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A logic of enumeration: the nature and effects of national literacy and numeracy testing in Australia — Source link 🗹

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A logic of enumeration: The nature and effects of national literacy and numeracy testing in Australia

Abstract: This paper reveals the array of practices arising from strong policy pressure for improved student results in national literacy and numeracy tests in Australia: the National Assessment Program – Literacy and Numeracy (NAPLAN). The paper provides an account of a policy context characterised by significant pressure upon teachers and principals to engage in practices to ensure improved outcomes on standardised literacy and numeracy tests, and of teachers and principals' responses to these policy pressures. Drawing upon Bourdieu's theory of practice, the article argues that what is described as the 'field of schooling practices' has become increasingly dominated by a 'logic of enumeration', and that high test results on standardised literacy and numeracy tests are increasingly valued capitals, evident in a strong focus upon teachers meeting, discussing and informing one another about NAPLAN; engaging in curriculum development practices which foreground NAPLAN, and; actively preparing students to sit the test, including, whether intentionally or unintentionally, teaching to the test. Such a focus has important implications for the sorts of practices most valued in schooling settings, as more educative logics are potentially marginalised under such circumstances.

Keywords: standardised tests; schooling practices; Bourdieu; field; habitus; capital; logics of practice

Introduction

This paper draws upon ongoing research into the nature of teachers' work and learning under current policy conditions in the state of Queensland, Australia. The research reveals the effects of strong policy pressure for improved standardised test results in a context where such testing was not previously evident, and how, over a short period of time, a test-centric focus has become increasingly evident. The research explores how teachers and administrators across six school sites throughout Queensland have responded to this significant policy pressure for improved outcomes on standardised measures of achievement, and the effects of such a focus.

While there is some literature about the nature and effects of high-stakes standardised tests in general, relatively little research has sought to understand educators' responses to such tests as the product of the recursive relationship between the broader social conditions/spaces

within which such tests are instigated and implemented, the particular dispositions of those involved in these testing processes, and the subsequent practices and contestation arising as a result of these processes. That is, there is relatively little focus upon the inherently *relational* nature of such testing as a social practice. Such an approach foregrounds the embedded way in which standardised testing constitutes the very nature of teachers' work at the same time as teachers actively engage in, and resist, such constructions of their work. The paper draws upon the sociology of Pierre Bourdieu, particularly his concepts of 'field', 'habitus' and 'capital' to help make sense of how constant and continuous pressure for improved test results has pervaded what is described as the 'field of schooling practices', including teachers' sense of selves. Such inquiry is also particularly salient in the Australian context which has come late to standardised national literacy and numeracy testing, and where a body of research about the nature and effects of such testing is just beginning to emerge.

Assessment practice and policy effects of standardised testing

Recent research into approaches to assessment has recognised assessment practices as intrinsically social. That is, rather than construing assessment practices as somehow 'objective' and capable of providing an 'accurate' account of students' learning, assessment practices are recognised as social constructs, necessarily infused with power relations, and seeking to exert substantive effects: 'A fundamentally modernist creation, educational assessment can be seen as the archetypal representation of the desire to discipline an irrational social world in order that rationality and efficiency could prevail' (Broadfoot, 2000, p. x).

In many ways, more standardised approaches to assessment can be seen as a particularly rationalistic response to this desire for order, and such order has been instantiated through strong policy support for standardised testing. In broad terms, standardised testing reflects a particular scientific rationality which foregrounds what Power (1997) refers to as an 'audit culture', and Strathern (2000) an 'audit society', characterised by a focus upon implementing various financially inspired audit mechanisms, particularly in contexts in which these practices are not readily associated, or have not been traditionally implemented (Shore, 2008), in order to give confidence about the nature of the particular practices in question. These auditing processes rely upon the production of an array of numbers to enable processes of comparison, and the production of such quantified knowledge has a distancing effect upon the practices to which these statistics relate, even as their production simultaneously presumes that processes of quantification are appropriate to the particular phenomena in question. As Desrosières (1998) argues, such an approach already assumes that there is something to be measured, and that this measuring process can be undertaken relatively unproblematically. There is relatively little regard to more problematic effects from within this discourse.

In relation to tests more specifically, Hanson (2000) indicates how our experiences with tests have effects upon us – positively and negatively; '[i]n a very real sense, tests have invented all of us' (p. 67-8). For Hanson (2000):

[Tests] play an important role in determining what opportunities are offered to or withheld from us, they mould the expectations and evaluations that others form of us (and we form of them), and they heavily influence our assessments of our own abilities and worth. Therefore, although testing is usually considered to be a means of

measuring qualities that are already present in a person, in actuality tests often *produce* the characteristics they purpose to measure. The individual in contemporary society is not so much described by tests as constructed by them (p. 68; emphasis original).

In short, tests 'produce' the sorts of people we become.

However, rather than becoming concerned about the extent to which such measurement and enumeration processes actually 'make sense' as part of this production process, and in relation to the particular practices to be 'measured', within a more dominant, rationalistic paradigm, at present, the emphasis instead seems to be upon coming up with ways to actually measure for purposes of comparability and comparison; that is, and after Porter (1995), '[t]here is a strong incentive to prefer precise and standardizable measures to highly accurate ones' (p. 29). These quantification processes also have a tendency to have the most substantive effects in those arenas most susceptible to external influence (Porter, 1995). This emphasis upon testing is often construed in response to broader competitive and comparative pressures within and between nation-states about concerns about national competitiveness under current global conditions (Stobart, 1998; Lingard & Sellar, 2013). Under these circumstances, the effects of such strong policy support for testing upon more educative processes and practices is an area of potential concern.

A body of literature exists in the area of the effects of policy support for standardised testing upon schooling practices, although not necessarily drawing on the inherently socially constituted, contested and relational nature of such practices. Drawing upon an historical and descriptive analysis informed by broadly neoliberal theorising, Hursh (2008) argues how high

United States, even as more effective and substantive testing practices are available to reveal more fully just what students know and can do. In states such as Florida, New York and Texas, state-mandated testing unduly influences curriculum decision-making within schools, and serves to marginalise input from teachers and school communities, whilst simultaneously increasing centralisation processes. Similarly, and also from a very broadly descriptive, historically-informed position, Ravitch (2010) argues the way in which tests are used for high-stakes purposes limits their educational value. It is not so much the nature of the tests themselves, but the way in which they are employed which can cultivate problematic practices amongst those affected:

Tests can be designed and used well or badly. The problem was the misuse of testing for high-stakes purposes, the belief that tests could identify with certainty which students should be held back, which teachers and principals should be fired or rewarded, and which schools should be closed – and the idea that these changes would inevitably produce better education. Policy decisions that were momentous for students and educators came down from elected officials who did not understand the limitations of testing. (Ravitch, 2010, p. 151)

In the context of the effects of national testing in Australia, there is a nascent body of research into the effects of policy support for standardised testing. Perverse effects of standardised testing have been noted systemically, including the way in which different states in Australia have sought to represent data in particular ways to ensure accountability benchmarks are most likely to be met so as to secure federal government reward payments. Lingard and Sellar (2013) draw, *inter alia*, upon theoretical resources including

neoliberalism, governmentality and Deleuzian notions of control societies, to refer to how personnel in the state of Victoria set ambitious targets for NAPLAN results, and were unsuccessful in attaining them, while New South Wales combined literacy and numeracy targets as a means of potentially shielding problematic year levels/elements from auditors, and succeeded in meeting their targets. Queensland, which performed most poorly relative to the other two states in earlier tests, set relatively lower targets, and succeeded in achieving these.

In relation to effects at the more localised level of schools, Comber's (2012) institutional ethnographic research into the effects of mandatory national literacy testing through NAPLAN provides broad insights into, amongst other effects, the strategic exclusion of students from sitting the test, work intensification of teachers, and appropriation of literacy theory for more performative purposes. Drawing upon Deleuzian notions of control society, Thomson and Cook (2012a) have also indicated how such measures have been deployed as markers of teaching quality, but how they fail to constitute the sorts of quality teaching they claim to measure. This work has revealed how testing has become a technology of control as it disaggregates and exteriorises the work of teachers, representing their work and student learning as easily commensurable to a single digit (Thomson & Cook, 2012b).

Importantly, in spite of the dominance of more standardised and accountability-oriented approaches to assessment, and considerable policy support for such assessment, alternative approaches, such as teacher judgement for both formative and summative assessment purposes, are also evident in the literature. Harlen's (2005) review of relevant literature reveals that while teachers' assessment practices have been found to be problematic and as providing evidence of low reliability and bias in teachers' judgements 'in certain

circumstances', 'this has to be considered against the low validity and lower than generally assumed reliability of exernal tests' (p. 245). That is, there are no simple solutions to the complex problem of making sense of students' learning, and standardised tests may appear to be a more reliable approach than alternative approaches, but this is not necessarily the case.

