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ORIGINAL ARTICLE

It's just as well kids don't vote: the positioning of children through public discourse around national testing

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Abstract The importance of mathematics or its alter ego 'numeracy' is being cemented in the public's mind with the instigation of national, high-stakes testing in Australia. Discussions about national testing in press releases, online news articles and online public comments tacitly attribute importance to mathematics. In these discussions, children are positioned as commodities, with mathematics achievement being the value that can be added to them. Deficit language identified some children as being less valuable commodities and less likely to gain value from schooling. In the same public discourse, the value of the sort of mathematics that can be assessed in these tests appeared to be so accepted that it did not need to be mentioned. This has social justice implications.

Keywords Media · Public discourse · National testing · Children · Social justice

Introduction

The mediatisation of education policy has begun to be researched in the last decade (Franklin 2004; Stack 2006; Hattam, Prosser and Brady 2009; Forgasz and Leder 2011). This research identifies how only certain topics get discussed (Stack 2006). Sometimes, it is the government who controls the agenda which the media relays (Franklin 2004). At other times, it is the media who initiates the discussion and the government then responds (Hattam et al. 2009). Nevertheless, it would seem that although a shared initial language is needed to begin the discussion, the different contributors shape the debate, thus enabling only some issues to become visible. In

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debates around unemployment based on publicly available statistical information, Desrosières (1998) stated:

> Making a space for contradictory debate on policy options presupposes the existence of a minimum of referential elements common to the diverse actors: a language in which to express things, to state the aims and means of the action, and to discuss its results. This language did not exist prior to the debate. It was negotiated, stabilized, then distorted and gradually destroyed in the course of interactions proper to a given space and historical period. (p. 332)

Yet the actual process by which this operates is not clear. In debates around education policy, Rawolle (2010) stated:

> One of the unresolved issues that faces research on mediatisation is that, though it represents a process through which social change occurs, not a great deal of care has been taken in attempting to conceptualise and theorise what is held to change and the means by which changes occur. (p. 22)

Similarly, in mathematics education, there have been many discussions about social justice, but with 'little concern for how students are constructed in the process' (Gutiérrez and Dixon-Román 2011). The contribution of the media to social justice issues has been noted (Leder and Forgasz 2010). The research of Forgasz and Leder (2011) found that two Australian newspapers were selective in how they discussed issues surrounding mathematics assessment, leaving issues of equity implicit in theirs coverage. Furthermore, in regard to The National Assessment Program—Literacy and Numeracy (NAPLAN), Leder (2012) stated 'how the Australian public today values national tests, and in particular, the NAPLAN testing regime, is a question still waiting to be investigated' (p. 17).

In this paper, we respond to the question posed by Leder (2012) by exploring how children are positioned through media reports on national testing. We cover how the government, especially the Minister of Education, presented information about NAPLAN; how the media reported on the government's initiatives; and how the general public through online comments positioned children in their reactions to these reports. In the final section, we discuss the lack of comment about the kind of mathematics education that children need for citizenship (Skovsmose 1998) and how this was likely to contribute to social injustice being served.

National testing, mathematics and children

Achievement in mathematics is considered to open or close possibilities for further study and work opportunities, thus making it an important subject for children to learn (Skovsmose 1998; Quintos and Civil 2008). In Australia, national testing, begun in 2008, has solidified the importance of numeracy. Literacy and numeracy are the only subjects assessed. Therefore, they have the reputation of being essential in judging the ability of a school to provide a 'good' education to students (Donnelly 2009). The tests in NAPLAN were designed to determine whether Australian students had reached minimum standards at years 3, 5, 7 and 9 (Australian Curriculum, Australian and

Assessment and Reporting Authority [ACARA] 2010a). ACARA's website describes them as:

> The content of each test is informed by the National Statements of Learning in English and Mathematics which underpin state and territory learning frameworks. Test questions cover aspects of literacy (Reading, Writing, Spelling, Grammar and Punctuation) and numeracy. Questions are either multiple-choice or require a short written response. (ACARA 2010b)

In January 2010, the Federal Labor Government opened a website, called My School, which compared different schools' results on the NAPLAN tests. This made NAPLAN a high-stakes series of tests (Lingard 2010), with implications particularly for teachers and schools in low socio-economic areas who worried about the impact on their reputations as educators (Lange and Meaney 2012). Yet, the introduction of NAPLAN was promoted as contributing to 'raising standards', particular for students from disadvantaged backgrounds (Donnelly 2009). As Lingard (2010) stated, this justification 'has become a globalized educational policy discourse' (p. 131), which researchers, such as Hursh and Henderson (2011), connect to neoliberal beliefs about the need to privatise schools, amongst other institutions. Testing holds schools, teachers and education systems accountable and promotes the belief that individuals can make choices in an education market (Lingard 2010; Hursh and Henderson 2011). In regard to the comment of Desrosières (1998) about how debates are constituted around shared language, it would seem that 'raising standards', a euphemism for social justice, was initially stabilised in the discussion and then distorted to become about accountability.

Our interest was in social justice issues, as manifested in how public discourse around NAPLAN presented children or students: specifically, how children were constructed and how their needs for an education, particularly a mathematics education, were described.

