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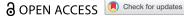
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On the uses and use of NAPLAN: the hidden effects of test-based data-centric accountabilities

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ABSTRACT

This paper engages, Sara Ahmed's theorising on 'the uses of use' to frame an analysis of the hidden, embedded effects of standardised testing policy that have become normative practice/s in Queensland, Australia. It (re)examines data from an ethno-case study into the datafication of assessment and learning over one school year, in primary and secondary schooling contexts, to understand the uses of the National Assessment Program – Literacy and Numeracy (NAPLAN) in a new, critical light. We explore schools' contemporary uses of NAPLAN - intended or otherwise - to demonstrate how the policy effects of NAPLAN have become insidiously submerged within the daily practices in schools. Drawing on interviews with 27 teachers and seven school leaders, classroom and staff meeting observations, and artefact data, we reveal the invisible vet profoundly altering presence of NAPLAN and its consequences. Specifically, we analyse the ways in which NAPLAN practices, structures and technologies are both hidden and yet manifestly altering as a) practices that disappear into their uses, becoming unidentifiable and routine; and b) practices that follow well-used pathways that further embed particular uses. We counter rhetoric of NAPLAN normativity and complacency, instead demonstrating that its current uses, while not originally intended, are insidious and profound.

ARTICLE HISTORY

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KEYWORDS

Standardised testing; NAPLAN; data; teachers; accountability; use

Introduction

In this paper, we draw on Sara Ahmed's (2019) notions of 'use' and its associated functions and practices, to understand the nature and effects of standardised testing policy, specifically the National Assessment Program - Literacy and Numeracy (NAPLAN) in Queensland, Australia. Introduced in 2008, NAPLAN is an annual standardised testing regime in which all Australian children in Years 3, 5, 7, and 9 are tested on Literacy (reading, writing, and language conventions) and Numeracy. In recent decades, data from standardised testing in international and national contexts have

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dominated the discourse on improving schooling and educational outcomes (Addey et al., 2017; Hardy 2014; Lingard et al., 2016). In fact, education now seems to be almost exclusively considered in relation to the 'measurement and comparison of educational outcomes' in the aim to raise standards (Biesta 2009, 33). With many countries now participating in International Large Scale Assessments (ILSAs), we are seeing a global phenomenon that is '...shaping assessment cultures within nations' (Addey et al., 2017, 438). As noted by Martens et al. (2016), international assessments have become a globally accepted phenomenon to which national schooling systems respond. The results of these international studies are influencing policy decisions within nation-states and reorganising and restructuring their educational systems. Although the first international studies can be dated back to 1964, the OECD's PISA, introduced in 2000, has gained ongoing significant growth through both political and media attention and response. PISA positioned itself as a guide for educational reform within the context of the neoliberal push for increased accountability and transparency within nation-states, becoming an authority in assessing academic performance and shaping what is understood as 'good education' at the national level (Martens et al., 2016).

Of particular interest to this paper is that as such global and national policy conditions influence education in Australia, the global rise of 'policy as numbers' has become the 'reductive norm' within education systems (Lingard 2011) and as part of the Global Education Reform Movement (GERM) (Sahlberg 2007, 2021). Sahlberg (2007) explains the three common features in this global movement across education systems as the 'standardisation of education,' 'increased focus on literacy and numeracy' and 'consequential accountability systems' (Sahlberg 2007, 151). These 'market oriented reform strategies' (Sahlberg 2007, 147) have brought with them a 'juggernaut' of international and national testing (Wyatt-Smith and Adie 2018), impacting educational priorities and giving rise to what Biesta (2010) calls the 'age of measurement' and the 'measurement industry' (Biesta 2016). Sahlberg (2021) notes that while GERM is not a 'formal global policy program' it has evolved as an 'unofficial educational agenda' (p. 142) through the reliance on a set of popularised assumptions on how best to improve education systems.

Importantly, the problematic nature of such educational reform is evident in how broader policy conditions play out in practice. As noted by Ball (2015), we, as neoliberal subjects, are incited to relentlessly work on improving ourselves to 'drive up our numbers, our performance, our outputs - both in our personal lives and our work lives' (p. 299). Thus, those in schools are governed through numbers (Ozga 2009) and through quantification and comparison (Ozga 2008), with conceptions of education also shifting towards being governed by numbers and statistics (Grek 2009). Such governance by numbers is also playing out within the broader debates of 'big data' (Beer 2016; Kitchin 2014), and digital data infrastructures that materialise large volumes of data (Clutterbuck 2020), that have come to regulate cultural norms and societal values (Bradbury and Roberts-Holmes 2018).

Positioned within the global policies and pressures of ILSAs, the promotion of the core work of education, being to improve educational outcomes through test-based data centric accountabilities, is expressed at the national and local level (Hardy 2018). While such policy contexts are perhaps more established in the US and UK contexts, within Australia today the high-stakes nature of data has been stimulated through NAPLAN and the publication of NAPLAN results on the MySchool website (Klenowski and Wyatt-Smith 2012). These policy conditions foster systems of accountability as an integral part of school practices, altering what counts as effective performance (Gore et al., 2023), good teaching (Holloway 2021) and quality schooling (Mockler 2020). Much research has examined how NAPLAN as a neoliberal assessment regime performs as a catalyst for increased performativity logics at both the system as well as the school levels (Hardy 2015). Specifically, the pressure to perform on NAPLAN has reduced staff morale (Spina 2017), increased work-related stress and yet reduced time for quality teaching and learning (Wyn et al., 2014) and introduced a logic of comparison where teachers constantly engage in 'talk' about how students are positioned on NAPLAN results (Hardy 2015).

Importantly, discourses of NAPLAN have consistently shown divergent points of view about the testing regime since its inception. NAPLAN was originally conceived as a measure to identify students who were not meeting minimum standards for literacy and numeracy, and to more effectively target funding based on need. NAPLAN was also positioned with a strong social justice and equity orientation, with an aim to increase transparency and accountability and to help disadvantaged school communities lift their performance. While NAPLAN became regarded as a catalyst for decision-making regarding government funding and the distribution of services, this compounded the stakes of such performance measures (Hardy 2014) and further morphed NAPLAN into a technology of surveillance. While researchers have long highlighted it as being highstakes (e.g. Klenowski and Wyatt-Smith 2012; Thompson 2013), policymakers and politicians have argued that it is low-stakes, and as intended only to provide feedback to teachers, students and their families about learning progress. Policymakers and politicians have also positioned the testing as 'not new' and have contrasted it alongside ostensibly higher-stakes testing which hold direct consequences for students, such as end of high-school exams (ACARA 2014). Research has directly challenged the construction of NAPLAN being low-stakes, such as Howell's (2017) research showing children's perspectives of the testing regime. Howell (2017, 570) notes that 'claims that NAPLAN is experienced negatively by some children have been consistently dismissed'. However, many of the children in her study experienced the test as being negative, and 20% of the children in her study described physical symptoms of anxiety manifesting as sleeplessness, fear, and other negative physical symptoms.