The state of Queensland is a particularly interesting case in relation to assessment practices because it has traditionally served as an alternative to many of these more dominant approaches. International literature on assessment, particularly on formative, teacher or classroom assessment, has recognised Queensland as adopting alternative practices to the use of tests for accountability purposes, instead relying more heavily upon teacher moderated judgements of student work. Klenowski (2011) argues teachers' assessment literacy in the Queensland case can serve the function of providing reliable information to address accountability concerns, whilst retaining the primacy of assessing for learning (rather than assessing for the sake of assessment itself). However she also notes that the national reform agenda which deploys NAPLAN as a vehicle to collect national information on assessment outcomes, and the use of additional funding through various literacy and numeracy 'partnerships' between schools and the federal government to assist schools to meet national benchmarks based on NAPLAN, challenges this focus upon assessment for learning. Nevertheless, and in spite of these challenges, there is evidence of the value and centrality of teacher judgement in moderation of assessment processes, including how such processes are deeply social, and dependent upon interaction between teachers as they engage with stated standards and students' samples of work, and draw upon tacit knowledge of various sorts, and ongoing dialogue and negotiation (Wyatt-Smith, Klenowski & Gunn, 2010). Indeed, teachers themselves have valued the use of standards in processes of moderation, and believe they produce consistency in teachers' judgements of student learning (Connolly, Klenowski &

Wyatt-Smith, 2012). Such advocacy is not simplistic in nature, but also recognises the challenges which attend this work; Walters' (2007) research into the achievement and underachievement of Bangladeshi Year 3 pupils in England, for example, indicates some of the complexity of actual teacher judgements. Such judgements were found to be influenced by teachers' understandings of their students, teachers' need to manage lessons, and how students present themselves in the classroom. Nevertheless, as Sebba's (2006) research in Queensland revealed, when teachers engaged in moderation practices, this 'challenged their thinking and developed their practice' (p. 193). Significantly, this was seen as about 'professional behaviour for moderation purposes rather than monitoring of marking for accountability purposes' (p. 193).

Given the nascent nature of national standardised testing in the Australian context, it is not surprising that there is relatively little research into how strong policy support for such testing plays out in schooling settings. Furthermore, little research has been undertaken which seeks to explore the recursive relationship between these tests as inherently socially constituted, the particular dispositions of those involved in these testing practices, and the contested nature of schooling practices under such conditions. That is, there is little work which reveals how the dominant logics which have come to characterise schooling practices are manifest in relation to those engaged in this work, and alternative practices. The research presented seeks to redress this by drawing upon the sociology of Pierre Bourdieu to better understand this relationality and contestation as they pertain to strong policy support for standardised testing, and its effects upon current schooling practices. Finally, that this research is undertaken in Queensland is also significant for understanding how such standardised testing plays out in a context with a considerable history of teacher moderated assessment practices focused on

enhancing student learning, and as an alternative to the use of such tests for accountability purposes.

A Bourdieuian approach

[T]here are two tasks in front of educationalists who would seek to use Bourdieu ... First, it is necessary to catch up with Bourdieu theoretically, by seeing his work as a *method* of enquiry, rather than a completed *theoretical* edifice; and second, to work out the method in relation to their own social space and the particular 'field' of education within it (Harker, 1990, p. 99; emphasis original).

In an effort to respond to Harker's call to be true to Bourdieu's approach by taking up his ideas methodologically (rather than simply 'applying' his concepts as a form of what Reay (2004, p. 432), citing Hey (2003), describes as 'intellectual hairspray'), this paper seeks to provide insights into the myriad test-centric practices, the logics which characterise what is construed as the 'field of schooling practices', under current policy conditions. For Bourdieu (1990a), society comprises recognisable social spaces – 'fields' – as sites of contestation over the social practices deemed most valuable under any given circumstances. That is, fields come to be characterised by particular, or dominant, practices as a result of tensions between competing practices:

A field is a structured social space, a field of forces, a force field. It contains people who dominate and others who are dominated. Constant, permanent relationships of inequality operate inside this space, which at the same time becomes a space in which the various actors struggle for the transformation or preservation of the field. All the

individuals in this universe bring to the competition all the (relative) power at their disposal. It is this power that defines their position in the field and, as a result, their strategies (Bourdieu, 1998a, p. 40, 41).

Those who occupy any given field reflect the nature of this contestation by the way in which they embody the practices which characterise the field, and subsequent strategies. Fields are influenced by the individuals and groups within them, even as they simultaneously influence these individuals. That is, there is a recursive relationship between those who occupy a field, and the field which they occupy. To better appreciate and understand this recursivity, Bourdieu articulated the notion of 'habitus' as the embodiment of the practices which characterise a field. The habitus is a product of ongoing exposure to particular practices, and the generative mechanism for the logics which come to characterise any given field. For Bourdieu, habitus reflects an enduring set of dispositions arising from participation within any given field, and which thereby simultaneously produces the field itself. Bourdieu (1990a) endeavoured to capture the mutually recursive relationship between the habitus and the field in the metaphor of the player who has a real 'feel for the game'. This feel for the game:

... gives a fairly accurate idea of the almost miraculous encounter between the habitus and a field, between incorporated history and an objectified history, which makes possible the near-perfect anticipation of the future inscribed in all the concrete configurations on the pitch or board. (Bourdieu, 1990a, p. 66)

This feel for the game – and its corollary, an inability to respond according to the dominant practices which constitute a field – are the product of particular resources or 'capitals' which

individuals and groups accrue by virtue of their location within a field, and the resources most valued within that field. Bourdieu (1986) identified several different forms of capital, including economic, social, cultural and symbolic capital. Economic capital is associated with material and economic resources which can be converted to monetary forms; social capital refers to particular relationships which form between individuals and which accrue benefits to individuals and groups in particular locations; cultural capital includes various artefacts (objects, awards, credentials) which are construed as meaningful; and symbolic capital is any form of capital which can be transformed into other forms of capital, depending on the resources considered most valuable in any given social space. Other forms of capital have also been ascribed to Bourdieu's work, including various forms of 'statist capital' which Schwartz (1997) argues characterises Bourdieu's later work, and which emphasises how the state exerts influence within various fields.

As a result of the interplay of the habitus of various actors, each with particular capitals which can be more or less deployed to advantage within a field, the practices which constitute fields are inherently contested, with dominant practices reflecting the outcome of the competing logics of practice which characterise any given field. In this way, practices only make sense in relation to one another and give rise to different 'position-takings' which 'are defined in relation to one another through their *mutual exteriority* and their relations of proximity, vicinity, or distance, as well as through relations of order, such as above, below, and *between*' (Bourdieu 1998b, p. 6; emphasis original). It is this relational aspect which helps to make sense of actual and potential practices, including those which dominate. As a result of this process of contestation, fields come to be characterised by a particular 'logic', to become identifiable as exhibiting specific 'logics of practice', which make it possible to identify practices as practices of a particular kind. Such logics reflect the 'strategies' which

become possible – the 'feel for the game' which is enabled within the particular limits which influence the field, and which characterise what is construed as possible (Bourdieu, 1977).

However, even as fields become characterised by particular, more dominant logics – logics which may seem impervious to alteration – fields are always necessarily dependent for their reproduction upon those who constitute them, and the influences upon them. Consequently, they are subject to change. Internally, change may come about as a result of socio-analysis on the part of those who comprise a given field; this entails individuals and groups analysing the nature of their circumstances, and thereby developing necessary understandings to challenge these circumstances (Bourdieu & Wacquant, 1992). Change may also result externally from more dominant influences beyond the field; one of the key forces for change is what Bourdieu describes as the overarching 'field of power', including more economistic logics which occupy a dominant position more generally within society. However, the field of power is not simply evident in the form of more economistic logics (or their effects), but by contestation within the field over the logics which come to dominate (Bourdieu & Wacquant, 1992). The strategies which agents deploy within any given field provide insights into the nature of contestation and dominant practices within the field, as well as logics external to the field which exert influence. Consequently, fields are subject to change, even as they exhibit considerable consistency and durability; the strategies which come to characterise them provide important insights into the logics within fields, and enable both change and durability. Bourdieu (1990b) argues these strategies are not so much 'rules' as 'regularities' (p. 64), which play out in accordance with the logics of the field, and for which the habitus serves as a motor – a 'regulated disposition to generate regulated and regular behaviour' (p. 65).