Methods

The data include interview transcripts, media releases and online news articles sometimes with public comments about NAPLAN and My School. They capture what the Minister for Education at the time, Julia Gillard,[1] stated on these matters as well as how this information was received by journalists, academics, the teacher union and the principal association and included public comments on some news items. In the media discussion of NAPLAN, other politicians were sometimes interviewed. However, there were few differences in opinion between the Federal Opposition and the Government at this time and so the Opposition's opinion was mentioned rarely by the media. Our initial analysis involved identifying each use of the term 'child(ren)' or 'student(s)' in the data set. Many commentators, including the Federal Opposition, did not make any statements that mentioned children and/or students and so their contributions to the general discussion are not part of the analysis.

[1] Given that Julia Gillard has recently been deposed as prime minister (26/6/2013) and the media is now focussing on her legacy, part of which is seen as the changes in education, it is apt that a review of that legacy is now done.

Although the first NAPLAN tests were conducted in May 2008, we began our documentation from September 2008, when parents were about to receive information about their children's NAPLAN results for the first time. We stopped collecting in March 2010, when much of the discussion around the release of the school results for NAPLAN on the My School website was overtaken by the discussion of a potential boycott of the next set of tests, proposed by the teacher union.

Wherever possible, we took news articles from national sources, the Australian Broadcasting Corporation (ABC), the online journal *Inside Story* and the newspaper *The Australian*. At times, articles from the Brisbane-based *Courier Mail* and the Adelaide-based *The Advertiser* were included because they had online comments from the public. All three newspapers belong to Rupert Murdoch's News Corporation, which was heavily criticised for helping the government circumvent union concerns about comparing schools through the publication of NAPLAN results (Lingard 2010). As well, one media commentator with a regular column in *The Australian* was perceived as being strongly connected with the parliamentary opposition, the Liberal party, and shown to have had an undue influence on education policy during the previous Liberal government (Hattam et al. 2009). Although not a complete set of discussions, the material has sufficient breadth to reflect most views, even if there may be a bias towards the neoliberal views of the News Corporation papers. Transcripts of interviews and press releases were found on the Department of Education, Employment and Workplace Relations' (DEEWR) website. Over 230 A4 pages worth of data were collected, and these are shown in Table 1. The √ and − signs indicate, respectively, the presence or not of statements by Julia Gillard or comments by the general public. Public comments were made to only a few online articles but were usually many pages in length (20 or more) with a range of opinions, often presented very strongly. This was particularly the case at the end of an article in *The Advertiser* (Kenny 2009, Nov 11) about Julia Gillard's statement that parents should confront schools if their results did not match those of similar school.

In order to determine how children were positioned in public discourse around NAPLAN, we began our investigation by analysing the first 30–50 pages of the data, identifying where children or students were mentioned. Both authors independently determined codes in the manner of grounded theory (Strauss and Corbin 1998). The contexts, in which children or students were mentioned, became the initial codes. From comparing these, an integrated set of categories developed which were shared with a research assistant who continued the analysis. When categories needed revision, these were checked with the authors. When all the data was analysed, a random check was made on the allocation of a category to how children were discussed. Sometimes, a quote would be given more than one category when appropriate.

The categorisation led to the identification of five themes, described in the next section, which indicated how children were positioned by contributors to these public discussions. Some of these themes had more responses than others; a fact that in itself was interesting. Understanding what is underrepresented in public discourse provides valuable knowledge about that discourse. As Skovsmose (2005) stated:

> A language (a discourse) operates like a fishing net. It determines what can and cannot be caught. It determines talk and silence. To understand the nature of a certain language it is important to understand the extent of the *silences in that language*. (p. 99; italics in the original)

Table 1 Data sources for material included in the data set

Type	Dates	Where	Pages	Julia Gillard	Public Comments
Press releases, speeches, etc.	19 December 2008	DEEWR	2	√	–
	11 September 2009	DEEWR	2	√	–
	28 January 2010	ACARA/My School	1	–	–
	24 February 2010	National Press Club	8	√	–
Transcript of interviews	10 September 2008	With David & Kim, Channel 10	7	√	–
	10 November 2009	Tony Jones, Lateline (ABC)	6	√	–
	7 February 2010	Laurie Oaks, Channel 9	1	√	–
	17 February 2010	Doorstop Interview	3	√	–
	24 February 2010	Fran Kelly, Radio National	1	√	–
Online news articles	10 August 2009	The Australian	2	√	–
	13 October 2009	The Australian	2	–	–
	3 November 2009	The Advertiser	2	√	–
	11 November 2009	The Advertiser	23	√	√
	17 November 2009	The Courier Mail	3	–	√
	17 November 2009	ABC News Online	36	√	√
	18 November 2009	The Australian	2	√	–
	28 November 2009	The Australian	2	–	–
	18 December 2009	ABC News Online	3	√	–
	19 January 2010	ABC News Online	22	√	√
	27 January 2010	The Australian	2	–	–
	27 January 2010	The Age	2	–	–
	28 January 2010	ABC News Online	3	√	–
	28 January 2010	ABC News Online	33	√	√
	29 January 2010	ABC News Online	1	√	–
	29 January 2010	ABC News Online	1	–	–
	31 January 2010	ABC News Online	2	–	–
	24 February 2010	Inside Story	13	–	√
	25 March 2010	ABC News Online	4	–	–

As the documentation was publically available, contributors' names, including commentators to online news articles, are provided with quotes. Spelling and grammar remain as in the original contributions. However, where necessary we provide explanations of colloquial expressions in square brackets.

