013, p. 12). In a frame-analysis study, Baroutsis (2016) found that news media reporting of NAPLAN results was simplistic and as a consequence often flawed. 'The media framing of 'school performance' acts as a mode of regulation and scrutiny that is focused on 'holding schools to account' using mostly top-down accountability' (Baroutsis, 2016, p. 574).

Media reporting of Indigenous NAPLAN results

To date there has been no specific study of how news media reports on the results of Aboriginal and Torres Strait Islander students in NAPLAN testing. To address this gap the research team gathered and analysed news items pertaining to Indigenous students and NAPLAN. Utilising quantitative content analysis and constructionist news framing analysis methodologies we drew on the Nexus database, plus online materials, across an eight-year period, 2010–2017, to identify 143 news items referring to 'NAPLAN' and 'Indigenous' and/or 'Aboriginal' and/or 'Torres Strait Islander'. Items were then coded for title, publication, spokesperson, theme and tone of the language used. We used the principles of critical discourse analysis (Fairclough, 2001) to evaluate each article. This analysis approach attends to the words, language and the broader contextual factors at play in the construction of a text. Our research concentrates on how contemporary journalists draw on a stock of cultural understanding and practice as they produce news stories (Dunne Breen & McCallum, 2013). Each news story was read in the context of Australia's colonial history, the Closing the Gap policy and the high-stakes testing educational context. Close attention was paid to the story elements and graphics of news stories including the numerical representation afforded by data-driven journalism. We also paid close attention to whose voices and what discursive practices were used to tell the story of Indigenous 'success' in education. Finally, we coded each NAPLAN descriptor to identify the most common language sets used. We coded for 'positive' and 'negative' language in headlines and identified 'measurement' and 'failure' as the dominant groupings. Each news item was critically analysed in light of this typology of discursive factors, and through the iterative processes of inductive textual analysis, key themes and journalistic practices were identified. Close analysis revealed that the routine practices of journalism, the affordances of data journalism, and the use of language dominated by language, comparison and failure, worked together to perpetuate the deficit discourse (see also McCallum & Waller, 2020).

Routine practices of journalism

Our first finding is that the routine practices of journalism profoundly shape the production of news about Indigenous NAPLAN results. Since its inception in 2008, the release of the NAPLAN national report each December is a regular fixture on journalists' news calendars. Drawing on the statistics made available in the online report and the *My*

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School website, journalists conducted simple statistical analyses that provided numerical evidence of school performance for their stories. Government provided the most widely accessed news subsidy, drawing on pre-packaged news stories in the December NAPLAN national report (Franklin, 2004). Our analysis showed that over the eight years in our study, 30 per cent of stories relating to Indigenous education and NAPLAN were published in the month of December. Typical headlines, such as this one, include:

• National Indigenous Television: *Indigenous education gap stands out in latest NAPLAN results*. (SBS NITV News, 2015, 8 December)

Other sources of news included the 2011 Council of Australian Governments reform report; the 2014 Wilson Review of Northern Territory (NT) Indigenous education, and a controversial report by the Centre for Independent Studies (CIS) that used NAPLAN results to argue for the closing down of NT Indigenous communities (Hughes & Hughes, 2010). We found that while Indigenous NAPLAN news was generally of marginal interest to Australia's mainstream news organisations, news values of proximity and crisis drove the publication of a routine story of Indigenous educational failure. Another facet of reporting was how state and regional news reports routinely compared regional results. For example:

• Fairfax media headlined: *Long way to go in closing the ACT's Indigenous gap.* (Stanhope & Ahmed, 2017, 14 March)

While in the Northern Territory,

• news.com reported: NT independent schools lead pack with NAPLAN results, bush schools continue to struggle. (Aisthorpe, 2017, 18 March)

And in Queensland,

• Gap widens between top and bottom students as Queensland comes 5th in NAPLAN. (Caldwell & Chillcott, 2012, 25 January)

These findings support the earlier conclusions of Mockler (2013) that news media benefit from the publication of the NAPLAN results as they generate newsworthy stories for local audiences.