Seeking to engage Bourdieu's understanding of the social world necessarily entails deploying his concepts methodologically, and in ways which genuinely help develop new understandings of given problems. Consequently, this paper seeks to draw upon Bourdieu's concepts of field, habitus and capitals to try to make sense of a particular set of assessment practices and policy effects associated with standardised testing in schools in Australia, and how these practices and policy effects are strongly focused upon improvements in standardised, numeric indicators of student learning within what is described as the 'field of schooling practices'.

Setting the scene: Literacy & numeracy testing in Australia as a national policy agenda

Although education is the constitutional responsibility of each Australian state and territory, since the Australian government first began to provide significant financial resources through Section 96 of the Constitution, the federal government has exerted considerable influence upon education. This has included through a number of 'Australian Government Quality Teacher Programme' initiatives undertaken since 2000 to improve teaching quality in Australian schools (Commonwealth of Australia, 2000; 2003; 2005). More recently, this work is evident through the consolidation of various 'National Partnerships' between state educational authorities (public, private and Catholic (a significant sector in Australian schooling provision)), and which have been designed to improve teacher quality (Australian Government 2011a), literacy and numeracy (Australian Government 2011b), and schooling experiences for students in low socio-economic settings (Australian Government 2011c).

Such intervention has been assisted by considerable cooperation at the highest level of statefederal relations, and most notably through the Council of Australian Governments (COAG) (involving the Prime Minister, Deputy Prime Minister and State and Territory leaders). An important part of this process involved the adoption of the *Melbourne Declaration* in 2008 by federal and state ministers of education, and which instigated an inter-governmental agreement to develop a much more cohesive, national approach to curriculum, teaching and assessment practices in Australian schools. This included the development of two key bodies - the Australian Institute for Teaching and School Leadership (AITSL), which focused upon issues of teacher quality, and the Australian Curriculum Assessment and Reporting Authority (ACARA), which was responsible for developing: a national curriculum from Foundation (Preparatory) to Year 12; a national assessment program aligned with this curriculum, and; a national data collection and reporting framework. AITSL also released the National Professional Standards for Teachers in 2011 as a vehicle to improve the focus upon teacher quality (Australian Institute for Teaching and School Leadership, 2011). Such standards are part of a broader apparatus of nationalising educational practices in Australia. While there has been consultation with professional associations and other educators, and this has built upon considerable work and development by both professional associations and state educational authorities to develop relevant standards for professional practice over time (and some effort to relate the standards to case studies of practice), these standards have also tended to be presented as lists of broad and generic outcomes to which teachers have been expected to aspire, and their more educative effects challenged by potentially technicist applications (Santoro, Reid, Mayer & Singh, 2012). (See Sachs (2003) for a more critical view of the standards movement as a whole, and also Ingvarson (2010) for an overview of recent developments in Australian education leading up to the development of professional standards; Ingvarson (2010) also flagged the challenges of developing productive standards for the wide range of teachers in schooling systems in Australia immediately prior to the release of very broad-ranging national professional standards for teachers). Such policy

shifts have been occurring alongside broader educational approaches, such as the increased focus upon education as inquiry rather than simply the dissemination of facts.

However, the reform which has been most controversial, and which has had perhaps the most significant effect as part of this array of national initiatives, is the federally supported national literacy and numeracy testing policy, 'NAPLAN' – the National Assessment Program in Literacy and Numeracy. Instigated in 2008, the results of this test have been published annually since January 2010. ACARA has taken carriage of the provision of these results through its *MySchool* website. This focus on testing has been linked with the federal government supported 'National Partnerships', with states needing to show how their results on NAPLAN have improved as evidence of the success of additional funding provided through the National Partnerships program, and to secure ongoing funding through this agreement.

Policy conditions for educational reform in Queensland

The Queensland case is a particularly interesting example of the effects of strong policy support for national testing in Australia. In response to relatively poor results in inaugural NAPLAN tests in 2008, Queensland embarked upon systematic reform of educational provision within the state. This included instigating an externally commissioned report, colloquially known as the 'Masters' Report', an eponymous reference to the principal author of the report, Professor Geoff Masters, CEO of the Australian Council for Educational Research (Masters, 2009). The Masters' Report made a series of recommendations, including the need for a much more targeted approach to NAPLAN, involving more explicit test preparation within the state. At the same time, and through National Partnerships

funding, the state had: invested in specialist teachers as Literacy and Numeracy 'Coaches' of other staff; increased the focus upon ICTs, and; introduced an audit process of teaching and learning practices within Queensland schools (Queensland Government, Queensland Catholic Education Commission & Independent Schools Queensland, 2011). Schools had been, and continue to be, involved in collecting myriad school-based data on literacy and numeracy outcomes to complement external data, such as that provided through NAPLAN.

Queensland's low performance on NAPLAN, and concerns about improving these results in an era of increased public accountability through the *MySchool* website, and increased focus upon teaching and learning practices through the state-wide audit process, led to concerns to ensure that teachers in Queensland continued to engage with the focus upon national testing.

The schools

To shed light upon the focus upon standardised national literacy and numeracy testing throughout Queensland, but still in sufficient detail to capture the complexity of such schooling processes, the research draws upon teachers, principals and other school-based personnel's responses to NAPLAN in six school sites across the state. While clearly not a representative sample, the schools do reflect some of the diversity, including geographic, demographic and socio-economic (SES), which characterises schooling in Queensland. 'Saltbush' was a P-10 school (students aged 5 to 15) of almost 200 students located in a regional and remote area, serving a predominantly indigenous community in north-western Queensland. 'Northam' was a relatively large school (by Australian primary school standards) with almost 900 P-7 (students aged 5 to 12) primary students, and located in a low SES community in a regional coastal city in northern Queensland. 'Mintown' (P-7; 450 students) served a prosperous mining community in the central Queensland coal-basin. In

contrast, 'Edgemount' (P-7; 700 students) was sited on the western edge of the greater urban area in south-east Queensland, and served a community characterised by inter-generational poverty. 'Bayview' (P-7; 400 students) was located within a gentrified seaside community on the eastern edges of this urban conurbation, and 'Forestvale' (P-7; a very large primary school with more than 1150 students) served an outwardly middle-class community in the southern coastal part of the south-east corner conurbation.

Methods and methodology: Understanding schooling practices in context

The research is part of a three-year project into teachers' work and learning practices under current policy conditions in the state of Queensland. In an effort to develop both rich understandings of current practices within individual school sites, and to better understand how teachers' learning and work practices are influenced by current policy conditions throughout the state, the research reports on data collected through in-depth interviews in six schools across the state, involving a total of 164 teachers, principals, school-based administrators, and other school-based teaching and auxiliary staff (including teacher aides). Interviewees were mostly teachers, principals, and deputy principals, and other educators occupying specified whole-school roles (including heads of curriculum; support teachers – literacy and numeracy; special education teachers). Where the opportunity availed itself, interviews were also conducted with teacher aides and secretarial and other administrative support staff.

Interviews were approximately 30 minutes to one hour (although several interviews were in excess of 90 minutes), held at the school sites, and transcribed remotely. Resource limitations meant interviews were held over a 1-week period for each school. In smaller

schools, this enabled all teachers (and some support personal) to be interviewed. In larger schools, this limitation entailed selecting as wide a cross-section of teachers (and where possible, affiliated staff) from within the school as possible (including full and part-time teachers across year levels; heads of curriculum; literacy and numeracy coaches; principals; deputies). Participants were provided with ongoing feedback during the interview process, and each school was given a detailed written report reflecting the key findings of the research at the end of the week.

In keeping with Bourdieu's methodological call to consider his concepts as 'thinking tools' (Bourdieu in Wacquant, 1992), the findings are presented as key sets of practices, characterised by particular logics, within what is described as the 'field of schooling practices'. For Bourdieu (1993), making use of his concepts in empirical research was paramount:

I have always been immersed in empirical research projects, and the theoretical instruments I was able to produce in the course of these endeavors were intended not for theoretical commentary and exegesis, but to be put to use in new research, be it mine or that of others ... What I aim to produce and transmit above all is a scientific habitus, a system of dispositions necessary to the constitution of the craft of the sociologist in its universality (1993, p. 271).

This research is also undertaken in light of the need for epistemic reflexivity in relation to all aspects of the research process. The 'scholastic point of view' (Bourdieu, 1998b, p. 127), which characterizes academic research is recognised as influencing findings presented, and as necessarily distant (that is, a different practice) from the practices which it seeks to explore,

and strives (however inadequately) to explain. Such a reflexive stance enables a level of understanding about the research proffered which is simultaneously robust, but also cognisant of its limitations, and of all forms of analysis characterised by the studious leisure which attends such work, and which necessarily contrasts with the practices being explored.

