

The role of national media in adult literacy and numeracy policy: a case study from Australia

In 2013, the OECD released their findings from the Survey of Adult Skills (SAS) that assessed adults' skills in Literacy, Numeracy and Problem-Solving in Technology-rich environments in 22 countries. OECD initiatives such as the SAS and the PISA have been the subject of critical policy studies, particularly in relation to their influence on national policy making. National media as actors in these policy contexts has been the subject of some of these policy studies. Using a methodology informed by Actor Network Theory (ANT), this paper examines Australian media's responses to its country's SAS results, making historical and international comparisons to uncover what mobilises media to become a policy actor.

Keywords: Education Policy; Media as Policy Actors; Adult Numeracy and Literacy; International Skills Assessments

Introduction

On 9 October, 2013, the results of the first wave of the Survey of Adult Skills (SAS), an initiative of the Organisation for Economic Cooperation and Development's (OECD) Programme of International Assessment of Adult Competencies (PIAAC) were released for the 22 OECD member countries that had participated¹. SAS assessed adults' performance levels in three areas: literacy, numeracy and problem-solving skills in technology-rich environments (PSTRE), and had been developed to produce data that could guide national education policies and skills development (OECD, 2013a). In Australia, 7430 adults, aged 16 to 65 participated. Prior to the SAS, the OECD had sponsored the International Adult Literacy Survey (IALS) in 1996 and the Adult Literacy and Lifeskills Survey (ALL) in 2006. Literacy and Numeracy (called quantitative literacy in the IALS) were measured in the previous surveys, however the PSTRE was new. Australia, the country of focus in this article, participated in all three

surveys.

Transnational organisations such as the OECD have been increasing its efforts in large scale assessments of both school students and adults. The public investment into these initiatives² and the profile of their findings, particularly the comparative data, have led researchers in recent years to investigate the impact of this phenomenon on local educational governance (Gorur & Wu, 2015; Grek, 2014; Hamilton, Maddox & Addey, 2015; Tsatsaroni & Evans, 2013; Walker, 2009). Focussing on the OECD, Grek (2014, p. 278) says the OECD:

... has emerged as central producer of policy-oriented knowledge in the developed world; and it offers not only measurable and comparable data but also – what is considered – reliable guidance for policymaking. (p. 278)

When local educational governance interacts with transnational policy initiatives, policymaking processes acquire new dimensions, and so do their analyses. Fenwick and Edwards (2011), in their review of contemporary educational policy research, argue that in these globally networked policy ecologies, multiple policy players and their multiple realities of the problems come to the fore, exacerbating the process complexity. This observation has not been lost in mathematics education research.

One set of policy actors in contemporary educational policy processes that have attracted attention in recent times is the media. Hamilton (2012) studied the media representation of literacy, with particular attention to media reaction at key policy moments such as the release of large scale adult literacy and numeracy surveys. Walker and Rubenson (2016) undertook a study of the media's role in shaping public perception of adult literacy, and together with the OECD's role in the development of the IALS and subsequent assessment surveys, in promoting the transnational policy agenda of the OECD, with its underlying human capital discourse about adult literacy. In Australia,

Yasukawa and Black (2016) traced the ‘crisis discourse’ fomented by the media following the 2006 ALL survey results. In relation to the media’s interaction with the SAS, Cort and Larson (2015) analysed ‘The non-shock of PIAAC’ in Denmark, commenting on the lack of traction the Danish SAS results had on policy, while Yasukawa, Hamilton and Evans (2017) compared the different early media responses to the SAS results in Japan, France and the United Kingdom.

Study of the media response to educational testing is not limited to that related to adult literacy and numeracy. Waldow, Takayama and Sung (2014) examined and compared the media responses to the 2009 Program for the International Student Assessment (PISA) results in Australia, Germany and South Korea, while Baroutsis and Lingard (2017) undertook a longitudinal study of media coverage of PISA in Australia from 2000 to 2014. These studies provide examples of how national media construct narratives around selected findings from high profile educational testing such as the PISA, giving particular attention to comparative data, that impact on local policies.