Data driven journalism

A second theme in our analysis of Indigenous NAPLAN news stories relates to the reliance of journalists on the affordances of digital journalism. The ACARA *My School* website provides journalists with an array of information to report on NAPLAN results. Journalists are able to compare results between states, number of Indigenous students, remote/urban areas, and private/public/independent schools. Educator Chris Sarra argues that this can be a positive thing, bringing about transparency and accountability, stimulating reform processes, highlighting performance gaps and motivating new programmes. In a 2011 article titled 'Remote learning shift gains big tick':

Dr Chris Sarra says increased transparency and accountability brought about by the *My School* website has made a real difference to Indigenous education. NAPLAN results have stimulated reform processes and highlighted performance gaps, motivating new programs. (Chilcott, 2011, 23 August)

While it has been argued that the easy access to data affords journalists a new opportunity to challenge official accounts (Coddington, 2015), our analysis demonstrates that when it comes to NAPLAN and Indigenous peoples, the result is quite the opposite. Despite the wealth and complexity of information at hand, as well as ample research available in the field of Indigenous education, simple statistics remain prevalent in articles reporting on NAPLAN results in the period from 2010 to 2017. The statistics concentrate on aspects of performance, often without an in-depth analysis. In the following two examples, journalists drew on secondary data drawn from the controversial CIS report for their evidence about Indigenous performance in NAPLAN, despite the availability of published original data:

- 4 out of 10 Aboriginal students sitting the tests are failing them. (Santow, 2010, 29 April)
- Indigenous students are trailing mainstream students by six years. (Patty, 2010, 29 April)

Pervasive language of numbers, comparison and failure

The language of deficit dominated the way journalists told the story of Indigenous NAPLAN results. We have identified two prominent language sets through our textual analysis. The first pertains to a series of words centred on the concept of 'measurement'. Ninety-five of the 143 stories in our dataset contained language that communicated news about Indigenous education in terms of numerical comparison. Examples included: statistic, gap, performance, target, results, best, worst, dominated, categories, halving, target, percentage, %, lagging, scored, progress, points, measure, compare, matching, topping, large, exceeded, rankings and disparity. Typical of deficit stories about NAPLAN and Indigenous students were the following:

- Indigenous literacy figures fall short. (McDonald, 2011, 8 June)
- Indigenous students score 15 points lower than non-Indigenous students in city schools. (Ferrari, 2012, 19 December)

Such language fits with what Mockler (2013) termed the 'Performance Narrative' that is embedded with the assumption that a market-like competitive force is a positive driver for educational outcomes, quantified by NAPLAN, and parsed by a resource tool such as *My School* (Mockler, 2013, p. 10).

We find that the superficially neutral language of measurement and performance takes a particular inflection in relation to news reports about Indigenous education. We identified a second set of terms in the news stories in our dataset that coalesced around deficit language. These included: failure, worst, fault, decline, waste, plummeting, broken, blame, no improvement, poor performing, discriminating, ashamed, slow progress, intervention, 274 🛞 K. MCCALLUM ET AL.

shocking, dismal, devastating, left behind, persistent, plateaued, struggle, and worsened. The almost exclusively negative representation of Indigenous students through their NAPLAN results constructs a statistically supported picture of failure in relation to Indigenous education. The following media headlines exemplify the way stories about Indigenous NAPLAN results were represented in terms of crisis and failure:

- 2016 NAPLAN results show maths, literacy skills flatline. (news.com, 2016, 13 December)
- SA failing in Indigenous education. (Stokes, 2012, 26 June)

NAPLAN results were tied to government funding processes to support a narrative of policy and educational failure. The neo-conservative CIS continued to provide a key source of news throughout 2011 and 2012. An invited opinion column in *The Australian* newspaper blamed progressive government policy, rather than under-funding, for poor NAPLAN results (Hughes & Hughes, 2011). Titled 'Protecting bad teachers produces chronic failure', the authors stated that 'According to the *My School* website, funding is not the cause of Indigenous education failure'. Interesting to note is the use of health crisis language such as *chronic* and *flatline* to emphasise the gravity of the story. Journalists reported the alarmist and ideologically-driven CIS commentary largely uncritically:

• Superman needed to rescue education. NAPLAN results reveal that Australia's worst performing 150 schools are almost all Indigenous. (Bantick, 2011, 31 March)

Again, in 2012, the ABC drew on the CIS' research to report that 'School test results plunge in the NT despite big money'.