Finally, this research builds upon preliminary findings conducted in a smaller number of schools at an earlier period in the national testing process which revealed how teachers in particular were able to 'appropriate' the focus of national testing for more educative purposes (Author, 2013). In part, this could be explained by these teachers working in schools at an earlier moment in the policy cycle in relation to NAPLAN, when the effects of NAPLAN had not become so entrenched. Also, how schools deployed significant additional funding to assist in developing the literacy and numeracy capacities of their teachers at this time, (which included the employment of various 'coaches' to assist with this work), may have contributed to these differential effects. While additional resourcing (including for coaching) occurred in some school sites at the later time when the research into the six school sites reported here was undertaken, arguably, longer-term, continued systemic performative pressures for ongoing improvement in test scores may have dissipated some of the more educative effects of this work as the national testing regime became more institutionalised and embedded into schooling practices. Some of the later coaching may have actually contributed to this process as the testing regime became more dominant. The more complex, fulsome findings presented in this paper suggest that this earlier position-taking, while valid, is also simultaneously challenged by the continued dominance of national testing policy in Australia, with significant implications for the schooling practices most valued under current policy conditions; this is also in keeping with the habitus as socially structured, even as it is socially structuring.

The logics of national literacy and numeracy testing within the field of schooling practices

An emergent thematic analysis approach, involving identifying key recurring themes within the data (Shank, 2002), and informed by Bourdieu's theorising of practice, reveals a field of schooling practices characterised by specific practices associated with informing teachers about NAPLAN; the alignment of curriculum experiences with NAPLAN, and; processes of actively preparing students for NAPLAN tests. The nature of the logics which characterised these practices is outlined below.

Informing teachers, forming teachers

From the outset, informing teachers about NAPLAN characterised the field of schooling practices:

When the NAPLAN results will come in for this year, then they sort of look at where our focus should be in Grade 2. I know when the NAPLAN results will come out, then there will be a focus on that when we do our staff meetings. You know, they'll show us where we're at. (Kelly, Year 2 Teacher, Forestvale)

This surety of focus upon results reveals a privileging of more 'objective' data, and points of view, as represented by NAPLAN. This belief that 'they'll show us where we're at' is a form of objectifying of students' learning practices which serves as evidence of teachers themselves adopting a more 'scholastic point of view' in relation to their practice – a view

which doesn't take into account the complexity and inherently socially constituted work which is the development, deployment and subsequent analysis of any form of assessment (Broadfoot, 2000). This objectifying is particularly overt in relation to NAPLAN, given its national, standardised and generic nature.

A habitus conditioned to focusing upon NAPLAN results was evident in the way in which teachers took upon themselves pressures and expectations from the bureaucratic educational apparatus of the state that results would improve, regardless of the circumstances in Queensland, and how these differed from the other states:

I think Education Queensland now is putting a far greater emphasis on NAPLAN than they did before. It was kind of before, 'Oh well, we're a year behind and woe is me'. And now we really need to step up because there aren't too many more excuses we can make. (Petra, Year 2 teacher, Northam)

Even though students in Queensland were one year younger than their counterparts in most other states (particularly New South Wales and Victoria – the two most successful states in NAPLAN), with greater rates of indigeneity, rurality and poverty than many states, a habitus was evident which had been heavily socialised into messages emanating from the bureaucratic state apparatus that students' NAPLAN results had to improve, and that arguments for relatively poor performance, regardless of how well justified, were inadequate. Consequently, teachers construed themselves as responsible for students' results, regardless of mitigating circumstances.

This pressure manifest itself in the way teachers looked at data, and engaged in structured activities to become more familiar with the test itself. This was evident across all year levels, not just Years 3, 5 and 7 – the students who actually sat the test – and in relation to the more middle-class schools, as well as poorer schools (where lower relative results might be anticipated to concentrate teachers' energies upon the testing regime moreso than colleagues in more prosperous communities). This was evident in the case of middle-class Forestvale, for example:

For example, last year we had to look at, we looked at what the test was. We looked at the data, and then we had to do the test ourselves, just to see where those mistakes are, so that we could then determine what were the common errors, and what were the common areas that needed to be focused on. (Lilly, Year 1 Teacher, Forestvale)

We've sat down – we had one big meeting and we sat down and we went through previous NAPLAN tests and worked out what the challenges for the kids would be, actually even opening the test and like, splitting down, splitting up questions. And what they would need to know to complete each answer. (Rhyll, Year 1 Teacher, Forestvale)

We got together as a grade, or year and then we ... looked at each other's [NAPLAN results], and what could have happened, and what could be helped – done to improve them for the following year. (Chrissie, Year 5 Teacher, Forestvale)

While different fractions of the field of schooling practices were influenced differently, and the tone did differ between the schools – with a sense of more pejorative effects in poorer

(and 'lower' performing) schools – that the logics of testing exerted strong influence across these settings (socio-economic spectrum) is evidence of the doxic status of the test more generally in recent times. Teachers' learning was productive of a habitus influenced by and responsive to experiences of directly analysing NAPLAN data across the whole school, or working with colleagues who had done so, and developing improved understandings of how students performed on NAPLAN:

I know that our head of Year 6 was involved in looking at where we, like where the poor areas were. And so we are supposed to be doing some like – just an hour or so a week on NAPLAN sort of learning. Just in terms of basic skills like grammar and spelling, and those are some of the things or the areas that they were really poor in. (Cynthia, Year 6 Teacher, Northam)

A key strategy to secure ever improved NAPLAN results involved ensuring teachers were aware of how their students were positioned relative to expected benchmarks ('like schools'; state benchmarks; national benchmarks), and past performance. Staff meetings were a key site for facilitating this work and learning, including explicitly identifying students' positions against national benchmarks:

Sometimes most of the staff meeting – a lot of the time actually, yeah... – they [teachers and school-based administrators] talk about NAPLAN and 'bands' ¹... Well they look at the data that the students have, what the students have achieved in previous years and how they're achieving now, and there's lots of coloured boxes about. You've got the red box, which is the students who are below the band that's

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¹ Clusters of NAPLAN results, indicating whether students are 'below', 'at', or 'above' national minimum standards.

expected. And then you've got the yellow box which is where they should be, and the green if they're above. (Elizabeth, Music Teacher, Mintown)

We don't do NAPLAN in Year Four but there's still – often in staff meetings, we'll be looking at NAPLAN data and looking at particular concepts that kids have not got.

And working out how it is that we can cover those concepts, and help kids do better with that in the future. (Ronnie, Year 4 Teacher, Forestvale)

This process of 'doing better', as well as constant talk about students' positioning in particular 'bands', and how they achieved in previous years in relation to now, all reveal a field of schooling practices dominated by a logic of comparison. Students were compared to their own previous capacities, as well as against state (and regional), as well as national benchmarks. Such processes point to a culture of comparison serving as a mode of governance of schooling practices, with particular attention in this case to a national optic – a 'national eye' (Nóvoa & Yariv-Mashal, 2003) – by comparing school results with other schools throughout the country. NAPLAN was not only a catalyst for an increased focus upon performativity at a system level, with attendant concerns about 'reputational capital' at this level (Lingard & Sellar, 2013), but also a catalyst for similar concerns at the school level itself.

Again, a habitus responsive and exposed to learning about specific NAPLAN questions in which students did poorly, and how to assist students through curricula opportunities, was explicitly evident. The overt way in which teachers in lower SES schools reflected upon these concerns also reveals the differential effects of such practices within the field, and how such sites are particularly subject to the new doxa of standardized testing in Queensland, even

as it influences all schooling sites. Comments from teachers at Edgemount were especially instructive in this regard:

They [teachers] analyse the results and say, 'Well we – these are the questions, these are the types of questions these children are having trouble with'. Perhaps it's higher order thinking skills in maths, or 'thinking' and 'search'-type questions in reading – the inferential type questions. So we try to sort of link that to the curriculum. And because we have people like Lisetta and Mary who are curriculum workers and mentors in literacy and numeracy, they try to come up with strategies or ways of teaching higher order thinking skills that we can teach the children. So that they can do these tests well. (Louise, Learning Support Teacher, Edgemount)

We look at reading, which questions for example let's take reading, which questions the kids didn't do well, and we teach that. So if they're more meant to be looking at – if the kids in reading didn't do inferencing well, we teach more of that. (Frances, Year 5, Edgemount)

An explicit focus upon 'do[ing] the test well' exemplified the influence of more test-centric logics in such settings.