Themes

In the following sections, we discuss each of the themes, often beginning with what the government or the Minister of Education at the time stated. This is then followed with a discussion of how the presentation of these ideas was interpreted by journalists and members of the general public.

The educational responsibility for children

In the initial discussions about NAPLAN, the Minister for Education connected the identification of low performing schools with the provision of extra support. In this

way, she showed that children's education—what they should learn and how they should learn it—was a responsibility of the Federal Government. This was a change, as constitutionally the states, rather than the Federal Government, controlled the provision of education (Lingard 2010).

> Julia Gillard: The Rudd Government's Education Revolution is driving a renewed focus on the foundation skills of literacy and numeracy to lift student achievement across the country.
>
> Through the Education Revolution, the Rudd Government is investing $540 million in literacy and numeracy in schools as well as developing a world-class National Curriculum. (Department of Education and Employment and Workplace Relations [DEEWR] 2009, Sep 11)

Julia Gillard also made the raising of standards a community responsibility, which the government should fulfil. Such statements often made links implicitly to the sort of education that children should have (which is discussed later in a separate theme).

> Julia Gillard: As Australians we have an obligation to the future, an obligation to ensure the Australian school students of today and tomorrow each get a world class education. They should be stretched and extended into being the best that they can be so they have the best chance to achieve and succeed in life. (DEEWR 2010, Feb 17)

However, parents whose lived experiences suggested that their children were not receiving 'the best chances to achieve and succeed in life' blamed state government departments, which traditionally had controlled the funding for support services in schools.

> Paddy of Adelaide: A word of sympathy to parent(s) of any bright child as there is virtually no support from the school or DECS [South Australian Department of Education and Child Services] to extend or accelerate the bright student- so long as they meet the LAN [literacy and numeracy] basic standards, the school is happy and will gladly settle for mediocrity. (Kenny 2009, Nov 11)

Although there was a consensus that governments at the behest of communities were responsible for schooling, there was much fault finding in how it had been provided. The Minister for Education tried to turn the direction of this discussion by showing that her government and its policies were achieving better results than previous governments.

Of the public discussions about responsibility for children's education, the most vitriolic were those between teachers and parents. In these discussions, children were positioned as having little individual control over whether they gained the outcomes tested by NAPLAN. The following is fairly typical of remarks made by teachers, although in this case it came from a student teacher:

> Shrynx: I have my last exam of my education degree tomorrow. Is it worth my going if for the rest of my career I'm going to have to respond to uninformed bollocks like these comments? At the end of the day a teacher has students for about 6 hours. Parents have them for 18. Who should ultimately be responsible for the children? Do the math. Stop making excuses. Don't sob to me about not

> having enough time to do anything with your kids. I haven't had a day off in months. (Kenny 2009, Nov 11)

The implication of such remarks was that some children because of the lack of commitment by their parents were unable to gain value from being taught by teachers, no matter how good the teachers were. As many teachers blamed parents, many parents blamed teachers for not adding value to their children and described how they had unsuccessfully tried to approach schools and teachers to improve the situation.

> Eddy of Edwardstown: Ms Gillard needs to wake up. Teachers through their union disregard the NAPLAN testing because they are 'not representative of the whole education experience'. Numeracy and Literacy test results have been available to school communities since the testing began. In our school the boys have historically been below average yet the girls have been above average. Clearly this relates to the teachers commitment and ability to teach boys yet over eight years my son was in his primary school no improvement was made despite my raising this issue repeatedly. In a country town its not easy or possible to 'vote with your feet'. (Kenny 2009, Nov 11)

When the 2009 NAPLAN results came out, Julia Gillard suggested that parents confront schools, if they were underperforming compared to 'like' schools. Most parents in the comments saw this as a waste of time whilst teachers saw it as having the potential to become 'teacher bashing'. In a few cases, a more nuanced understanding was raised.

> Angelo Gavrielatos, President of the Australian Education Union: Unfairly branding schools as failing does immense damage to the confidence and self-esteem of students, undermines the relationship of trust between teachers and parents and makes teaching and learning much more difficult. (Balogh 2009, Nov 17)

> Teacher dreamer of Adelaide: The 'Education Revolution' is a great thing! It will give the parents a chance to compare school's academic results. Every school has the same disadvantaged/advantaged index, every class in every school has the same number of children with disabilities, drug dependant parents and those with parents who criticise teachers and education, every school has parents that will encourage reading and writing, every school has parents who take an interest in the child's schoolwork and attend all school functions, every school has parents that will teach their children about drugs, puberty, sex, dog awareness, water safety, protecting themselves, internet safety, courtesy and manners and how to be a productive and well-informed society member. Every school has teachers who can just teach Literacy and Numeracy and do very well in NAPLAN tests. That is their only requirement. Teach to the NAPLAN and don't worry about anything else. Then I woke up and knew this was not Fantasy Land. (Kenny 2009, Nov 11)

Even in discussions in which parents saw themselves as active contributors to their children's education, generally children were positioned as the objects of their parents' desires for them to gain knowledge that would add value to their potential life opportunities.