• A study of NAPLAN results around the country shows that standards have plummeted in the Northern Territory, in spite of years of funding and good intentions. (Eastley, 2012, 27 June)

NAPLAN results were cited as the lynchpin of the Closing the Gap strategy: the perceived lack of improvement in results is seen as yet another 'failure' of the government's broader Indigenous affairs strategy.

• Federal failures cited as hopes fade of closing the education gap. (Robinson, 2012, 27 June)

We also identified a tendency to look for a 'solution' to the 'problem' without questioning the complexities of multiple issues at hand. We found that news stories linked NAPLAN results with other policy discourses including attendance, absenteeism, and truancy (McCallum & Waller, 2020; Waller, McCallum, & Gorringe, 2018). For example, a story in *The Australian* (Karvelas, 2014, p. 26 August) titled: 'Truancy tamed by welfare threats', stated the government's Welfare Reform Measure (SEAM) had improved Indigenous school attendance and that this in turn had 'direct, positive effects on NAPLAN results'. Some journalists linked school performance with socio-economic disadvantage figures, remoteness and isolation data (eg Balogh, 2016, p. 1 October), casting remote Indigenous schools as the 'problem'. In an article titled 'Remote chance of University' Lane (2010, p. 28 December) reported that: *NAPLAN results show Indigenous schools are at the bottom of Australia's schools, with appalling literacy and numeracy failure rates*. Such reporting reinforces race as being the cause of the gap in the results, with few articles taking into account the complexity and inter-relatedness of factors leading to Indigenous education achievement as measure through NAPLAN.

Counter narratives, nuance and success

Strengths-based or positive accounts of Indigenous education were difficult to come by; just 17 of 143 stories we analysed had positive or neutral headlines. If and when positive outcomes were identified, three main 'solutions' were typically identified and reported about: attendance strategies put in place by schools and governments, radical educational methods, and sending children from remote communities away to boarding schools. For example:

• Doomagee State School produces stunning NAPLAN results thanks in part to technological advancements in teaching. (Chilcott, 2011, 15 September)

New programmes or government policies such as the 'direct instruction' programme championed by Noel Pearson were touted as a singular solution to the 'problem':

• Direct instruction works wonders in Northern Territory schools. (Walker, 2017, 12 August)

Journalists tended to report under the assumption that the 'problem' must have a simple solution, but its causes, or indeed the very question of its existence in one guise only, were rarely discussed. Our analysis suggests that NAPLAN results have become the unquestioned yardstick for the measurement of the educational achievements of Indigenous children. A discourse counter to the dominant 'deficit' mode of thinking was difficult to find in mainstream news sources. Atypical examples included, the Kemblawarra Public School which introduced restorative justice, learning plans, and family consultation (McIlwain, 2012, p. 9 September), Midvale Primary School which runs health checks, a breakfast club, and an early intervention programme (Ferrari & Perpitch, 2012, p. 20 December), and Cherbourg school's emphasis on partnerships with parents, staff and community members, as well as positive reinforcement programmes (NIRS, 2011, p. 16 September). Academic news sites such as *The Conversation* promoted solutions that were working for particular schools, albeit at times feeding into the negative discourse by exposing the dire statistics first to frame the 'problem'. This highlights the role of editors in shaping the narrative through the titles of articles that help to frame an otherwise nuanced account.

- Indigenous education report misses the big picture. (Fogarty, 2012, 3 July)
- Stop focusing on 'the problem' in Indigenous education, and start looking at learning opportunities. (McKinley, 2017, 9 February)

Conclusion

News media reporting provides just one site of discourse and knowledge production about Indigenous education. Nevertheless, the systematic analysis of mainstream news media stories provides a useful lens through which to consider how Indigenous education is discursively constructed in this powerful domain. We find that discourse about Indigenous education is steeped in a language and structure of deficit. Our analysis of the words, sources, topics and data in 143 news stories over eight years has drawn a picture of Indigenous students, their parents, schools and communities as failing against their non-Indigenous peers. Where stories of success were told, they were often located within the dominant discourse of failure with Indigenous students or schools succeeding despite the assumed reality. Positive stories were most likely to promote the radical 'direct instruction' model or identify the success of individual schools or programmes, rather than Indigenous-led solutions. In matters of racial literacies, strengths-based counter narratives a times position Aboriginal or Torres Strait Islander 'achievers' as the one person or child who has beaten the odds against a backdrop of disadvantage. In journalists' efforts to write something positive, they perpetuate Whiteness as neutral position that plays into divisions between Western or mainstream perspectives of knowledge, success, attainment and Indigenous knowledge being built over time.