A habitus forged from the demands of NAPLAN was also evident in teachers' involvement in marker training for the test as a means to enhance students' results, and how this was construed as beneficial for providing feedback to students and parents. This was the case even as there were concerns expressed about how the feedback for the test was not timely (5 months between sitting the test, and receiving feedback), and therefore of limited value:

And we did really – there was a bit of a push, teaching to the test, but teaching that genre and how to write that. And then we were trained by a NAPLAN marker on how to mark it. And so I've got that knowledge now that if I was in a NAPLAN class at least I would know what a NAPLAN marker – what a marker is looking for. Whereas if you're going in blind, you don't have – this is just writing. And so then I was able to give really good feedback to my children and their parents.

... [Y]ou can get really good data from the marking now, the specific stuff they were looking for and comments and things, so that was really good last year. But the turnaround from the test to the results is a really long time. (Lindsay, Full-time 'Relief Teacher'², Mintown)

While its validity for learning was contested, NAPLAN had clearly become a taken-for-granted practice as teachers reflected upon the 'really good data from the marking' – the numbers – which could be attained. This was the case even as there were hesitations expressed about the worth of the test because of the lack of timeliness in the return of results. In this way, more test-centric, enumerative logics were clearly evident within the field of schooling practices.

Aligning the curriculum: A NA(tional)PLAN curriculum

In some school settings, curriculum provision was influenced significantly by students'

NAPLAN results. A logic of responsiveness to NAPLAN results was evident in the modified curriculum in one school – the 'Academic Success Program'. In this school, for those

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² A teacher employed on a full-time basis to fill in for absent teachers (in this case, in either of the two primary schools in the town, which because of its relatively remote location, experienced ongoing teacher shortages).

students who performed poorly on previous NAPLAN or trial tests, additional, intensive, literacy and numeracy classes were instigated to improve NAPLAN results, in lieu of timetabled subjects, such as Languages Other than English (LOTE):

We've got the kids who passed the NAPLAN benchmarks – I believe [they] all go to LOTE; the ones who didn't pass it work with the classroom teachers twice a week for 45 minutes each session. And what my teaching partner and I did is we split them, so that on Monday half of the group does English, and the other half does maths. And then on Thursday we swap it over.

...And then we've got a select number of kids for that [Academic Success] Program ... that go out twice a week and work more intensively. And then we've got a few separate kids that go out four times a week, so it's a bit messy... The ones that need more help go out more often.

...I believe there is about 12-14 kids in there and then 6 of those 12 get extra help again twice a week, and then 2 of those 12 get extra help four times a week on top of that. (Claire, Year 7 teacher, Northam)

This logic of intervention, this 'extra help', was construed as a normalised part of practice within the school. Indeed, the 'Academic Success Program' in this school was considered a valuable vehicle for promoting increased opportunities for students to focus upon improving their literacy and numeracy capacities, and involved a complex reassignment of teaching staff to enable the program to continue:

Now the Academic Success Program is – is essentially what we do is, is we take the bottom cohort of kids, from Prep to Year 3 ... and what they do is they get an extra

hour of explicit instruction 4 days a week, which equates to 40 hours a term, which equates to 80 hours a semester, which equates to 160 hours [per year]. So for that extra hour what we've done: we take the bottom group 25-30 kids, we take one of the year level cohort teachers and the other kids are spread out, because we're taking a group out, so the cohort remains the same size, if that makes sense.

... And so we use a cohort teacher, we use a learning support teacher and we put 2 highly trained teacher aides with them; so we've got 4 adults working with a group of 25-30 kids. And again it's more explicit instruction but it's in that small group focus, where we can drill down, and the kids are continually tested. If they've proven that they've caught up, or they have the basic facts, they then migrate out of the system. But they have to do it for a couple of sessions in a row. (William, Principal, Northam)

Importantly, and again reflecting the differential effects of the doxa of testing, the lower SES schools, such as Northam, appeared to have more 'structured'/formalised programs, such as the Academic Success Program, in place to redress concerns about relatively low NAPLAN results. In these settings, that the capitals strongly valued were improved NAPLAN results was evident in how students were constantly tested to determine whether they should continue to receive intensive, ongoing interventions:

A: Yep, and they're constantly tested.

Q: Okay. Okay to see if there's movement?

A: Yeah. (Gunilla, Year 5 Teacher, Northam)

A habitus productive of the focus upon NAPLAN was reflected in how the curriculum was described as shaped around the provision of specialist teachers in schools more generally,

who were seen as a valuable resource for ensuring familiarity with NAPLAN. Again, this strategising was perhaps most evident in the context of the lower SES schools. The work undertaken at this time in these schools was clearly focused upon NAPLAN-style activities:

Last year I was specifically put on the class to help the teacher with NAPLAN support, so I was specifically taking groups out, working with mainly numeracy; we have done some literacy as well around the persuasive writing task [a popular NAPLAN genre]. Having said that though, this year I'm working with the English teacher. She does [Year] 7, 8, 9 English, and I take a rotation, so we do a lot of rotations in the class, especially in high school. It seems to work, and because there's so much content to cover, I was responsible for the comprehension for Year 7 and 8. So we would actually have examples of NAPLAN-style comprehension tasks; so reading through them, just the explicit strategies of how to attack a reading task; how to answer comprehension questions; what they're looking for; how they're trying to trick you; that sort of thing. Just those explicit strategies on how to actually complete the task, with a few of the lower students. (Deirdre, Support Teacher – Literacy and Numeracy, Saltbush)

The focus upon identifying 'how they trick you' is indicative of a form of strategising developed in response to an increasingly doxic status of testing in these schools. Also, while teaching practices should not entail guesswork on the part of students about what they are required to do, notions of 'explicit' teaching take on an entirely different meaning in schooling settings where assessment for learning seems to have be increasingly influenced by forms of assessment more closely aligned with individual and collective (teacher and school) reputational capital. Under such circumstances, it is perhaps not surprising that dedicated

literacy coaches were allocated to specific year levels in the lead-up to NAPLAN testing to assist with this more explicit teaching:

Last year, she [visiting literacy coach] was given to the NAPLAN classes during the first 2 terms. And then for Term 3 and Term 4, she was given to the QCAT³ classes. And because I had a Grade 6 class, she'd come up every 3 weeks and see me. (Gracie, Year 7-8 Teacher, Saltbush)

Recognition of high NAPLAN tests scores as valued capitals was evident in provision of support to assist teachers in curriculum areas associated with NAPLAN:

I know NAPLAN results have been low in particular areas so at the moment there's programming being looked at so we can have particular support I guess next year in those curriculum areas that haven't been 'up there' as far as our NAPLAN results go. (Desleigh, Year 7 teacher, Edgemount)

A focus upon results – a logic of numbers – was reflected in alignment between NAPLAN and the everyday curriculum within schools. This was evident in the development of a more streamlined approach towards reading groups in schools, involving tracking of students, including for the very youngest children:

We look over the results and I guess, and the results of the NAPLAN test is probably, a reason why there's been such a focus on the reading groups in the lower end of the school. Like I said, we've always done reading groups but they wanted ... to, I'm

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³ QCAT – Queensland Curriculum Assessment Tasks – an initiative supported by Education Queensland to help develop teachers' capacity to moderate assessment tasks with one another, so as to develop more effective assessment tasks, and to grade student assessment more accurately.

guessing that they wanted to make it more of a systematic and 'streamlined' process where everybody was doing the same from Prep to Grade 2, leading into Grade 3 for NAPLAN. (Lilly, Year 1 Teacher, Forestvale)

Even as students also participate in other whole-class reading activities, the strategising of 'grouping' (a euphemism for streaming) students is problematic for those students streamed into lower groups who have less time being exposed to the more developed reading practices of students in higher groups, thereby marginalising these students even further. Processes of tracking in general in schooling have a deleterious effect upon teaching by providing less rich and varied learning experiences to those students who most need it; such unequal practices are part of a competitive, more neoliberal logic antithetical to and corrupting of a genuine education for all – the only 'education' worthy of the name, worth having (Connell, 2013). However, such processes appear to have become unquestioned on the part of many of the teachers involved in the research. This is due in part to socialisation processes in school settings which ensure the continuation of existing activities such as ability grouping of students in reading groups ('we've always done reading groups'), but it is also exacerbated by regimes of testing such as NAPLAN which reinforce such practices, and make it even less likely that they will be challenged. It is also a reflection of the continued need for assessment literacy within the field, and that this needs to be a continuing part of teachers' growth and development if it is to enable productive challenging of current assessment practices (Klenowski, 2011; Sebba, 2006).