In Canada, there have been several studies of media’s interaction with mathematics education. Barwell and Abtahi (2015) analysed news media representations of mathematics education by examining coverage of the PISA results released in 2013. They found the media presenting a “narrative of decline” (p. 308), that attributed unproblematised blame to an ongoing dispute over pedagogical approaches in mathematics: traditional teacher-directed teaching and discovery learning. This theme also emerged in studies by Rodney, Rouleau and Sinclair (2016), and Chorney, Ng and Pimm (2016). Rodney et al. (2016) found that the metaphors of being at war, and territorial fighting about the pedagogical approaches identified also in the study by Barwell et al. (2015). This work was extended by Chorney et al. (2016) who examined media’s narratives about the purposes of education. They observed that the narratives

saw education as a commodity, and students (who learned successfully) as economic resources for the state, which therefore required them to compete and ‘win’; other possible purposes including learning were not prominent in these narratives. These three studies all attended to the different rhetorical devices that the media used to generate narratives of decline, controversy and crisis in the state of mathematics education, without, or perhaps at the expense of, creating engagement with readers for a considered engagement with issues about the state of mathematics education.

To further investigate the role that media play in relation to other larger transnational networked policy processes, research approaches that acknowledge the ‘messiness’ of policymaking are needed. Socio-material approaches drawing on ideas from Actor Network Theory (ANT) are suggested by Fenwick and Edwards (2011) as having strong affordances for the kinds of critical insights needed in contemporary policy research.

Using theoretical resources from ANT, this article examines the Australian media coverage of the SAS results. It has two aims: to compare the Australian media coverage of the SAS and the previous ALL, and to compare the media coverage of the first wave SAS results in Australia to the coverage in Japan, France and the United Kingdom (UK). The following questions were used as the lens to examine the news articles:

1. What was the level/ intensity of the Australia media coverage of the SAS results, particularly when they were first released?
2. What were the issues or aspects of the SAS results on which the media focussed; was there any pattern or consensus on the significance of the results?
3. What source or sources did the media draw upon to establish credibility?

4. What, if any, policy implications do the media directly or indirectly draw from the results?

In the next section, recent studies that problematise the role of transnational organisations in educational policy governance are first reviewed. The section will then focus on studies that examine the media as an actor in the interactions between the transnational and local policy actors. It will highlight two recent studies to which comparison with the current study are likely to produce interesting insights into what mobilises and gives power to the media as a policy actor. With reference to these recent studies, the section will provide a rationale for a socio-material approach to policy analysis. Results from the analysis of media reports will then be presented, followed by discussions and conclusions from the study.

Literature review

A number of recent studies problematise the increasing involvement of transnational organisations such as the OECD on local educational policies, thus potentially altering the arrangements of local educational policy governance. Tsatsaroni and Evans (2014), critique the generic, competency model of the numeracy component in the SAS. Because such a model is legitimised by the OECD, they are concerned by the ease by which it could find its way, unchallenged, through local policy processes to reduce notions such as lifelong learning to a narrow skills-based conception, devoid of contextual nuances. They also critique the OECD's economistic interests underpinning initiatives such as the PIAAC, the overarching programme of which the SAS is a part. This concern is also picked up by Walker (2009) who argues that the OECD discourse around lifelong learning reduces what it means to be a 'worthy citizen' solely to someone who is a contributor to their country's economic growth.

Critique of the narrowing conceptions of knowledge and learning to job-related skills is a theme in other studies as well (c.f. Darville, 2009; Yasukawa & Black 2016). More specifically in numeracy and mathematics education, Jablonka's (2015) critique focuses on the absence of a conscious problematisation by the OECD about the implications on models of mathematics curricula through their promotion of *numeracy* and *mathematical literacy*, components of the SAS and the PISA, respectively. She identifies most importantly that these terms disrupt the existing knowledge organisation in the mathematics curricula, effectively "weakening ... the traditional discipline based curricula because it promotes establishing links with everyday and professional practice" (p. 600). Her critique is not so much the objection to a shift in emphasis from the current curriculum models of mathematics; rather, it is about the lack of open debate about possibilities that would include many more models than simply the OECD models and the traditional mathematics disciplinary model.

However powerful the OECD's influence is, the relationship between initiatives like the SAS and the PISA, and shifts in policy discourse or the introduction of policy instruments is not a simple causal relationship. Fenwick and Edwards (2011) argue research attention must be given to the heterogeneity of policy actors, and to recognise that there are also non-human actors involved in these policy processes: "material devices, technologies, embodiments and specialities" that influence the educational policy processes (p. 710). They argue that sociomaterial theory, in particular Actor Network Theory (ANT) and its variants (Callon, 1987; Latour, 1987; Law & Hassard, 1999) provide useful approaches to studying the heterogeneous policy actors in transnational policy processes. Studies by Hamilton (2011; 2012), Yasukawa and Black (2016), and Yasukawa et al. (2017) focussing on OECD adult literacy assessments, and

Gorur (2011) and Gorur and Wu (2015) focussing on the PISA and Australian education policy are examples of research employing ANT concepts and approaches.