In this paper, we suggest NAPLAN's embeddedness in Australian schooling, policy and practice indicates that it is working as it was intended – as a key driver for schooling reform. We demonstrate in our analysis that NAPLAN follows a well-worn discursive pathway as a high-stakes, pressurised testing system, evident in practices and infrastructure. By its very nature, when working as intended, it disappears into its uses - into the tools, practices and logics it generates, becoming an embedded feature of the system it influences (Ahmed 2019). In this article, we deploy Ahmed's theoretical work on the uses of use; how exploring the way/s an item is used - in ways that are both visible and overused - can offer new insights into the ways that particular objects become invisible and yet profoundly altering. To do this, we analyse interviews with 27 teachers and seven school leaders in one public primary school and one public secondary school, as well as classroom and staff meeting observations and artefact data from both school sites. In doing so, we highlight the invisible and altering presence of NAPLAN and its consequences on teachers' work and wider schooling structures and practices.

The original contributions of our work are twofold. First, our paper contributes new understandings about how NAPLAN practices, structures and technologies are hidden yet manifest as a) practices that disappear into their uses, and b) practices along well-used pathways that further embed particular uses. We counter the rhetoric of NAPLAN receding as a policy mechanism and instead show how the insidious and sedimentary practices associated with NAPLAN suggest that NAPLAN as a performative accountability technology is indeed working as intended and thus disappearing from view. The second contribution of our paper is theoretical: our development of Ahmed's work as a theoretical lens to understand these practices serves as a novel approach within this field of research.

The paper is structured as follows. We first provide contextual information about the schooling system in which this study is located, followed by details of the study design and analysis. Our analysis is structured into two key themes: 1) NAPLAN as an infrastructure with associated practices disappearing into its uses, and 2) NAPLAN being discursively constructed as a high-stakes testing regime which follows well-worn pathways which promote particular uses or practices, and limits the possibility of others.

Accountability, data and NAPLAN

Australian education policy since the early 1980s has responded to broader policy trends of marketisation and neoliberalism (Connell 2013) - forces that have had profound impacts on social and economic policy (Western et al. 2007) and schooling (Davies and Bansel 2007). Australian education policymaking has seen the effects of the local adoption of global policies, a phenomenon referred to as 'policy-borrowing' (Auld and Morris 2014; Lingard 2010). This, as well as the combination of market logics and constant schooling reform, has seen regulation and standardisation become policymaking constants (Groundwater-Smith and Mockler 2018). In the early 2000s, the federal Labor government introduced a range of nationalisation reforms. These included standardised testing regimes (the National Assessment Program - Literacy and Numeracy (NAPLAN)) and a centralised website for the reporting of data on school demographics and performance (MySchool), as well as a national curriculum and a central curriculum and reporting authority (the Australian Curriculum, Assessment and Reporting Authority (ACARA)) (Lingard 2010). These policy technologies are now established features of the Australian schooling system (Lewis et al., 2020) and have created new conditions for teachers and policymaking, characterised most substantively by datadriven logics (Hardy 2014) and cultures of accountability (Thompson 2013).

The research context: a year of schooling in Queensland

When use can be separated from function, use seems to come after. But starting with use might require going back even further, before some-thing became functional, before a cup came to be a cup, a utensil, a thing from which we can drink. When would a story of use begin? (Ahmed 2019, 24)

NAPLAN has been central in Queensland's education policy and political imaginary since its introduction in 2008. After performing comparatively poorly in the inaugural round of testing, the Queensland government and education system made it a core driver of their school improvement agenda. A significant body of research has been conducted on the effects of this decision in Queensland in particular, and the subsequent consequences for teachers' work (Daliri-Ngametua et al., 2022), children's experiences of schooling (Howell 2017), and principals' leadership practices (Heffernan 2016; Mills and Niesche 2014). Further research has explored the systemic approaches and infrastructure developed in response to Queensland's focus on NAPLAN as a core tenet of policy (Clutterbuck et al., 2021; Lewis and Hardy 2015). As noted previously, while research has established NAPLAN as high-stakes and shown its pernicious effects, the aforementioned debate about the high-stakes nature of NAPLAN continues to be shaped by policy-as-text and policy-as-discourse (Ball 1993) which simultaneously entrenches the position held by NAPLAN through targets, language, and strategy while also positioning NAPLAN as no longer being important and simply a low-stakes part of a wider accountability regime/infrastructure (Queensland Department of Education and Training and Queensland Teachers' Union 2018; Queensland Teachers' Union 2018).

Theoretical framework: Sara Ahmed and the uses of use

We take Ahmed's, 2019 notions of 'use' as our point of departure in analysing these data. The conceptual tools offered by Ahmed in her analysis of 'use' afford an understanding of intended and consequential policy effects of NAPLAN and similar accountability regimes. We deploy these tools to explore NAPLAN as a phenomenon which has become embedded in Australian education and schooling. In particular, we take up two key ideas: the ways things disappear into their uses, become insidiously invisible and yet influential, and the well-used, familiar pathways which embed particular uses of a thing, diminishing the possibilities for imagining otherwise.

Disappearing into uses

One of Ahmed's (2019) key arguments on the uses of use is that an object working as intended disappears from view; it is subsumed within its functionality, becoming both familiar and altering. It is also true that things can be designed this way, to disappear and to become unnoticed, so that it is no longer possible to identify the object's origins, or to imagine what was possible before or without it. In this paper, we take an object - the NAPLAN testing regime - and consider its uses and the technologies and rationalities underpinning these uses, to argue that the regime is so deeply embedded in the everyday grammar of schooling in Australia - in ways that extend beyond its intended use - that it is no longer identifiable or noticeable.