Children as objects whose value can be measured

In the ongoing discussion, another distortion occurred when politicians stopped relating to parents as citizens to relating to them as consumers. In this way, the government effectively linked My School with the electronic information-age sentiment (Lingard 2010) that, as consumers, parents had the right to information so they could make informed decisions about their children's education. Positioning of parents as consumers was done by connecting to assessment's traditional role as an authoritarian voice about a child's ability:

> In the past, students had often been grouped by ability for various types of academic content instruction. The competency labels were generated and reinforced by an assessment process that worked as a gatekeeper for student experiences. Students were identified as having a certain level of capability, they received instruction 'appropriate' for that level, and later assessments reconfirmed their competence. These parents had heard the same voice speaking of their child throughout all the years of schooling, and it probably extended into their own education as well. (Graue and Smith 1996, p. 411)

Almost 15 years later in Australia, the Minister for Education indicated that assessment still preformed this role, but now, it was done more efficiently because children at a certain year level did the same test.

> Julia Gillard: This is the first time every child [has] sat down and done exactly the same test. So, parents from the start of next week on will get a report from their school. The report will show how their child has gone on bands of achievement. (Department of Education and Employment and Workplace Relations [DEEWR] 2008, Sep 10)

In this comment, children are positioned as needing to be tested so that their capabilities could be documented and then reported to parents. In the online comments, parents reiterated their need to know about their children's capabilities, whether or not they saw NAPLAN as doing this appropriately.

> PerthMum: I am aware that they are a snapshot, and that they are not ALWAYS a good indication. Kids have good days and bad days, and I have seen that in one very out of the ordinary result for one of my children on one of their test results. However in this age of ego stroking and PC 'its all about the individuals progress, not a comparison', it is a welcome indicator for parents who want to know how their kids are doing.
>
> Should parents just love their child without quantifying where they sit in comparison to the nation? Yes, absolutely! However parenting requires informed choices. Do I get a tutor to assist my child? Do I ramp up the use of incidental maths to help the child who isn't quite getting it in that one area? Do we spend time looking at occupations that suit the child's ability or do we just tell the child to aim for the stars when they simply do not have the academic strength. …
>
> Unions, teachers, schools worried about it reflecting badly on them need to get over it—it is what it is. (Rodgers 2010, Jan 19)

> Emma of Mid North: All that is really important to parents, is how their individual child is progressing. NAPLAN results are an inaccurate and poor measure of tracking a child's progress. One test on one day, testing one level of knowledge retention, which was compiled by people in inner city Sydney. How is it relevant? If your child reads to you every day, then parents can see the progress for themselves. (Kenny 2009, Nov 11)

Similarly, parents generally responded positively to having information about their local school on the My School website. On My School, schools were compared within groups that had similar compositions of parental occupation, family background, number of Indigenous students, number of students with disabilities and the number of students who had English as a second language. Therefore, parents believed that they would be able to determine if their school was underperforming. There was no discussion about how the use of the statistical mean would always result in some schools being below average.

> Nick: As to whether this is a good or bad thing … as a parent with young pre-school kids … I can guarantee you if this information is available I'll be doing everything I can to get my child into as higher ranked school as possible. (Woodley 2009, Nov 17)

Some participants in the online discussions took a more ironic stance on the presentation of this information on My School.

> Em: Not to mention that the vast majority of the 'worst' schools will be out in the sticks [countryside], or in very undesirable suburbs, so it won't affect most people anyway. The only thing will be that better public schools in generally good areas will have to cope with an influx of enrolments from parents who want their precious babies to get the best start in life… Why not just believe in them?! I guarantee it will have better results than sending them to the best school as an insurance policy against underachieving. (Woodley 2009, Nov 17)

The launch of My School led to the discussion becoming about the 'value added' to children by schools. Again, this discussion occurred regardless of whether the participants viewed NAPLAN and My School as appropriate ways of assessing and informing about the value-adding process.

> Grant: A great and meaningful piece of information to be included would be percentage of students who improved upon their previous NAPLAN results. For example, the percentage of students in Year 5 who improved upon their Year 3 NAPLAN results.
>
> That way, parents would be able to see the true worth of a school. They would be able to see the school's ability to value add to the cohort of students that attend their school.
>
> I'd much rather send my child to a school that demonstrates an ability to build upon students' existing abilities rather than a school that successful prepares its students to sit NAPLAN tests (ABC News 2010, Jan 28).

> Julia Gillard: The Rudd Government will introduce a 'unique student identifier' across Australia as soon as possible, so that the most rigorous measures of school improvement and valued added are developed (DEEWR 2010, Feb 17).
>
> Chris Bonner: Future changes will see My School come closer to presenting data on how much 'value' a school adds to its students, in a revised attempt to say something meaningful about schools. The problem is that value added data isn't immune from any home and neighbourhood effect on student achievement; nor does it account for changes in the socio-educational composition of a school's enrolment or cope with schools that have a high enrolment turnover (Bonnor 2010, Feb 24).

Although the setting up of My School had been done to show how a school could make a difference regardless of circumstances (DEEWR 2009, Sep 11), one implication, suggested in Chris Bonner's article is that value adding is not just a result of the school but also of other circumstances that surround the child.

Sometimes NAPLAN was positioned as not providing a broad enough basis from which parents could make appropriate judgements about the value being added. The following two comments followed the Minister of Education's suggestion that parents should confront their schools if its results were below those of similar schools on the My School website.