ANT is a *theory of translation* (Latour, 1987). In the context of a policy process, policy actors together with their problems and interests are *enrolled* to form a growing assemblage or *network*. The network is strengthened as *equivalences* are established between the interests of the different actors. In addition to human actors, there are also non-human actors which are enrolled and assembled into the network, which at some point, may become stable and coherent as an organised whole to be *mobilised* into ‘the official policy’. Once such a network is mobilised, its history can be forgotten or become inconsequential and it is accepted and worked with as a *black box*.

A key set of non-human actors in educational policy processes involving large scale international assessments is the numbers that are generated from the assessments (Hamilton, Maddox, & Addey, 2015). These include the international league tables that rank the relative performances of the participating countries; the percentages of the population performing above and below a particular benchmark, and the average proficiency levels of the population groups. In some cases, particular numbers or translations of these numbers become what Latour (1987) calls *immutable mobiles* that travel and combine with other elements of the assemblage.

Using an ANT framework, Yasukawa and Black (2016) traced the evolution of an Australian adult literacy and numeracy national strategy following the release of the OECD ALL in 2007. Their study found that the policy process commenced with the translation of the Survey results into a national ‘crisis’. The Survey had shown that approximately half of the surveyed Australian adults performed below Level 3, a proficiency level that the Australian Bureau of Statistics (ABS) (2008) responsible for releasing the results defined as the “minimum required for individuals to meet the

complex demands of everyday life and work in the emerging knowledge-based economy” (p. 2). Yasukawa and Black (2016) found that within a day of the ABS release, the media translated this result into headlines such as:

Half of Australians illiterate

We’re the ninny state: Report says Victoria must boost adult literacy

Tasmania bottom of the class

Canberra leads way in life and literacy (p. 27)

In ANT terms, the proportion of the surveyed adults performing ‘below Level 3’ got translated into an immutable mobile, a claim that was repeatedly made and translated into deficit discourses of crisis proportions (see also Black & Yasukawa, 2014).

Their study traced the sustained role played by the media in promoting and legitimising the ‘crisis discourse’ around Australian adults’ literacy and numeracy. As new policy actors including the peak employer organisation, the trade unions, organisations that developed the ‘training packages’ for different industries and the skills policy agency set up by the government were enrolled into the network, media reports quoted them as voices of authority, united in their concern for a national policy response. The significance of the consensus among these actors was captured in the statement from the head of the policy advisory agency: “the most important first step is getting all the key players ‘singing off the same hymn sheet’” (Yasukawa & Black, 2016, p. 33). Yasukawa and Black (2016) argue that what was being exalted in this hymn was a policy position paper, *The Australian economy needs an education revolution* that the Australian Labor Party published prior to their winning government in 2007. The authors of the study argue that this was one of the non-human actors that served to translate and reduce any real concerns about adult literacy and numeracy into a problem about the country’s economic productivity. This ‘hymn sheet’, they argue,

explains the kinds of actors who were enrolled into the network, and those who were not, and who, like, the adult basic education practitioners, were enrolled at best as token actors.

So eager were those actors who were singing to the same tune that they facilitated the translation of the ‘crisis’ into a number of material artefacts before a new policy was formulated. These included a revised national assessment framework that enabled equivalences to be established between its proficiency levels and the ALL levels, a new training package for adult literacy and numeracy, and a new literacy and numeracy training module for vocational education and training practitioners. By the time the new National Foundation Skills Strategy for Adults (NFSS) was released in 2012, these material artefacts were strongly anchored to the policy network.

In comparison with the very intense and sustained media involvement in the locally mobilised response to the ALL results in Australia, the media responses in Japan, the UK and France - countries which participated in the first wave of SAS, were found in a study by Yasukawa et al. (2017) to be short-lived, though intense while they lasted. Again ‘numbers’ played a key role in the way the media translated the SAS results as objects of pride or shame in the respective countries. In this study, the authors found that the positioning of the country on the international league tables was translated into media responses in different ways. In Japan, a country which came top in the international league tables for both Literacy and Numeracy, the initial media responses were that of celebration and affirmation, for example:

意外、でも誇らしい 成人力調査、日本が世界一 [Unexpected but proud – Adult Skills Survey: Japan is first worldwide]. (Yasukawa et al., 2017, p. 285)

On the other hand, for the UK and France, the results in Literacy and Numeracy were below the OECD average, and the media responses highlighted these as symbols of national shame:

Britain's education crisis: Up to 8.5 MILLION people are no better at numeracy than a 10-year-old and young people are now among least literate in the developed world. (Yasukawa et al., 2017, p. 285)

and

Maths-lecture-bonnet-d'âne-pour-les-français-adultes [Maths, reading: dunce cap for French adults]. (Yasukawa et al., 2017, p. 285)

In their study, it was observed that the media reports gave less of a sense of a local network being mobilised in any of the three countries; rather, the voice of the OECD official responsible for the PIAAC featured consistently and prominently. The media sources in all three countries drew heavily on a textual artefact of the PIAAC - the *Country Note: Survey of Adult Skills first results* published by the OECD for each country. Their study also found that when the results for the PISA were released two months after the release of the SAS results, the media coverage dealt with both the PISA and the SAS for a short while before the SAS results appeared to lose coverage altogether.