Ahmed (2019) also writes on uses that emerge after an object's conception, and the ways that visibility may transform as uses do. Uses can also emerge after an object is designed, writes Ahmed, and therefore, the eventual use of an object should not be confused with the original intentions. The evolution of the use of an object happens in such a way that something might appear to be unused while being used. The ways that things are used may occur without leaving traces, Ahmed suggests, or, traces one might expect to be able to see. She notes use as being 'a frame: not all activities appear as uses if not all uses appear' (p. 60-61). So not only does an object disappear when working as intended, it can also become hidden when it is not being used in ways one would expect to see. It becomes less obvious and appears to be unused, when in reality it is being used in different ways.

Ahmed (2019) notes that despite alterations to the intended or initial use of an object, these do not necessarily stop it from working. However, taking up an object for different uses can not only disguise the object itself, but deeply embed it within a particular space. Ahmed writes that spaces can then become organised around particular uses, and these might or might not be obvious. In organising space in particular ways, we can make the use of something easier or more likely. Ahmed describes this as 'hap' and explains the ways that 'hap' aids the object in disappearing from view:

It might appear as if the moment of use is hap: that this person or that person just happens to fit the requirements the way the stone just happens to be the same size as the hole in a wall. But once a building has been built, once it has taken form, more or less, some more than others, will fit the requirements. Fitting is still dependent on work: social reproduction works by tending to disappear as work. (Ahmed 2019, 185)

The invisible work that is built into the moment of use appearing as 'hap' is a core focus of this paper. We suggest in later sections that the reproduction of NAPLAN, its practices, uses and ideas, occurs through work that is largely invisible and is already subsumed into the logics and practices of teaching and learning. These seemingly incidental uses, that appear neutral and normative, are actually ideological, suggests Ahmed; she writes that things are used in certain ways because of the ways structures and processes are built around them. This is an important distinction in our analysis of NAPLAN's presence in contemporary schooling; practices and uses that are now routine and rudimentary are built into existence by a system governed by NAPLAN logics.

We argue in this paper that the structure of NAPLAN is evident in myriad ways in decision-making that happens in schools, many of which are hidden or go unnoticed. Entire infrastructures are built around the use of particular objects, such as NAPLAN, but its use is also evident in everyday decisions from school leaders and teachers. Like Ahmed (2019, 206), we see the ways the 'small acts of use [...] over time' become foundations that enable particular ways of working, that welcome particular approaches, and that exclude other possibilities and perspectives from fitting within schooling systems and contemporary practices. These building blocks and small acts of use can be conceptualised as pathways, a notion we explore further below.

Well-used pathways

The notion of well-used pathways, introduced by Ahmed (2019), maintains that use and overuse of items over time creates familiar ways of thinking and being that reinforce the normativity of their use. At the same time, she argues, this familiarity makes much more difficult the notion of resistance or imagination of possibilities that something could be different. The pathways created by use - or the common ways of using something become so embedded that it becomes difficult to imagine a different way of working. Particular uses of an object will become restrictive and things or spaces that are

repeatedly used in one way 'will become less receptive' to other ways of working (p. 59). We use this heuristic to analyse the ways the ubiquitous infrastructure surrounding NAPLAN makes it easier for it to permeate into other uses, beyond its initial intentions.

On the use and overuse of objects, Ahmed (2019) writes that while objects function better after use, as any friction or 'roughness' is levelled by interaction, the well-worn path becoming 'smoother, easier' (p. 38). There is an inherent materiality to using something well; the tangibility of use functioning as resistance to the ephemeral. It reminds users, too, that any past use makes a stake in the future; past use makes way for future use. One limitation, though, of use/overuse, is that the more well-used some paths become, the fewer pathways appear available. The options for use become limited to those that have been used well before. Once this overuse occurs, and the options of use are restricted, there becomes a point when its usage no longer makes things easier; in fact, an object can become 'overused' and therefore it stops being usable at all (p. 47). Using something, Ahmed argues, can mean 'wearing it out' (p. 38); intertwining human involvement, mingling with and through the object, changing the way the object exists in the world. Inevitably, use means friction, tension and wear.

Well-used pathways create impediments to resistance, suggests Ahmed (2019), an argument that warrants the analysis of NAPLAN's well-used logics to invite other ways of thinking and doing. Ahmed argues that the embedded and commonly accepted nature of these well-used pathways are often left to individual people to resist, or to conceptualise alternatives. However, Ahmed suggests that this is particularly difficult and should not be up to individuals to do; to resist the use of something which is commonly accepted, or a well-used pathway, places people into precarious positions. Subsequently, it creates difficulties for them - it becomes more effort to resist, and resistance holds material consequences. It is possible that teachers who resist these pathways can be taken away from opportunities to participate in decision-making and can miss out on career opportunities and 'the paths that lead not just through, but up the organisation' (p. 78).

The concept of well-used pathways offers an innovative approach to understanding the position held by NAPLAN and associated policies and discourses within a wider education system. In working with this concept, we contribute new possibilities for understanding the implicit and explicit place and effects of high stakes testing which could be taken up in research in other contexts which share similar policy regimes.

Methods and methodology

This paper draws on data generated as part of a doctoral research project using a theoretically informed ethno-case study (Parker-Jenkins 2018) to explore the nature and effects of the datafication of assessment and learning on student, teacher and whole school/leader practices in two middle class public schools¹. Evergreen Public Primary School and Mainview Public Secondary School were selected as the focus of this study as they are both high performing schools on a range of measures, including academic performance in both school-based and external assessments. The data derive from 58 semi-structured interviews with 27 teachers and seven school leaders (including teachers of Prep to Year 9) as well as observations in classrooms, professional learning communities and a range of artefacts from within both school sites. All interviews and observation data were de-identified to adhere to the ethical guidelines as mandated by the

Australian 'National Statement of Ethical Conduct in Human Research' (NHMRC, 2018). The data were generated over the duration of one school year in order to examine the impact of datafication on practices that merge and diverge over time, including in relation to the sometimes unexpected external conditions that unfold over time.