News about Indigenous educational performance through NAPLAN was alarmingly one-dimensional. Few journalists challenged the agreed assumption that achievement in the NAPLAN tests and improvement against non-Indigenous peers was an indicator of Indigenous success. This finding affirms the critical accounts of Altman and Fogarty (2010), Gorur (2013) and Lingard et al. (2014) that educational achievement, measured though the technical apparatus of NAPLAN, is a key indicator of economic prosperity and evidence that Indigenous people are participating in the market economy. News media organisations champion educational policies and practices that draw all marginalised groups into the 'real economy'. These findings support the emerging body of research that demonstrate the mediatisation of educational policy, whereby media policy become increasingly entwined (Rawolle & Lingard, 2014).

The weaving together of a language of measurement and a language of failure is particularly pervasive in stories framed through the news value of crisis and negativity. We conclude this is ultimately a story of data justice, where journalists embrace statistical certainty to reinforce a story of racial superiority that permeates through media and policy discourse (McCallum & Waller, 2017). In the age of datafication, our study provides a strong example of how data availability and use can align with established policy and media discourse to perpetuate discrimination, power and control (Hintz et al., 2018). As Sullivan (2016) has lamented, the use of deficit metrics –

... measures failure, and in doing so tells white and black alike just how much Aboriginal people are failing. For all its seemingly natural inevitability, it is, in the end, demoralising, demonising, depressing and, as a result, self-fulfilling. (n.p.)

This distressing portrait of media reporting can be seen as further perpetuation of deficit thinking in relation to Indigenous education. Educational researchers have provided strong evidence that it is not natural or inevitable for Indigenous students to be understood through their NAPLAN results (Guenther & Bat, 2013). Guenther, Bat and Osborne (2013, 2014) argue for a shift to 'red-dirt thinking' that would focus on Indigenous perspectives, triumphs and failures. Initiatives such as Learning on Country (Fogarty & Schwab, 2015) reconceptualise Indigenous education away from dominant assumptions.

Such a shift in focus would positively inform the measurement criteria for success and the definition of relative advantage of remote-area Indigenous education.

Drawing on Thompson and Mockler (2016) we also ask whether there is potential for the locus of blame in newspaper reporting to shift in relation to Indigenous education. The changing nature of the news ecology opens up opportunities for new and more nuanced perspectives. Dreher, McCallum, and Waller (2016) examined how Indigenous participatory media, including or Indigenous-led media such as IndigenousX (www.indigenousX.com. au), sites such as The Conversation, digitally shared community news services, and alliances such as that between Indigenous-owned and operated media organisations and mainstream news such as the ABC and *The Guardian* offer the slimmest suggestion of change. Contributions to the public debate such as those by Biripi academic Rvan (2017) are helping to reshape the discourse by taking a strengths-based approach and telling the stories of Indigenous educational success. Gorringe's Engorri method is identified as another compelling Indigenous-led educational practice that challenges a deficit mindset (Waller et al., 2018). We have been aware throughout this project that academic researchers can be complicit in reproducing deficit discourse but also have an important role to play in confronting, challenging and reframing the deficit mindset. However, this shift towards more strength based in academic writing of Indigenous issues comes at a time when the media has essentially gone backwards in their understandings, often adopting a 'clickbait' mentality in terms of what headline will get the most attraction.

Our research demonstrates that to date the digital turn has perpetuated the dominant discourse of deficit in Indigenous education. The evidence provided here supports the view that the journalism has been a key contributor to deficit metrics in Indigenous education that ultimately reinforces colonial superiority and race-based stereotypes. But Hall (1973) reminds us that the way journalists report is not natural or inevitable. The digital turn opens opportunities for journalists to engage with individual schools, educational leaders and teachers to consider the full range of educational options and values available in Indigenous education.

Note

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ORCID

Kerry McCallum b http://orcid.org/0000-0001-7567-2125 *Tess Ryan* b http://orcid.org/0000-0002-6655-4933 *Jo Caffery* b http://orcid.org/0000-0001-9178-0863

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