> Hard Working Teacher: I'll give you an example of how misleading this data can be, and work against small schools: I have 7 year three students in my 2/3/4 class. Of these, 2 have severe learning disabilities and did not take the NAPLAN test this year. (They were exempted at parents' request). Another student was new to our school this year, and that student bombed out [did very poorly] in the Maths part of the NAPLAN. No dramas, we had 4 out of 5 do very well, so that is 80 % success rate, right? Unfortunately not. Because our school has 7 students enrolled in Year 3, we were deemed to have 4/7 pass rate (57 %). There's a big difference, isn't there? (Kenny 2009, Nov 11)
>
> Grumpy of Fulham: What a great thing for a politician: to incite parents to "confront" (her words) teachers at their child's school to demand improvements in standards! And what is the measure of these standards? The standardised NAPLAN tests that capture a narrow range of learning at a particular point of time once every couple of years. Two year's growth and development in academics, maturity, values, physical fitness, expression in music and drama, reduced to a literacy and numeracy snapshot taken over a couple of hours. Bizarre. But on this basis schools will be compared and the great god "Market" will wreak its vengeance across the educational landscape. Politicians will escape accountability for the provision of first class public education in each school's local community and no-one will enter teaching because it will be cemented in place as the most undervalued and demoralised profession. (Kenny 2009, Nov 11)

Although in this last quote there is a critique of accountability requirements of the education market, generally in the public discourse, nobody queried the notion of

schools adding value to children. Rather it was about to what extent NAPLAN provided a fair measure of the schools' value-adding capability.

The debate around NAPLAN contributed to children becoming objects of measurement so that parents, in particular, could be provided with relevant information about the value added to them. Assessments' traditional role as an authoritarian voice for parents about their children's capabilities meant that if parents or teachers queried NAPLAN's role in providing knowledge about the value being added to children, the questioning was generally about its accuracy, not about whether it could be utilised in this way. Similarly, the Minister of Education was able to make use of parents' belief that they had a right to information as the consumers responsible for ensuring that the outcomes of education led to an increase in their children's possibilities for a good future.

Children constructed as disadvantaged

Consequent of the acceptance that children are commodities to which value can be added is an understanding that not all children can be expected to gain the same value. Sometimes the children themselves were considered unable to take advantage of the value-adding process. At other times, their parents were considered as restricting teachers' possibilities for adding value to children. Schools or teachers were also seen as not providing an appropriate value-adding process, which then contributed to some children becoming disadvantaged. Finally, NAPLAN and My School as contributors to some schools being labelled as disadvantaged were seen as being responsible for the children at these schools becoming disadvantaged.

The Minister of Education consistently identified children who were most likely to do poorly on the NAPLAN tests as those who came from disadvantaged backgrounds. Therefore, disadvantaged children were Indigenous children, children with disabilities and children from poorer households. These children were less likely to be able to make use of the value that schools could provide. As well, if a school had significant numbers of children from disadvantaged backgrounds, then the school was labelled as disadvantaged. In this way, socio-economic status becomes a measure of 'resistance to value adding' and NAPLAN results a measure of a school's capacity to overcome this resistance.

> Julia Gillard: The National Assessment Program will help us identify schools that aren't reaching the kind of standards that we want kids to get to. And there are other things that can tell us about disadvantage in schools—number of Indigenous children enrolled, for example; number of children with disabilities (DEEWR 2008, Sep 10).

> Julia Gillard: It's about lifting standards for every child in every school and making a huge difference for those kids most at risk of being left behind, who are our kids from our poorer households in this country (DEEWR 2009, Nov 10).

On the other hand, parents felt that children who had disabilities or who were gifted were most likely to be disadvantaged by their schooling because the value-adding process would not be successful. Their concern mirrored those of the parents in the research of Graue and Smith (1996) who commonly described their children as not being sufficiently challenged or being challenged too much.

> Bullfrog: Whilst there are some sociological advantages in classes of mixed ability, unless the resourcing model is vastly changed, the current set up disadvantages non-normal learning kids, both the less capable, and more capable (Woodley 2009, Nov 17).
>
> Bernard Wood of Modbury: Many kids I've met with ASD [autism spectrum disorders] don't meet the requirement for a special class but they cannot handle mainstream and unfortunately mainstream teachers are not experts in teaching these children and they get suspended etc. therefore the kids suffer (Kenny 2009, Nov 11).

Schools were also perceived by some parents as disadvantaging children because they felt that the schools' reputations affected children's life chances. Consequently, these parents felt that the testing regime's identification of poorly performing schools meant that NAPLAN testing was not a benign and neutral process.

> Dan: I have pretty much no choice where my kids go to school given the zoning rules, so to me all this does is perpetuate and exacerbate the discrimination my very young children are already subject to. That is, because of where they live, they have to go to a fairly low performing school. Because of that, they will be considered to be low performing students whether or not they are. Because of that they may have more difficulty finding a job and because of that, they may not be able to afford to live in a wealthier suburb and send their kids to a private school either.....and so on (Woodley 2009, Nov 17).

Rather than discussing how children became disadvantaged, the Federal Opposition considered that My School would disadvantage schools. The solution was to give school principals more power over whom to employ.