Approach to analysis

Secondary analysis

We revisited data that were initially generated as part of a doctoral research project, bringing a new theoretical lens to the analysis. Methodological writing has highlighted challenges faced in undertaking secondary analyses of data by new researchers, or archived data which can lose important contextual detail (e.g. Corti et al., 2005). As one of the authors of this paper was the original researcher of the parent study, our process involved continually discussing and reflecting on the data together, seeking insights and observations about context and the original data generation process. Sherif (2018) suggested that secondary analysis – when knowing these important details about the original research - can bring new insights when applying a new theoretical framework. Our intersecting areas of interest and expertise include education policy enactment, teachers' work and lives, and the effects of accountability and external pressures on school-based practices. These diverse and overlapping interests enabled us to bring new insights to these existing data through our ongoing discussions and collaborative analysis, both of which draw on our respective perspectives.

We undertook a thematic analysis informed by our collective reading of Ahmed's (2019) work. Our analysis followed Braun and Clarke's (2022) deductive thematic analysis approach, which recognises the importance of theory and engagement with literature. As part of our analysis, data were read and re-read alongside conversations among the three authors which spanned months and challenged, provoked, and coalesced around our various interpretations of the teachers' stories shared within this paper. Themes were generated and refined through this process, informed by Ahmed's writing and the key ideas we found were recurring in our reflections. The following analysis section is centred around two of these themes - the ways NAPLAN disappears into its uses, and NAPLAN as a well-worn discursive pathway.

Analysis and discussion

NAPLAN hidden in plain sight: disappearing into its uses

The puddle does not exist in order that Poppy can drink from it. But once a puddle exists, it can come into use. Use can come after. (Ahmed 2019, 23)

Ahmed (2019) writes briefly of her dog, Poppy, drinking from a bowl that has been purposefully placed by the door, or drinking from a puddle, which exists only because of a confluence of circumstances - the shape of the land and the weather. According to Ahmed, the puddle Poppy drinks from does not exist so that Poppy can drink from it rather, once a puddle exists, it can 'come into use' (p. 23). As Ahmed suggests, use can indeed come after creation.

We draw on this analogy to consider the circumstances of NAPLAN's emergence, and the misalignment of its intended uses and its current uses. NAPLAN's contemporary uses - and in particular, those outlined in this paper - to guide curriculum development, to dictate teacher resources, to drive the presence and use of its data in schools, did not inspire NAPLAN's existence. Rather, these use/s come after. They do not form part of its intended function; its uses are the result of the evolution of its functions and purposes. While it is used, in this process, 'it is being transformed' (Ahmed 2019, 22, emphasis added), until its uses become something else entirely different from intended. Indeed, Ahmed suggests, it is entirely possible that the way something is used becomes separated from its intended function.

The uses for NAPLAN described by the teachers in this section emerge after NAPLAN's introduction, and after several years of implementation and evolution. These accounts offer examples of NAPLAN's transformation, and the shaping of the testing, its meaning and purposes, by the uses that have emerged after years of implementation. Ahmed (2019, 26) writes that it is important to note how an object is 'shaped by the requirements of its use'. NAPLAN too is shaped not by its intended purposes, its guiding orientations and principles, but by schools', departments' and states' requirements of its use.

Teachers in this study described NAPLAN's evolution, to its current status as a dictating force in curriculum development, teaching priorities and resource allocation. These uses, emergent and troublesome, and separated from initial imagined uses, signal not only NAPLAN's transformation, but also its act of existing as a covert, influential policy driver.

Genevieve, an upper primary teacher at Evergreen, described her school changing their teaching significantly in response to their NAPLAN performance:

For example, we would have loved to spend longer on narrative, but we couldn't because we have to look at persuasive, because it could be narrative or persuasive in NAPLAN. If we didn't have NAPLAN, we wouldn't have that monkey on our back.

Similarly, Louise, an upper primary teacher at Evergreen, recalled the curriculum at her school being 'all NAPLAN driven'. The types of writing completed by the students at Evergreen are either narrative or persuasive in order to reflect the writing performed on NAPLAN. She explained:

So, the curriculum in a lot of schools, the writing task is centred around those, so the kids are quite proficient at it by the time they get to NAPLAN, which is a shame because poetry is gone; poetry is always shoved at the end of a term. So, you've got two weeks of poetry. Drama's gone down the toilet, all those things.

The narrowing of school curriculum is a well-documented side-effect of NAPLAN's looming presence over teachers and schools (Berliner 2011; Thompson and Harbaugh 2013). At Evergreen, NAPLAN has necessitated the development of a whole-school strategy around literacy, for example. NAPLAN's function as a curriculum driver, an influence on the forms of writing permitted, and curriculum design and implementation, resembles an emergent use for NAPLAN as an educational technology, and one that has developed after its existence, rather than during the process of initiation.



Another emergent use of NAPLAN was described by Molly, a school leader at Evergreen, who outlined circumstances where NAPLAN dictates staffing decisions:

Those year levels that sit NAPLAN, 3 and 5, we obviously make decisions about what teachers, what staff, we're going to put on those year levels. What staff we're going to put on the year levels before, to make sure that the children are, you know, skilled up.

Similarly, Kelsey, an upper primary teacher at Evergreen explained the pressure to perform in NAPLAN dictates the allocation of support staff resources in the school:

In the past, we haven't had a lot of learning support in Year 6, because that has been pushed to Year 5 and Year 4 for NAPLAN. So those teachers have gone to the NAPLAN years, because, you know, NAPLAN is important.

The uses such as guiding staffing decisions and determining learning support resource allocation are evolved uses of NAPLAN. They are a product of its transformation, separately completed from the design of its intended use and are often covert in nature. This usefulness, however, does not originate in NAPLAN itself; it is not built into it inherently. Ahmed (2019) writes, 'if the usefulness of a thing gives it a use value, the value does not originate simply in that thing' (pp. 25-26). NAPLAN's value in informing curriculum design, determining staffing decisions, and providing data to teachers do not 'originate simply' in its existence (p. 25–26). These are use values that emerged after it has been appropriated, transformed and repackaged according to its evolved uses. It therefore is not an inherently useful tool; the usefulness is attributed after its evolution, after it has been repurposed in ways that were unintended.

Important questions that must be asked of NAPLAN are whether it is working as was intended, and if it is useful. Ahmed (2019, 21) writes that once something stops working, or can no longer be used, it 'intrudes into consciousness'. It might be argued that this is observed in the contemporary manifestation of NAPLAN and its associated practices, structures and technologies. In NAPLAN's intrusion into consciousness, its implicit, covert existence in subsumption into practices of teaching, it forms part of the consciousness of education, and lingers dangerously as an underpinning and orienting rationale. Ahmed adds, 'We might call what cannot be used broken' (p. 21).