This whole process around teaching reading was an angst-producing exercise, evident in how teachers came to understand that the approaches and strategies undertaken were deployed throughout the state, not only in their own school:

Yes, it's a response to always trying to improve the results. Trying to improve our results compared to 'like' schools. Trying to improve our results nationally because it's hard – we did improve but it's hard to keep on improving. And the other schools – some of the other schools are sort of employing all the [reading] strategies now. So we were doing really well compared to all schools, but now we're similar to 'like' schools. (Louise, Learning Support Teacher, Edgemount)

Again, a logic of comparison was clearly evident, and the capitals accumulated were rendered visible in the form of improved NAPLAN results; and much of the curriculum was oriented towards providing the conditions for improved results. That is, NAPLAN results, which when published constitute a form of objectified, and also institutionalised capital, seemed to shift the curricula focus from an emphasis upon learning for its own sake, to a focus upon securing the best possible test scores as markers of esteem, and as proxies of learning (particularly in comparison with 'like' schools). Such capitals were 'possessed', or perhaps more accurately, 'possessed' all to whom they were directed – teachers striving to teach to effect improvements in such results, school administrators seeking to have their schools represented in the best light possible in public for a such as MySchool, and those students being 'pushed' by their teachers to do as well as possible to safeguard the 'reputational capital' attached to these results (Lingard & Sellar, 2013). Various reading groups and reading strategies were seen as likely to contribute to improved NAPLAN results.

Testing practices: Practising tests

^{4 &#}x27;Like schools' are schools considered demographically similar to individual schools, for national comparison purposes. Each individual school is compared with 60 similar or 'like' schools throughout Australia which are deemed to have similar socio-economic characteristics as the school in question. Theoretically, this enables comparisons between schools to be made across the country as a whole. Practically, it means schools with very different histories and cultures (including student selection practices) are compared with one another.

The field of schooling practices was also characterized by a logic of actively preparing for the tests, including practising the tests, with considerable time allotted to do so. While clearly evident in low SES schools (e.g. Edgemount), such logics were also on display in higher SES settings (e.g. Mintown):

We have meetings and we talk about new curriculum that's going to be brought in or about NAPLAN. How we're going to cater for NAPLAN, how we're going to teach it, how we're going to do practice tests beforehand. (Louise, Learning Support Teacher, Edgemount)

I do a lot of preparation for NAPLAN, because when I got to my students, they were at the 'lower end of the spectrum', as we would say. So I tried to do a lot of preparation to get them up and prepared for NAPLAN. So I did spend a lot of time in that preparation area learning about – well, 'Right, this is a previous NAPLAN; let's have a look through these NAPLAN exemplars – what do I need to do?'
... I would spend a couple of hours a week doing NAPLAN preparation in conjunction with C2C⁵, so where I could fit it in, I did do a lot of preparation for that. (Tyson, Year 7 Teacher, Mintown)

Revealing a emerging orthodoxy, strategising for NAPLAN was clearly in evidence in the form of hours of preparation specifically for the test. However, the nuances associated with this process also need to be noted. While Mintown was located in a mining community with very high economic capital, the cultural capital within the community was somewhat

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⁵ 'C2C' – 'Curriculum to the Classroom' - the Queensland state-version of the new Australian Curriculum, implemented in 2012.

dissonant with more dominant schooling practices (typically associated with middle-class contexts (cf. Ball, 2003)), and more effort seemed to be expended in this school in test preparation activities than might be anticipated on the basis of economic capital alone.

Reflecting how this emerging doxa of standardised testing can take up much of the time available for schooling in low SES settings, there was also evidence of considerable time spent on various forms of test preparation. This included more detailed preparation practices focused on specific aspects of the test (e.g. spelling 'NAPLAN' words), and sometimes at a very perfunctory level, such as assisting students with actually colouring in 'bubbles' beside multiple choice answers:

I even just helped out with filling out the form, this is how you do it, this is how you correctly shade in a bubble, because it sounds easy but it's not always done. And with Year 9, I did their spelling. So [Years] 7 and 8, I did the reading comprehension; Year 9, I was responsible for spelling. So I took the spelling rotation. Similar thing – we focused on past NAPLAN words; just getting them to have a look at – this is the level of words you're expected to know at Year 9, [and] some spelling strategies around those words. And then they're all tested in NAPLAN style, either dictation or a 'cloze' [passage] where you've got to put in the missing word, or circle the misspelt word, spell it correctly. So just trying to prepare them the best [we can]. (Deirdre, Support Teacher – Literacy and Numeracy, Saltbush)

Yeah, just so the kids know how to actually fill in the test. Because our kids are still getting used to being formally tested so much. Just for them to know how to answer

the questions correctly. But again, fitting that in was quite limited. (Gunilla, Year 5 Teacher, Northam)

The increasingly doxic status of NAPLAN was productive of significant additional staffing (usually teacher aides) to NAPLAN year levels in the lead-up to the test at both low and higher SES school sites, and some dissonance when these personnel were reallocated to other duties at the conclusion of the test:

[There was] a lot of work given to us by the teacher aides and the literacy coach for those first 6 months. Once NAPLAN finished, I lost everybody, and I'll have one teacher aide, say throughout the whole of the week. Whereas beforehand, I'd have one nearly every day, so it's sort of inundated, and then that was it. ... So that's a hard shock to sort of relate and work around, when you knew you had three groups and you had a person in this group, a person in that group and yourself. To go back to yourself, with 2 groups who had to work by themselves. (Robert, Year 7 Teacher, Bayview)

Up 'til May [when the NAPLAN test was held each year], I take Years 3, 5 and 7, or sometimes I have a support person to help me too. So we take teaching groups from those year levels and then we try to work on NAPLAN-type things. Like reading strategies, comprehension, trying to teach language conventions; sometimes its numeracy also. (Louise, Learning Support Teacher, Edgemount)

Again, and particularly considering the long gap between sitting the test (May) and receiving results (September), such strategising seems to reflect a privileging of more reductive test-

centric logics within the field, rather than a more substantive logic of assessment for learning. Indeed, a more test-centric logic of practice was readily apparent, even as the time-lag between students sitting the test and the return of the test was contested:

Oh it might – like with the practice test I might go, 'Oh dear, no one really knows about this type of punctuation'. Or if I've taught symmetry and a whole bunch of them got the symmetry question wrong, I might have to go back and reteach that and everything like that. But as a whole, I mean it doesn't come back until September, and you would hope the kids have already moved along from where they were back in May. (Gunilla, Year 5 teacher, Northam)

This test preparation was accepted by teachers, and entailed an intricate logic, involving teachers engaging in pre-tests to help ensure students were prepared for NAPLAN, including in higher SES settings:

I guess as a teacher that's been doing it for a few years I see the benefit in I guess test preparation, because I think there's a disconnection between what students know and how the test is actually conducted. So I think it is beneficial for the students to have as much test practice that connects their knowledge to the type of questions.

... we do a pre-test and we try and work out where students, I guess could benefit from some help, what they seem to be doing fine with – also helps with reading groups and things like that. So streamlining them in other ways. And really what we need to work on. So it might be a concept in maths – the majority are having trouble with angles. (Helen, Year 4-5 teacher, Mintown)

At the same time, again, the specific circumstances surrounding Mintown's location in a mining community with very high economic capital, but relatively lower cultural and social capital more typically associated with middle-class communities, meant more effort seemed to be directed to test preparation activities at this school than might be anticipated.

Nevertheless, teachers' focus upon various 'pre-tests', and 'what we really need to work on', points to a habitus influenced by more test-centric logics.

Such was the influence of NAPLAN that teachers were disposed to ensuring students had the opportunity to sit practice-tests. The increasingly doxic status of NAPLAN was evident in how practice-tests had become an inherent part of the culture of teaching. Such was the power of what could be construed as a new orthodoxy, and the process of misrecognition within which their work unfolded, that teachers saw themselves as 'choosing' to enact the tests, even as it was understood that they had to do so:

I can honestly say there was no push from up above to say, 'You must do NAPLAN'

– like there was no single 'relative' push but just the 'inherited' push of the idea

around NAPLAN, and what happens with NAPLAN data. So it was understood that

we had to implement testing, pre-testing – everything like that. Obviously the

principal has told us we had to do pre-tests and everything like that, but that was just –

you do what you believe you have to do to achieve – the best results.

...I have a NAPLAN guide book that I have there. There's a couple of pre-tests and obviously on the NAPLAN website there is a number of activities that you can use to prepare your students there. So that was things that we did with the cohort to get them up. (Tyson, Year 7 Teacher, Mintown)

This focus upon 'just do[ing] what you believe you have to do' downplays the very significant influence of the broader field of power under these circumstances. There was a misrecognition of the nature of the relations which characterised the field, with subsequent effects which reinforced the increasingly doxic practice of test preparation. Such position-taking was also the product of broader policy and political pressures since 2008/9 (and particularly as a result of the Master's Report recommendations for students to be better prepared to sit NAPLAN tests) for improved NAPLAN results.