> Christopher Pyne, Opposition Education Spokesman: The Government is creating the information publicly that will allow schools to be criticised and allow school communities to feel bad about their particular school but they are not giving principals the autonomy to act to change those bad results. (Rodgers 2010, Jan 19)

How children became disadvantaged was a complex issue for the general public. Some children were constructed as having less opportunities for having value added to them. The background of these children, such as having learning disabilities, meant that they could not gain value from schooling, as it was constituted at this time. As well, the reputation of some schools as disadvantaged denied their students the opportunity of being seen as valuable commodities for the work force, even if they had gained a 'good' education. As Hanson (1993) illustrated previously, labels provided by testing influenced how people perceived themselves well into their adult lives and so these concerns cannot be considered to be mere parental fantasies of worry.

Purpose of education

Information provided on the My School website was seen as an uncontested good, both neutral and objective. This allowed fundamental questions about what education is or should be about and what kind of places schools should be (Biesta 2009) to be left

virtually untouched in the public discourse. As Hardy and Boyle (2011) suggested in an analysis of NAPLAN data, it would seem that the value added to children became more important than the kind of education which provided that value.

There were a few comments about the purpose of education. In the early transcripts, articles and press releases, the Minister of Education clearly linked NAPLAN and My School to improving children's opportunities for a 'good education'.

> Julia Gillard: By showing student results in reading, writing, spelling, grammar and punctuation, and numeracy by sex, location, parental background and Indigenous status, the Australian community will be able to clearly see those student groups which need more support to improve their education outcomes (DEEWR 2008, Dec 19).

There was little discussion about what benefits these educational outcomes would have for students. The following comment was made in relationship to the introduction of a national curriculum rather than to NAPLAN as such. However, the areas that NAPLAN tested such as mathematics were singled out as important but with no specifics about how a lack of skills in this area would affect students' life chances.

> Julia Gillard: For too long, parents and employers have been anxious that students will leave school lacking the skills they need for life and work including proficiency in reading, writing and mathematics. As a nation we are about to move to a national curriculum of true rigour (DEEWR 2010, Feb 17).

There were only a few public comments about the sort of education children should have and the type of person they should become as a result of that education.

> Louise: Does your child have a good relationship with their teacher?
>
> What is your child's attitude toward their own learning?
>
> Does your child participate in class and group activities?
>
> Can your child solve problems independently?
>
> How does your child cope with adversity and setbacks?
>
> Feel free to add to this list of 'What really matters'. Don't get me wrong, I'm not saying that literacy and numeracy are not important; they are just as necessary, but are useless skills without other skills. (Rodgers 2010, Jan 19)

Some parents and teachers who had lived and worked in the UK, which has had a testing regime for many years, did discuss the purpose of education by comparing the UK and Australian systems.

> Helen of Happy Valley: When we arrived in Australia with a 10 and 12 year old I was so impressed by the vitality of the teachers and the social maturity of the students - I fear this is what may be lost along the way, as schools feel the need to dedicate more and more time to the 3 R's [Reading, wRiting and aRithmetic] and

> less to all the other activities that in my opinion make Australian kids much more rounded individuals than many in the UK. (Kenny 2009, Nov 11)

Apart from a few references to students' ability to gain jobs and go to university when they finished school, there were almost no discussions about why children needed an education. The following quote is one of the exceptions and came after a long connected set of public comments. These comments used a range of analogies, such as moving spuds [potatoes] around a field, to discuss how children could be moved from school to school without improving their chances of gaining outcomes if they were of low ability. Teachers disparaged children and parents, whilst parents disparaged teachers. Out of this discussion came the following comment:

> Gweneth: Except … we are talking about people and their life chances and happiness- their potential contribution to society and the potential cost if they are a burden - and not about things we can toss on the tip [throw away]. (Woodley 2009, Nov 17)

The purpose of education and how learning mathematics contributed to society was not described in any detail. Instead, the comments seemed to assume that improving outcomes in numeracy as well as literacy was something that everyone had agreed was important. As Julia Gillard was paraphrased saying ‘measures of maths and reading were the foundations of the rest of the educational experience’ (Kenny 2009, Nov 11).

Children's agency and learning

Although often positioned as commodities that schools added valued to without their active participation, children were discussed occasionally in regard to their agency and learning. One of the few references to how students learn was from Julia Gillard, who in a discussion with programme host Tony Jones on the ABC's *Lateline* programme, stated:

> Julia Gillard: We understand the most important thing to learning is the transaction between a teacher and a student, and if we can increase the quality of that, we can increase what's happening quality-wise in our schools. (DEEWR 2009, Nov 10)

Nonetheless, there were no indications about how this interaction could be improved, except to state that smaller classes sizes would not necessarily be the most appropriate way for this to happen. Occasionally, parents and the general public made comments about how they thought children learnt best:

> Clayton Caves: As for me smaller class sizes and bring back the right for teachers to discipline kids in school. Maybe this way the ones who do want to learn won't be let down by the ones that don't. (Kenny 2009, Nov 11)

> Bob Harris:
> Today I still think that the schools should teach the old fashion without the likes of calculators for maths, the internet is a very good thing for the child look things up and ban all of the chat rooms and the likes, go back to the three (Rs) and for the first fifteen to twenty minutes every morning give them mental arithmetic

> where the teacher reads out the question and the student just writes down the answer. When I went to school in primary school every year part of our books was a book with all of the tables in it this should be brought back and make the children how to work simple things to memory. (Kenny 2009, Nov 11)

Most comments, like these, harked back to the 'good old days' when children could be punished physically and memorisation was the key to learning. A few comments mentioned children needing an education that developed their potential. The following came from a teacher who had worked in a UK school and experienced the effect of league tables based on school results from national testing.