At Evergreen, leadership's position that NAPLAN was not regarded as a significant point of concern, provides an example of the way that NAPLAN, operating as intended, subsides from view, yet still determining particular orientations within the school toward its NAPLAN performance. Jackie, a member of the Primary Leadership Team, in suggesting that 'we've got to rely on our good teaching,' maintains an orientation toward NAPLAN performance, even as the intention was to demonstrate how the school has 'moved away' from NAPLAN-oriented practice. In the school's reliance on 'good teaching,' the school remains performance oriented, although noting their exceptionalism in not having to resort to less-ideal methods, such as curriculum narrowing and NAPLAN preparation. This indicates a level of privilege afforded by their NAPLAN performance, which the school attributes to their 'good teaching,' when it actually is in part a reflection of the correlation between NAPLAN performance and socio-economic status. Further, Maggie's position that the school is 'pretty good as not putting too big an emphasis on NAPLAN,' is indicative not of this reality, but of the covert mechanisms, processes and practices that exist within the school that demonstrate the opposite of what is expressed



by leadership. Additionally, Jackie's insistence that, 'We don't track through NAPLAN, we really don't,' is contradicted by comments offered by staff about the influence of NAPLAN performance on the school's teaching practices. Melissa, an Upper Primary Teacher, reflected:

Regardless of how many times people will say 'don't worry about NAPLAN - it's all good!' they still have meetings about it; they still compare your data; they still share the results; it is still important for schools and what the data is like; there is still that underlying pressure for the teachers. So, for me . . . grade 3 and grade 5 are not year levels that I want to be on. And I have been vocal about that, I don't feel that I have the experience to cope with that.

What these examples tell us is that NAPLAN preparation, focus and practices oriented toward improving performance - consequences of evolutions of NAPLAN's purposes have become covert and seamless, submerged within the school's normative practice and disassociated from what is considered NAPLAN preparation. Teachers and leaders described no longer preparing for NAPLAN and being guided by it, when in practice their orientations are attuned to it across their teaching, learning and leading. This suggests that NAPLAN is now a seamless and fixed component of teaching and leading practice across many schools, and that it has been so successfully integrated into the consciousness of school labour that it is no longer overtly recognisable; it has disappeared from view.

The entrenchment of NAPLAN: well-used pathways

The more a path is used, the more a path is used. (Ahmed 2019, 41, emphasis in original)

In the previous section, we outlined the ways that NAPLAN rationalities and logics become part of educators' collective consciousness, and how NAPLAN's problematics are overruled by its ubiquitousness. In this section, we take up another of Ahmed's, 2019 arguments on the uses of use, this time examining how NAPLAN use and overuse build well-used pathways of practice complicating the possibilities of imagining otherwise.

The overuse of NAPLAN in schooling; the way/s that its functions have far exceeded the intentions of its creators, mean that its uses have created a set of well-used pathways to particular purposes and ways of using. Participants in the original study described the ubiquity of NAPLAN's use revealing well-worn paths to practices that function to justify its own existence, and also dictate the ways that schooling is imagined by educators.

Molly, a school leader in a primary setting, described the *need* for NAPLAN in schools for the purpose of 'accountability'. 'There's got to be some level of rigour,' she explained. The well-used pathways that attribute NAPLAN performance data to school accountability has become its own self-referential justification, which, from Molly's perspective, provides rigour that the system wouldn't have without it. Molly continued, adding, 'So for accountability for teachers, day to day teaching, there has to be something dangling up there saying "You're accountable to this".

Here, Molly demonstrates NAPLAN accountability as a normative well-used path; she is unable to imagine that education could be rigorous, or what educators could be trusted to perform, without it. Similarly, Jackie expressed a view of curriculum shaped by NAPLAN's accountability logics:



When I came here, they were doing everything, every KLA in the Australian Curriculum and I just said, well pretty much literally, 'What are you doing? It is not possible!' Because the thing is, the only subjects we will ever be called to account on are English, Maths and Science.

This demonstrates a self-subscription to the rationalities of NAPLAN culture, where education is reduced to demonstrated growth on a limited number of subjects, rather than students experiencing the breadth of the curriculum that attends to 'a broad and defensible range of schooling purposes' (Lingard 2010, 135). This limited imagining of the curriculum is echoed by Matt, a junior secondary teacher, who admitted:

Everything we do in Year 7 up until the 9s finish, is basically readying for that Year 9 [NAPLAN] test and about seeing that, how far they've come from Year 7 to Year 9, which I understand is a good measure of the school. But still, the kids hate it.

These well-used purposes limit the imagining of how schooling can be and become. Diane described this limitation, admitting that 'it's almost like NAPLAN is our bible, and that all our teaching and learning revolves around that.' Diane's comment here indicates a devotion to this well-used path; a firm adherence to its teachings and its parameters. This is an observation similar to Sean and Jackie's, whose schools align subject availability and curriculum design with NAPLAN testing topics. As Ahmed (2019) writes, when these pathways become overused, fewer pathways become available, and in this case, it is limiting the conceptualisation of education as experiential, as enjoyable. As Diane added: "... something else got left off, and I think it's the enjoyment of classes. So, these kids are just being hammered with this stuff over and over and over again'.

The possibilities for divergent teaching, for new possibilities and pathways, open up again for teachers once their involvement in NAPLAN pressure subsides. Carey described 'this interesting little pocket' in Grade 6 where NAPLAN is no longer relevant to the school. So, he said, a new pathway emerges:

There's a lot more, 'Hey you know we're not focused on NAPLAN, actually just teach.' Yeah! So, it really creates this amazing environment where we can actually just focus on the teaching without having to worry about NAPLAN.

Demonstrative of the insidiousness of NAPLAN, Carey recalling an 'amazing environment'; where teachers are doing the minimum – just teaching – is a divergent pathway in NAPLAN culture. This less-used pathway is created not by resistance to the culture, but by the lessening of NAPLAN pressure in Grade 6—a year that does not sit NAPLAN. Carey's reflection indicates that the work of teaching is profoundly altered by the particular year levels teachers might find themselves in, and therefore to 'just teach' becomes a method of resistance.