However, and reflecting how fields are always inherently contested, more overt contestation within the field of schooling practices was evident as well. Even as teachers agreed they taught to the test in some fashion, this was an uncomfortable realisation:

...And even now – like it was in May and what they are writing now [late July] is so different and so much better. Yeah, I don't know. You learn not to stress out about it. It is hard because you definitely do teach the test, unfortunately. But at the same time, I sometimes think that – with NAPLAN because it's such a 'curve ball' – you never know what you're going to get, so you do teach a broad – . Like, it's very broad [range of materials taught]. But at the same time you miss bits and you think, 'Oh, I wish I had more time to go back and get their heads around that'. But we're trying to push through and just cover everything that could be on the test – could be coming up, so that they don't stress out and go, 'Oh my God!' And yeah, you've got to teach them how to sit a test, especially at this age because it's their first one. (Valerie, Year 3 Teacher, Mintown)

Indeed, the practices surrounding NAPLAN in general served to highlight tensions, compromises and uncomfortable realizations on the part of teachers. There was also contestation about the value of the test alongside some evidence of engagement with NAPLAN results to assist with goal setting, and developing and extending students:

We do a lot of analysis of NAPLAN. Do I think it's useful for me in the classroom? Sometimes, sometimes not. I don't know whether NAPLAN's a really accurate representation of what the kids know and what they don't know. But I think that we look at them to see where our kids are at at the beginning of the year, and set targets for them, you know, so we can try and extend them and expand them. We look at what questions, as a cohort they got wrong, so that we look at what they're lacking: if there's any in maths; if there's any particular area; if there's any particular [area] in language, maybe grammar, punctuation, spelling; in reading, what types of reading questions they're getting wrong, which is normally inferential. (Wilma, Year 7 Teacher, Edgemount)

Such accommodations point to the possibilities for learning from the test, even as they flag a potentiality to teach to the test. It is this ambivalence within the field, particularly in contexts in which teachers' capacities to make judgements about students' assessment require further development (cf. Walters, 2007), which can be exploited under conditions of more overt concern about test results as proxies for students' learning.

A habitus imbued with concerns about students' abilities in particular areas, especially in inferential comprehension in reading, was also evident, and which seemed to construe NAPLAN results as providing just another form of evidence of these difficulties:

Our kids really, like they decode really well, they just – and they can find the facts, important facts – but they don't really understand the effect of text or the, like as in the mood and what type of – what the writer is feeling – or the messages. If you ask them what the message of the text will be, so the inference, they'll tell you what the storyline is! And [you] say, 'But that's the story; that's what's written down in the words. But why did she write the story? Or 'Why did he write the story? What was the message behind it'? And they struggle with that. But that's because they don't fully understand the words that they're reading. And NAPLAN gives you – I mean that's one thing that stands out in the NAPLAN – I mean with the data. (Wilma, Year 7 Teacher, Edgemount)

These more formative insights are particularly important, and recognition of a field of schooling practices with the potential to cultivate more overtly educative practices amongst students, even as more reductive, test-centric logics appear to exert so much influence.

Revealing the complexity of the field of schooling practices, the results were also construed as a useful vehicle for making a case for the needs of students not previously focused upon, including students identified as being 'in the middle', and this led to more intensive drafting processes which assisted Year 7 students with their written expression:

We've always catered for the kids down in special needs areas or learning support, and they do a good job with that, but I guess, particularly when we started to see results with our NAPLAN that we said, 'Okay, well let's try and get those middle kids

up'. And that's, I guess, one of the ideas behind the drafting process with our English

is that it's really helped with those. (Toby, Year 7 teacher, Forestvale)

However, again reflecting the complexity and contestation within the field, the broader push

within Education Queensland for higher proportions of students in the 'upper 2 bands' of

NAPLAN also needs to be acknowledged to more fully understand the logics at play in this

particular case. While a potentially laudable aim, this focus on students in the middle –

students with greater potential to achieve the upper 2 bands than some others – needs to be

nuanced in light of substantive and not inconsiderable performative logics influencing the

field of schooling practices more generally.

In these ways, even as the focus upon national testing had become a taken-for-granted

practice within schools, with teachers typically disposed to engage with the testing processes

as part of their daily work, there was also some questioning of the focus upon NAPLAN, its

value, and of a teaching habitus influenced by more educative logics, evidenced in how

teachers considered NAPLAN as just one form of data, albeit useful for focusing attention

upon students whose needs were not deemed to be adequately catered for previously.

However, this was a complex ensemble of practices, reflecting a myriad of influences

simultaneously at play, and perhaps not necessarily always recognised as such by those so

actively involved in the production of these practices.

Discussion: A logic of enumeration

Clearly, the research reveals a very strong focus upon NAPLAN within schools in

Queensland. The logics of practice which characterise the field of schooling practices in an

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era of national testing are heavily oriented towards teacher responsiveness to a myriad of foci around testing. While there was greater consistency of support amongst school administrators for NAPLAN (reflecting a habitus closer to the administrative and bureaucratic arm of the state), this emphasis upon the test was evident across teachers, school administrators and other school staff (e.g. support staff such as teacher aides), with the similarities more notable than the differences across the various groups. (It should be noted, also, that the vast majority of participants were teachers and school administrators (principals, deputy principals), with relatively few 'other' staff represented). This is in spite of ongoing advocacy for schooling practices focused upon inquiry-based approaches, as opposed to simply knowledge dissemination (teaching 'facts'). (Such standardisation is, however, in keeping with the more reductive effects of the professional standards movement, for example, with its focus upon measurable and typically generic accounts of teaching practice (Santoro et al., 2012)).

In many ways, the focus upon NAPLAN reveals how the broader field of power, in the form of standardised measures of student literacy and numeracy achievement as a proxy measure for future economic output and provision, dominated the field of schooling practices, as expressed within the particular school sites described in the research. The field of power had such a significant and direct impact upon the field of schooling practices that on several occasions, teachers misrecognised the nature, extent and influence of NAPLAN upon their practices. While there is some earlier evidence of teachers appropriating the focus upon NAPLAN for improved results on standardised measures of literacy and numeracy for more educative purposes, (see Author, 2013), the more fulsome research presented here (across a broader range of schools across the state, over a longer period, and at a later time in which NAPLAN has become a more sedimented part of the educational landscape in Queensland),

provides significant evidence of teachers being increasingly dominated by broader political and policy concerns for improved test outcomes/'numbers' – a logic of enumeration – with problematic outcomes for practice. Under such circumstances of ongoing attention to standardised testing over several years, it is difficult to envisage how such testing could be deployed consistently for productive, educational purposes, even as it may have the potential to be realised in this way (Ravitch, 2010). That is, such circumstances make it difficult to foster the sorts of learning-focused approaches to assessment which should characterise testing practices (Klenowski, 2011).

Arguably, not only were teachers 'informed' about NAPLAN through ongoing meetings, including regular whole-school staff meetings, they were also clearly 'formed' as practitioners whose work and learning were actively and overtly oriented to respond to these demands. For these teachers, it seemed very difficult indeed to consider that the 'convention' of NAPLAN was not somehow 'real', as not a construct subject to debate (Desrosières, 1998); the test very much had effects, and as a social practice, disciplined all within its remit (Broadfoot, 2000). Consequently, within the field of schooling practices, a habitus was evident on the part of teachers which was clearly oriented to learning about NAPLAN, and how to improve NAPLAN results in association with colleagues within their schools. An active disposition was evident on the part of teachers and school administrators as they sought to become more informed about NAPLAN results, and how best to respond to lower results. A logic of NAPLAN preparation was clearly evident in the emphasis upon teachers undertaking various activities – e.g. developing basic skills in grammar and spelling – which were seen as directly beneficial for NAPLAN. This is not to imply that these teachers were solely focused upon improving national test results for their own sake, and to the detriment of the learning of their students per se, but it is to suggest that NAPLAN played a very

significant role in influencing the organisation of schooling (daily, weekly, and on a term, semester and yearly basis), and that such a focus intimates how a more intrinsic emphasis upon students' learning may well be under considerable threat. The focus upon NAPLAN seemed to reflect not only a 'control' society (Thomson & Cook, 2012a), but also a 'logic of enumeration' – productive of a NAPLAN-literate teaching disposition, and evident in support of staff meetings as sites for developing teachers' knowledge of their students' results, and how to improve these representative figures.