> Jimbobuk: Students at this school were basically taught to passed the nationwide exams rather than use their initiative to develop their own strengths in particular fields. At the time I thought that the students were about 1 year behind similar aged students here. (Woodley 2009, Nov 17)

In the public comments, the role that the government had in school organisation sometimes was seen as contributing to students not taking responsibility for their behaviour, including their own learning.

> David of Modbury: What a wonderful generation we are developing which is not the fault of teachers or parents, but the fault of a govt who will not allow parents or teachers the backbone to fail students and tell them what they are doing wrong. (Kenny 2009, Nov 11)

Like the quote in our title, which came from the first interview transcript in our data set (DEEWR 2008, Sep 10), children were assumed—mostly tacitly—to have no agency to decide what they learnt or how they learnt it. Even when people disagreed with the idea that a 'good' school would provide an education that would add the most value, children were positioned as non-agentic.

Discussion and conclusion

In this final section, we discuss what the construction of children in the public discourse around NAPLAN tests can contribute to discussions about social justice in mathematics education, in particular, in regard to citizenship. We do this by first describing the main messages that seem to arise from the themes that had many comments. The second part of this section considers the themes, which were only addressed by a few contributors.

Children as commodities

In our analysis of the public discourse around NAPLAN and My School, we suggest that children are constructed as commodities, with the school's role being one of adding value. Conceiving of children in this way builds on the long history of families considering children as investments. In discussing early childhood provision in the nineteenth century, DuCharme (1992) stated

'children were seen by many parents as investments and contributors to the family budget and not as persons in their own right' (p. 2). This tradition and its accompanying rhetoric may have supported its reiteration in twenty-first century discussions, even though the circumstances surrounding the value-adding process were very different.

Nevertheless, as was stated by some parents, making choices about their children's education was a myth, especially for parents who live in poverty (Thomas 2010). In reviewing literature on parents' perceptions of assessment in mathematics, Graue and Smith (1996) suggested that well-educated parents were more likely to actively make decisions about their children's education, thus passing on benefits of educational advantage. A lack of choices for alternative educational opportunities affected groups from low socio-economic areas and contributed to the perception that education provided to their children was of low quality and unlikely to provide value to their life opportunities.

The initial rhetoric for the instigation of NAPLAN was to support all children to gain 'a world-class' education. Yet, when My School was set up, some children became disadvantaged even if they had not been labelled thus previously. Certainly for schools already identified as being in low socio-economic areas, NAPLAN results enabled the label of disadvantage to be glued more securely to them. Perhaps because social justice was never discussed explicitly, 'raising standards', a euphemism for social justice, could be distorted to become about accountability of schools, which had detrimental effects on students.

In the themes that had the most contributions, politicians, journalists, parents, teachers and other members of the public rarely discussed children in other ways than as commodities to which value needed to be added. Children, who may have particular requirements from an education, lost their individuality. As well, discussions about NAPLAN seemed to restrict considerations of children as active learners and of the kind of education that should be provided to them.

With the introduction of My School, educational experts, teachers and parents concentrated their discussions on technicalities about whether the test results described a school and its students fairly. Mathematical modelling, of which this testing regime is an exemplar, often becomes the focus of such discussions, partly because of its aura of objectivity. Even discussants who opposed the My School project did so on the grounds that this information was 'incomplete' and directly or indirectly implied that if more or better statistics were available, then it would be acceptable. Consequently, the original problem that Julia Gillard had stated that the government was going to fix—equality and quality of schooling—is lost once an attempt is made to 'operationalise' an exploration of the problem because of the perceived need for quantitative data and mathematisable relations between quantities. Biesta (2009) called this *normative validity*—'this is the question whether we are indeed measuring what we value, or whether we are just measuring what we can easily measure and thus end up valuing what we (can) measure' (p. 35).

The focus on children being a commodity belonging to a specific family seems to be in contradiction to an understanding of education for citizenship, which would benefit

the society as a whole. Skovsmose (1998) would consider education as a value-adding process to be:

> 'accommodating' in so far it does not challenge any aspects of the predominant distribution of power or any power relationships. (p. 197).

When education is a process of adding value, then it becomes obligatory to determine which students do not gain an appropriate amount of value. The system, which enables a differentiation of gain by different groups of children, is in itself not questioned. For Skovsmose (1998), an alternative education would be one for children which 'includes competence in investigating decisions with mathematically formulated arguments' (p. 199). Yet as discussed in the final section, the purpose of education was not a topic that was discussed in any detail in the public discourse.

Content, pedagogy and evaluation

Although NAPLAN only assesses students' skills in literacy and numeracy, it was surprising to find that there was virtually no discussion of the mathematics that would add value to these child commodities, apart from some references to times tables. It appeared, as Biesta (2009) suggested, that what could be measured had become what was considered valuable for children to know. As well, it is known that one consequence of high-stakes testing is the reduction of what is taught to what is tested (Rizvi and Lingard 2010), so that what can be measured becomes what is taught. In trying to understand the lack of discussion about what mathematics should be part of children's education, it is helpful to consider Bernstein's (1971) ideas about formal educational knowledge.