NAPLAN's well-used logics have had a demonstrable effect on curriculum in Australia, with research documenting curriculum narrowing (Thompson and Harbaugh 2013) and concerted NAPLAN preparation (see Swain and Pendergast 2018). These practices embed NAPLAN as part of the teaching and learning agendas of schools in ways never envisioned at its introduction, and this embeddedness and overuse leads to friction and wear (Ahmed 2019), an observation echoed by Sean's observation that the kids 'hate' the overuse of NAPLAN as curriculum guidance. The impossibility of seeing otherwise is also notable in Sean's example; the school's strong performance on NAPLAN becomes a justification to continue in this way, and resistance against the mechanisms of NAPLAN performativity is impossible, considering the correlation drawn between curriculum preparation and NAPLAN performance.

Ahmed (2019) writes, on use and overuse, that 'the more people travel on a path, the flatter and smoother the surface becomes' (p. 41). In these examples of teacher practice and NAPLAN - the culture of NAPLAN accountability, shaping the curriculum, informing educators' own understandings of the possibilities for practice, are consequences of a flattened and smoothened path created by the others who have travelled before them. This well-used path dictates the imaginings and possibilities for teaching and curriculum, a direction educators are 'encouraged to go in' (p. 41) by the ease of the path established before them.

In this sense, NAPLAN creates pathways within teaching and learning that perpetuate the need for its own existence. These pathways, where there is a belief in the need for NAPLAN for 'rigour,' where subjects are mapped to a hierarchy of NAPLAN's making, where teachers self-subscribe to NAPLAN's logic and loyally devote their practice to its rationales. To create new pathways would involve interrogating the pathways built by NAPLAN's hold on teaching practice, forging new imaginaries that resist the shaping of a system on well-used logics that limit the possibilities of Australia's system of education.

Conclusion: exit points, resistance and new pathways

Happy shiny policies will be put in place, holes filled without reference to what went on before. Organizations often use paper to paper over the cracks, the leaks. Or they send out paper in order to create a trail, paper that can be used as evidence of what has been done. Creating evidence of doing something is not the same thing as doing something. (Ahmed 2019, 214)

In this paper, we have deployed Ahmed's, 2019 theoretical work on the uses of use to work in a new way, taking it up to consider the unintended, and now profoundly altering, uses of NAPLAN in contemporary schooling in Queensland, Australia. Ahmed's writing on the interactions of humans and objects makes two interesting points that we have used in this paper to understand NAPLAN's place in the imaginaries of teaching and learning. First, Ahmed writes about objects disappearing from view when they function as intended. Ahmed argues that objects become a covert part of the infrastructures of our lives and worlds, so that their rationalities and logics seamlessly become our own. Second, the notion of well-used pathways, Ahmed suggests that the over-use of particular ways of doing and being limit the capacity for us to do and imagine otherwise. This has particularly limiting effects on resisting normative ways of practicing teaching and leading, where the well-used pathways are smooth and easeful, while less-used pathways are more challenging to envision and pursue. Putting Ahmed's writing to work in a new way has enabled us to highlight the hidden and sedimentary nature of NAPLAN as part of an infrastructure of accountability in schooling today that is working precisely as intended.

We have argued that NAPLAN's current uses represent a misalignment of its original intentions; however, this evolution, leading to greater accountability, comparison and curriculum narrowing, are now seamlessly and insidiously integrated features of everyday schooling practices and more broadly, of schooling infrastructure. As Ahmed (2019) suggests, a way that an object is used is shaped by the requirements of its use, and in the case of NAPLAN, improved performance as defined by narrow measures such as NAPLAN scores, greater accountability and data visibility requirements have shaped the way/s that NAPLAN is deployed by educators and policymakers. As an influential policy driver in schools, and a mechanism used to inform staff decisions and resource allocation, we have shown that NAPLAN rationalities now exist as a normative, embedded element of school-level decision-making. As NAPLAN envelopes teachers' practice, it becomes both normative and unremarkable, and so its reach becomes harder to distinguish between what is teaching work, and what is NAPLAN-oriented teaching work.

Our second argument is that NAPLAN has both established and enshrined well-used pathways that form the key ideologies of teaching practice. These well-used pathways, including the belief that NAPLAN creates rigour through accountability, the use of NAPLAN to guide curriculum decisions, and placing limitations on what can be taught and when, although the subject of broad critique, are well-established practices in schools that perpetuate NAPLAN's influence. There are affective consequences of these well-used pathways too; participants in this study described their work revolving around NAPLAN testing and its evaluative power and the diminishment of enjoyment of teaching and learning. These well-used pathways that have rendered the narrowing of teaching, accountability culture and reliance on NAPLAN to direct and guide practice are firmly embedded and normative conditions of teaching in Australia, and simultaneously, they narrow the possibilities of imagining other possibilities – new pathways for practice.

Our analysis holds relevance for readers beyond the Australian context. Moving beyond dominant ideas of generalisability (i.e. statistical generalisability), our analysis is representative of naturalistic generalisability, wherein 'the research resonates with the reader's personal engagement in life's [...] experiences' (Smith 2018, 140). Given the policies and pressures of standardised testing and accountability regimes in education systems around the world, we anticipate that the research will 'ring true' (Smith 2018, 140) for readers engaged in schooling beyond Australia. For readers beyond our context, the experiences of teachers and school leaders in relation to NAPLAN and our theorisation of use may bear 'familial resemblances to the readers' experiences, settings they move in, events they've observed or heard about, and people they have talked to' (p. 140). Our empirical analysis, coupled with our development of Ahmed's theoretical work to analyse schooling and policy, has contributed new approaches to the study of accountability regimes and teachers' experiences of policy which we hope will be taken up in other contexts and locations to extend upon this work.

We finish this paper by suggesting that NAPLAN as a hidden practice mechanism and forger of well-used practice pathways inhibits possibilities for resistance in three key ways. First, the well-used pathways created by NAPLAN's embeddedness in the Australian education landscape severely inhibit the capacity for educators to do things differently. NAPLAN rationalities seep into schools, departments and curriculum in wide-reaching and profound ways, and therefore, resisting these well-established practices means arguing against the powerful cultures of practice. Second, as Ahmed (2019) notes, resistance comes at a cost (personal, material, other), and expecting educators and

schools already burdened significantly by other various pressures to also re-imagine or resist, is a challenging pursuit. Finally, one of our central arguments in this piece is how NAPLAN logics and rationalities disappear from view, becoming the covert, sedimentary, accepted and normative practices of teaching. This speaks to an insidiousness that also complicates NAPLAN resistance; if NAPLAN and its effects are subtle, embedded and standard, resisting what has disappeared within itself, and disappeared from view, is an arduous task.