Furthermore, the field of schooling practices was clearly characterised by a curriculum focus upon NAPLAN, including narrowing the curriculum for those students deemed to have problematic outcomes. This included, for example, allocating additional, intensive literacy and numeracy classes instead of Languages Other than English (LOTE). The strategising at play was heavily prescribed, and involved provision of significant resources for students not performing adequately on the tests. For some students, this included four times as much time allocated to literacy and numeracy activities oriented towards improving NAPLAN outcomes as their classmates. As in other settings (cf. Hursh's (1998) account of testing practices in the US), the field of schooling practices was characterised by test-centric logics, and the practices which came to dominate were those associated with how to improve test results. Various strategies, such as the 'Academic Success Program', were deployed to enhance students' literacy and numeracy capabilities – an unarguably worthy aim. However, such initiatives were also clearly oriented to realising improved NAPLAN results - numbers - which seemed to be the capitals of much value under current policy conditions. Such initiatives, with their focus upon restricting the curriculum of those students performing relatively poorly, and increasing the opportunity for improved future results by targeting such students with intensive literacy and numeracy tuition, reflects the influence of the broader field of

power in the form of political pressure at the state level for increased NAPLAN results. Under these circumstances, the full range of experiences available through a balanced curriculum, including not just literacy and numeracy, but also social studies, science, the arts, languages and health and physical education, becomes adumbrated. The result is that while some students have had exposure to this full range of opportunities and stimuli, others have received a narrower educational experience – a narrowing which further disenfranchises such students by denying them the sorts of stimuli which assist with the development of ideas as a source for their writing, reading and numeracy practices. Improvements in relatively narrow areas of the curriculum being tested in standardised tests exist alongside reduced opportunities to engage in a wide range of learning opportunities. In part, this process is fostered by some teachers' own sense that additional literacy and numeracy activities, and more intensive focus on these areas, will benefit these students; however, such a perspective is not uniform, with sometimes considerable contestation amongst teachers about the narrowing effects of such an approach. Also, the allocation of specialist teachers to those year levels preparing for NAPLAN in the lead-up to the tests in May, and then their redeployment to those grades immediately below these year levels after May to help 'prepare' these students for the following year's tests, served as a 'strategic' device designed to increase NAPLAN scores. The focus upon reading, and fostering school-wide approaches to reading strategies across school sites also served as an 'active' means of fostering improved NAPLAN results.

Furthermore, through such practices as participating in NAPLAN marking, teachers became increasingly disposed to the focus upon NAPLAN. These practices also reflect how high NAPLAN results are capitals of significant value, and that the field of schooling practices is increasingly characterised by a logic of multiple strategies to inform teachers' learning – but

a form of learning strongly oriented towards testing. Again, such processes have the potential to further marginalise efforts to foster the sorts of substantive interactions and learnings amongst teachers necessary to develop appropriate judgements for productive, ongoing assessment moderation practices (Wyatt-Smith *et al.*, 2012).

Teachers also engaged in short-term measures, such as practice tests, and various forms of 'teaching to the test', to ensure students were prepared for NAPLAN. Such was the domination of NAPLAN that, even on occasions when teachers disagreed with or were hesitant about such practices, teachers felt they could not but teach students how to sit the test, and to prepare students as best they could to do as well as possible on the test; such responses reveal a tension between systemic foci upon standardisable measures of achievement, and efforts to work towards what Porter (1995) describes as more 'accurate' estimations of, in this case, student learning. This included going through examples of tests, looking at exemplar answers, and actually 'teaching to the test'. Using the tests to identify specific concepts with which students struggled, and providing multiple opportunities for teachers to experience success in these areas, reflected, arguably, a new orthodoxy around schooling practices in which NAPLAN played a prominent part. Making the most of resources provided, such as previous NAPLAN papers, example questions, and a series of pre-tests, ensured an ongoing focus upon NAPLAN. Setting targets based on NAPLAN 'to try and extend them' reflected how a logic of testing came to characterise, indeed dominate, schooling practices. Also, while all schools were influenced by this logic of testing across the socio-economic spectrum, such logics seemed to have particularly troubling effects in schools serving lower SES communities where results in comparison to national benchmarks were typically lower than in other settings. Identification of specific areas in which students' results were low was a key 'strategy'. And all of this work occurred under pressures of time

to ensure students succeeded adequately on the tests, and added to the intensification of work for teachers (cf. Comber, 2012). The way in which teachers elaborated students' capacities and difficulties revealed a habitus forged by exposure to NAPLAN and to expectations of improved results in NAPLAN. Exposure to poor student results in this cohort influenced teachers' practices, evident in a habitus responsive and compliant to the demands of NAPLAN.

However, this is not to suggest that there was not contestation around NAPLAN, and the focus upon NAPLAN. Some teachers did recognise that there was too much focus upon the testing process – too much emphasis upon the disaggregation of learning to a single digit (Thomson & Cook, 2012b). Furthermore, teachers' comments also reveal a habitus grounded in more educative logics and concerned about students' lack of attainment on NAPLAN questions for what this indicated about students' learning, rather than concerns about the results per se. But, pressures of time were also clearly at play which meant that teachers felt they could not spend too long addressing particular difficulties students may have had, and they were conflicted about this (cf. Comber, 2012). That a habitus grounded in more educative logics was conflicted was evident in concerns to ensure students did well in the test, and that they genuinely understood the nature of the work being asked of them. Concerns about improving students' English expression – particularly students 'in the middle', as they were described in one school – were also seen as an outcome of recognising this particular group of students' poor performance in this area on the standardised tests (although, as noted earlier, more performative logics were also simultaneously at play as part of this focus on these particular students). These more educative logics were also, perhaps, more evident amongst teachers than school administrators, reflecting their different positionality within the field of schooling practices, and in relation to the broader field of

power (although, again, there was a significant degree of similarity of responses across teachers and school administrators in relation to NAPLAN).

Nevertheless, arguably, the data reveal how the form of 'statist capital' (Schwartz, 1997) most valued was that associated with NAPLAN. This was evident in the way in which this general, generic test was used to make important decisions about the nature of the curriculum implemented across year levels – including how teachers would gain access to additional resources (such as teacher aides) in relation to the NAPLAN cycle – and within year levels. Even as the field of schooling practices was clearly a site of contestation, it was heavily characterised by a logic of concern for improved NAPLAN results. While there was a strong focus upon systematically providing substantive additional resources for students whose literacy and numeracy skills were most problematic, decisions about how these resources were deployed seemed to be made within the parameters of a logic of national testing – a logic of enumeration – in which the symbolic capital of most value was, arguably, high NAPLAN results.

Conclusion: An economy of numbers

While teachers have sought at times to resist the more reductive effects of national testing (Author, 2013), over time, the research clearly reveals that teachers in Queensland are increasingly spending significant amounts of time, and schools significant resources, on improving students' test results. While the logics of test preparation were critiqued by some teachers, the extent to which these concerns can challenge the more reductive effects of a broader system clearly oriented towards improving results on standardised tests, is a moot point.

While teachers do indeed engage in processes of 'active reflection' (Reay, Crozier & Clayton, 2009) enabling them to develop a level of consciousness/socio-analysis, in relation to their circumstances – in this case, in relation to national testing processes – arguably, testing processes have simultaneously resulted in a plethora of responses and foci around testing which limit the nature of teachers' practices, and their capacity to critique such practices. Significant test-centric practices are at play across schools, including, as evidenced in the research presented: a strong focus upon teachers meeting, discussing and informing one another about NAPLAN; engaging in curriculum development practices which foreground NAPLAN, and; actively preparing students to sit the test, including, whether intentionally or unintentionally, teaching to the test. The strategising which occurred always seemed confined within a broader field dominated by concerns about improved outcomes on standardised literacy and numeracy tests. This is not to downplay the concerted efforts on the part of teachers to resist the more reductive effects of such tests, or to marginalise their efforts to do so. Instead, it is to foreground how overwhelming policy and political support and attention to such testing can dominate schooling practices, students learning, and teachers' learning, and that, consequently, more educative logics may be at risk. In many instances, such was the influence of the focus around national testing that it seemed almost impossible for teachers to 'think' otherwise. The result of such a focus is a field of schooling practices increasingly characterised by an 'economy of numbers', rather than an 'economy' of learning. A logic of enumeration – of focusing upon test results, and how to improve these test results – was clearly evident.

Bourdieu's 'thinking tools' of field, habitus and capitals are useful for foregrounding how the field of schooling practices is currently heavily influenced by test-centric logics. Under these

circumstances, a habitus is forged amongst teachers which is overtly and actively attuned to all aspects of test information, curriculum development and test preparation. While teachers are not simply 'strategizing' for NAPLAN, it is readily apparent that they are actively produced by and productive of a field of schooling practices which is deeply influenced by teacher and student learning practices focused upon how to improve students' results on standardised national tests, and within which improved NAPLAN results are capitals which are highly valued. Ensuring that such logics do not dominate schooling practices seems fundamental if we are to foster schools as sites of education, rather than simply for standardised testing.

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