> Formal educational knowledge can be considered to be realized through three message systems: curriculum, pedagogy and evaluation. Curriculum defines what counts as valid knowledge, pedagogy defines what counts as a valid transmission of knowledge, and evaluation defines what counts as a valid realization of this knowledge on the part of the taught. (Bernstein 1971, p. 47)

This quote from Bernstein seems to suggest that curriculum is the first concern. However, the role of national testing may mean that it is an assessment rather than a curriculum, which drives the formal educational knowledge in the twenty-first century. The relationship between curriculum, pedagogy and evaluation is certainly a complex one. For example, the general public may have considered test designers to be experts in their field, and hence, their knowledge of the curriculum did not need to be questioned. In a press release, Julia Gillard stated:

> The innovative National Assessment Program – Literacy and Numeracy (NAPLAN) measurement scales enable sophisticated analysis of growth in attainment over time, representing world best practice in the measurement of student progress (DEEWR 2008, Dec 19).

Although there were some murmurs that the tests were imprecise measures (Ferrari 2009, Oct 12; 2009, Oct 13), there was almost no debate about the tests being 'world best practice'.

Bernstein (1971) elaborated on contents, or educational knowledge, by considering the strength of its classification and frame:

> Classification refers to the nature of the differentiation between contents. (p. 49)

> *Frame refers to the degree of control teacher and pupil possess over the selection, organization and pacing of the knowledge transmitted and received in the pedagogical relationship*. (p. 50; italics in the original)

> Strong frames reduce the power of the pupil over what, when and how he receives knowledge and increases the teacher's power in the pedagogical relationship. However, strong *classification* reduces the power of the *teacher* over what he transmits as he may not over-step the boundary between contents, *and* strong classification reduces the power of the teacher *vis-á-vis* the boundary maintainers. (p. 51; italics in the original)

As changes made to one message system affect the other two message systems, (Lingard 2010), it is possible to use classification and frame as a way to understand how NAPLAN as a form of evaluation affects mathematics curriculum and pedagogy and what the consequences are for children and an education for society.

We suggest that the numeracy curriculum that was assessed in NAPLAN was what Bernstein (1971) described as a collection knowledge code. Such codes 'have strong boundary-maintaining features and they rest upon a tacit ideological basis' (p. 66). The lack of discussion about the appropriateness of what was being assessed suggests that it did rest upon a tacit ideological basis. Furthermore, what was included and what was excluded from the test were strongly bounded because the questions were multiple choice or short answer, limiting the type of mathematics/numeracy that could be assessed. Thus, what constitutes the valuable mathematics/numeracy 'contents' that should be taught (i.e. curriculum) in order for children to pass the test are strongly classified (Bernstein 1971). By delineating what is tested, NAPLAN also informs teachers, parents and students what is and what is not numeracy. Correspondingly, numeracy has become more strongly classified, and thus further insulated from other contents, such as literacy.

As a result of the high-stakes nature of the NAPLAN tests, the frame of numeracy pedagogy was also likely to become stronger, reducing the options that teachers and students had '*over the selection, organization and pacing of the knowledge transmitted and received in the pedagogical relationship*' (Bernstein 1971, p. 50, italics in the original). In the public discourse, concern was raised occasionally about teachers having to teach to the test but these comments were rare and often lost within the discussion about technicalities.

Without an extensive discussion of how evaluation affects curriculum and pedagogy, there was a reduction in opportunities to consider how the mathematics in the curriculum was altered by the demands of NAPLAN. Correspondingly, there was a lack of discussion about societal needs for a democratic citizenship, such as the suggestion of Skovsmose (1998) that mathematics education should contribute to the development of citizens who could reflect critically on the use of mathematics.

By concentrating on minimum standards, NAPLAN was designed to check on basic facts and procedures. However, the monopolisation of public discourse by discussions about NAPLAN has resulted in a reduction of possibilities to consider the numeracy as something more than these minimum standards. This may mean that children who are likely to struggle with gaining NAPLAN's minimum standards are also less likely to have a richer mathematics education provided to them. In this way, Skovsmose (2005) 'fishing net', constituted by the discourse around NAPLAN, only allowed for certain fish to be caught and discussed, silencing other conversations about mathematics education.

However, the opportunities provided in modern media reporting suggest that more fish could be caught because of the increase in contributors to the discussions. The opportunities that these provide have perhaps not been recognised sufficiently. For example, Forgasz and Leder (2011) in their analysis of how the media reported on mathematics education issues suggested that time and space constraints reduced the complexity of issues to do with equity and quality. They felt that the reporting might reinforce the general public's views and not result in overcoming ingrained inequities. Although simplistic explanations were common in the public discussion around NAPLAN, the complexity of the situation was recognised by some contributors. This was particularly so in regard to disadvantage where parents were able to use their lived experiences to query what was reported in the media. If children are to be considered as whole human beings and not merely commodities to which value should be added in the school situation, then more space could be made for these alternative perspectives. As media reports begin to include more comments from social media, such as twitter and facebook, there is hope that alternative perspectives may have greater opportunities to be heard. However, it should not just be left to parents to do this based on their lived experiences. Forgasz and Leder (2011) highlighted the need for academics to get their more nuanced understandings of issues into the public discourse.

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