Note

1. The Index of Community Socio-Educational Advantage (ICSEA) for both schools are average (around 1000).

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References

ACARA. (2014). NAPLAN 2014. National Assessment Program: Student Reports. Accessed 6 December, 2022. https://www.nap.edu.au/_resources/Student_reports_brochure_2014-web. pdfonTuesday.

Addey, C., S. Sellar, G. Steiner-Khamsi, B. Lingard, and A. Verger. 2017. "The Rise of International Large-Scale Assessments and Rationales for Participation." Compare: A Journal of Comparative and International Education 47 (3): 434-452. https://doi.org/10.1080/03057925.2017.1301399.

Ahmed, S. 2019. What's the Use? On the Uses of Use. Duke University Press.

Auld, E., and P. Morris. 2014. "Comparative Education, the 'New Paradigm' and Policy Borrowing: Constructing Knowledge for Educational Reform." Comparative Education 50 (2): 129-155. https://doi.org/10.1080/03050068.2013.826497.

Ball, S. 1993. "What is Policy? Texts, Trajectories, and Toolboxes." Discourse: Studies in the Cultural Politics of Education 13 (2): 10-17. https://doi.org/10.1080/0159630930130203.

Ball, S. J. 2015. "Education, Governance, and the Tyranny of Numbers." Journal of Education Policy 30 (3): 299–301. https://doi.org/10.1080/02680939.2015.1013271.

Beer, D. 2016. Metric Power. Palgrave Macmillan. https://doi.org/10.1057/978-1-137-55649-3.

Berliner, D. 2011. "Rational Responses to High Stakes Testing: The Case of Curriculum Narrowing and the Harm That Follows." Cambridge Journal of Education 41 (3): 287-302. https://doi.org/ 10.1080/0305764X.2011.607151.



- Biesta, G. J. J. 2009. "Good Education in an Age of Measurement: On the Need to Reconnect with the Question of Purpose in Education." Educational Assessment, Evaluation and Accountability 21 (1): 33-46. https://doi.org/10.1007/s11092-008-9064-9.
- Biesta, G. J. J. 2016. "Resisting the Seduction of the Global Education Measurement Industry: Notes on the Social Psychology of PISA." Ethics & Education 10 (3): 348–360. https://doi.org/10. 1080/17449642.2015.1106030.
- Bradbury, A., and G. Roberts-Holmes. 2018. The Datafication of Primary and Early Years Education: Playing with Numbers. Routledge.
- Braun, V., and V. Clarke. 2022. Thematic Analysis: A Practical Guide. SAGE Publications.
- Clutterbuck, J. 2020. Understanding digital educational governance: The case of OneSchool in Queensland, Australia. [Doctoral dissertation, University of Queensland]. UO eSpace.
- Clutterbuck, J., I. Hardy, and S. Creagh. 2021. "Data Infrastructures as Sites of Preclusion and Omission: The Representation of Students and Schooling." Journal of Education Policy 38 (1): 93-114. https://doi.org/10.1080/02680939.2021.1972166.
- Connell, R. 2013. "The Neoliberal Cascade and Education: An Essay on the Market Agenda and Its Consequences." Critical Studies in Education 54 (2): 99–112. https://doi.org/10.1080/17508487. 2013.776990.
- Corti, L., A. Witzel, and L. Bishop. 2005. "On the Potentials and Problems of Secondary Analysis. An Introduction to the FQS Special Issue on Secondary Analysis of Qualitative Data." Forum Qualitative Sozialforschung/Forum: Qualitative Social Research 6 (1). https://doi.org/10.17169/ fgs-6.1.498.
- Daliri-Ngametua, R., I. Hardy, and S. Creagh. 2022. "Data, Performativity and the Erosion of Trust in Teachers." Cambridge Journal of Education 52 (3): 391-407. https://doi.org/10.1080/ 0305764X.2021.2002811.
- Davies, B., and P. Bansel. 2007. "Neoliberalism and Education." International Journal of Qualitative Studies in Education 20 (3): 247–259. https://doi.org/10.1080/09518390701281751.
- Gore, J., B. Rickards, and L. Fray. 2023. "From Performative to Professional Accountability: Re-Imagining 'The Field of judgment' Through Teacher Professional Development." Journal of Education Policy 38 (3): 452-473. https://doi.org/10.1080/02680939.2022.2080274.
- Grek, S. 2009. "Governing by Numbers: The PISA 'Effect' in Europe." Journal of Education Policy 24 (1): 23-37. https://doi.org/10.1080/02680930802412669.
- Groundwater-Smith, S., and N. Mockler. 2018. Questioning the Language of Improvement and Reform in Education. Taylor and Francis.
- Hardy, I. 2014. "A Logic of Enumeration: The Nature and Effects of National Literacy and Numeracy Testing in Australia." Journal of Education Policy 30 (3): 335-362. https://doi.org/ 10.1080/02680939.2014.945964.
- Hardy, I. 2015. "Data, Numbers and Accountability: The Complexity, Nature and Effects of Data Use in Schools." British Journal of Education Studies 63 (4): 467-486. https://doi.org/10.1080/ 00071005.2015.1066489.
- Hardy, I. 2018. "Governing Teacher Learning: Understanding teachers' Compliance with and Critique of Standardization." Journal of Education Policy 33 (1): 1-22. https://doi.org/10.1080/ 02680939.2017.1325517.
- Heffernan, A. 2016. "The Emperor's Perfect Map: Leadership by Numbers." The Australian Educational Researcher 43 (3): 377-391. https://doi.org/10.1007/s13384-016-0206-7.
- Holloway, J. 2021. Teaching in Times of Turbulence: Metrics, Standards and Alignment in Teacher Policy. Springer. https://doi.org/10.1007/978-981-33-4814-1.
- Howell, A. 2017. "Because Then You Could Never Ever Get a job!': Children's Constructions of NAPLAN as High-Stakes." Journal of Education Policy 32 (5): 564-587. https://doi.org/10.1080/ 02680939.2017.1305451.
- Kitchin, R. 2014. The Data Revolution. Sage.
- Klenowski, V., and C. Wyatt-Smith. 2012. "The Impact of High Stakes Testing: The Australian Story." Assessment in Education 19 (1): 65-79. https://doi.org/10.1080/0969594X.2011.592972.



- Lewis, S., and I. Hardy. 2015. "Funding, Reputation and Targets: The Discursive Logics of High-Stakes Testing." Cambridge Journal of Education 45 (2): 245-264. https://doi.org/10. 1080/0305764X.2014.936826.
- Lewis, S., G. Savage, and J. Holloway. 2020. "Standards without Standardisation? Assembling Standards-Based Reforms in Australian and US Schooling." Journal of Education Policy 35 (6): 737–764. https://doi.org/10.1080/02680939.2019.1636140.
- Lingard, B. 2010. "Policy Borrowing, Policy Learning: Testing Times in Australian Schooling." Critical Studies in Education 51 (2): 129-147. https://doi.org/10.1080/17508481003731026.
- Lingard, B. 2011. "Policy as Numbers: Ac/Counting for Educational Research." International Journal of Offshore and Polar Engineering 38 (4): 355-382. https://doi.org/10.1007/s13384-011-0041-9.
- Lingard, B., W. Martino, G. Rezai-Rashti, and S. Sellar. 2016. Globalizing Educational Accountabilities. Routledge. https://doi.org/10.4324/9781315885131.
- Martens, K., D. Niemann, and J. Teltemann. 2016. "Effects of International Assessments in Education – a Multidisciplinary Review." European Educational Research Journal 15 (5): 516-522. https://doi.org/10.1177/1474904116668886.
- Mills, M., and R. Niesche. 2014. "School Reform and the Emotional Demands of Principals: Lorna's Story." School Leadership & Management 34 (2): 120-135. https://doi.org/10.1080/ 13632434.2013.856295.
- Mockler, N. 2020. "Discourses of Teacher Quality in the Australian Print Media 2014-2017: A Corpus-Assisted Analysis." Discourse: Studies in the Cultural Politics of Education 41 (6): 854-870. https://doi.org/10.1080/01596306.2018.1553849.
- NHMRC. (2018). National Statement on Ethical Conduct in Human Research. https://nhmrc.gov. au/about-us/publications/national-statementethical-conduct-humanresearch-2007updated-2018
- Ozga, J. 2008. "Governing Knowledge: Research Steering and Research Quality." European Educational Research Journal 7 (3): 261-272. https://doi.org/10.2304/eerj.2008.7.3.261.
- Ozga, J. 2009. "Governing Education Through Data in England: From Regulation to Self-Evaluation." Journal of Education Policy 24 (2): 149-162. https://doi.org/10.1080/ 02680930902733121.
- Parker-Jenkins, M. 2018. "Problematising Ethnography and Case Study: Reflections on Using Ethnographic Techniques and Researcher Positioning." Ethnography and Education 13 (1): 18-33. https://doi.org/10.1080/17457823.2016.1253028.
- Queensland Department of Education and Training and Queensland Teachers' Union. (2018). A Joint Statement from Department of Education and the Queensland Teachers' Union: National Assessment Program - Literacy and Numeracy (NAPLAN). Accessed March 1, 2023, https:// www.qtu.asn.au/application/files/2215/4051/5185/NAPLAN_Oct_2018.pdf.
- Queensland Teachers' Union. (2018). QTU Position Statement: NAPLAN in Queensland Schools. Accessed March 1, 2023, https://www.qtu.asn.au/application/files/2215/3249/0801/QTU_ Position_Statement_NAPLAN_July_2018.pdf.
- Sahlberg, P. 2007. "Education Policies for Raising Student Learning: The Finnish Approach." *Journal of Education Policy* 22 (2): 147–171. https://doi.org/10.1080/02680930601158919.
- Sahlberg, P. 2021. Finnish Lessons 3.0: What Can the World Learn from Educational Change in Finland? Teachers College Press.
- Sherif, V. 2018. "Evaluating Preexisting Qualitative Research Data for Secondary Analysis." Forum: Qualitative Social Research 19 (2). Art. 7. https://doi.org/10.17169/fqs-19.2.2821
- Smith, B. 2018. "Generalizability in Qualitative Research: Misunderstandings, Opportunities and Recommendations for the Sport and Exercise Sciences." Qualitative Research in Sport, Exercise & Health 10 (1): 137-149. https://doi.org/10.1080/2159676x.2017.1393221.
- Spina, N. 2017. The quantification of education and the reorganisation of teachers' work: An institutional ethnography: A thesis submitted in fulfilment of the requirements of the degree of Doctor of Philosophy. Queensland University of Technology, Brisbane, Australia.



- Swain, K., and D. Pendergast. 2018. "Student Voice: Student Feelings as They Journey Through National Assessment (NAPLAN)." Australian Journal of Education 62 (2): 108-134. https://doi. org/10.1177/0004944118779602.
- Thompson, G. 2013. "NAPLAN, MySchool and Accountability: Teacher Perceptions of the Effects of Testing." The International Education Journal: Comparative Perspectives 12 (2): 62–84.
- Thompson, G., and A. G. Harbaugh. 2013. "A Preliminary Analysis of Teacher Perceptions of the Effects of NAPLAN on Pedagogy and Curriculum." The Australian Educational Researcher 40 (3): 299–314. https://doi.org/10.1007/s13384-013-0093-0.
- Western, M., J. Baxter, J. Pakulski, B. Tranter, J. Western, M. van Egmond, J. Chesters, A. Hosking, M. O'Flaherty, and Y. van Gellecum. 2007. "Neoliberalism, Inequality and Politics: The Changing Face of Australia." The Australian Journal of Social Issues 42 (3): 401-418. https:// doi.org/10.1002/j.1839-4655.2007.tb00066.x.
- Wyatt-Smith, C., and L. Adie. 2018. "Assessment: The Trilogy of Standards, Evidence and Judgement in Australian Education Reform." In The Australian Curriculum: Promises, Problems and Possibilities, edited by A. Reid and D. Price, 163-176, The Australian Curriculum Studies Association (ACSA).
- Wyn, J., M. Turnbull, and L. Grimshaw. 2014. The Experience of Education: The Impacts of High-Stakes Testing on School Students and Their Families. A Qualitative Study. Melbourne: The Whitlam Institute.