The current study focusses on the media as a policy actor following the release of the SAS results in Australia. It compares the Australian media response to that following the ALL, and to national media responses following the SAS in Japan, the UK and France.

Methods and methodology

Media reports were identified by searching the database *Factiva* using the search terms “PIAAC or Survey of Adult Skills”. The selected period was from 1 January 2013 to 31 December 2013. This included the period three months after the release of the NFSS through to the international release of the first set of SAS results in October 2013. The search parameter for the region of interest was limited to Australia. 13 news items were retrieved by *Factiva*; no blogs and other online posts were identified by *Factiva*.

Given the extensive reference to the OECD’s key messages in the SAS reporting in Japan, UK and France (Yasukawa et al., 2017), the key messages from OECD’s *Country Note* (2013b) for Australia were distilled to examine how or if they were given prominence in the Australian media coverage of the SAS results.

The media reports were first classified according to the type of media source in which they were published, and then a subset was selected for further analysis. The selected media reports were examined individually first, and then in relation to other reports to identify any patterns or interactions between the reports.

The OECD Country Note

All of the *Country Notes* are published in the same format. Each starts with the key issues about the country’s results identified by the OECD. This is followed by a section briefly explaining what the SAS assessed, how proficiency was measured, what other information was collected, and the number of people sampled in the country. It then provides further explanation of some of the OECD’s findings about the results including three graphical league tables showing the country’s ranking in relation to the other 21 countries and the OECD average. The analysis of the proficiency results draws on international comparisons as well as data from the background questionnaire that participants completed to provide socio-demographic information as well as, for those

in the workforce, the perceived demands on the literacy, numeracy and PSTRE skills in their jobs. The final section provides technical details about the SAS. Information from the *Country Note* is summarised in Table 1.

Table 1. Summary of key messages from the OECD *Country Note* for Australia.

There is nothing in the OECD’s findings that is highlighted as alarming in terms of Australian adults’ literacy, numeracy and PSTRE skills *per se*, or in comparison to the findings of other countries. It is in fact difficult to identify any clear policy imperative as was identified in other *Country Notes* (see for example, Yasukawa et al., 2017). In the following section, the national media reports are examined.

Media coverage

13 news items were identified through the keyword search “PIAAC or Survey of Adult Skills” for the 2013 calendar year. Three were publications from *Australian Government News* which provides very short (about 250 words) notice of new publications or media releases from federal government departments. One announced the preliminary release of the Australian SAS results, with no commentary; this item was not included in the corpus for analysis. The remaining two were linked to media releases from the Australian Bureau of Statistics (ABS), and the media releases, rather than the notice about them were included in the corpus for analysis. There were two articles in *The Conversation*, an online publication of commentaries from the academic and research community²; analysis of these articles is not included in this paper. The remaining eight articles, while accessed from an online database, were published by traditional print-based newspapers (which also publish online). *The Australian* and the *Australian Financial Review* are two daily newspapers published nationally and owned

by News Corp Australia and the Fairfax Press, respectively; on a spectrum of ‘quality’ journalism and ‘tabloid’ journalism, both of these publications are considered ‘quality’ journalism. News Corp publications are generally regarded right-leaning, and the Fairfax publications as centrist on the political spectrum. One report from *The Age* was identified, a daily ‘quality’ newspaper published by the Fairfax Press in Melbourne. There were two articles from the *Herald Sun*, a daily ‘tabloid’ newspaper published by a subsidiary of News Corp. *The Observer (Gladstone)* published by APN News and Media is a regional daily paper in the state of Queensland.

The news items from the traditional newspapers were analysed chronologically, alongside the ABS media releases that appeared during this time. It should be noted that there were two release dates for the Australian SAS results: what was called the Preliminary Findings³ were released on 15 February, 2013 in Australia only, and the results and reports for all countries that participated in the first wave were released internationally on 9 October, 2013.

Examination of the media reports

Reports from the traditional national newspapers

On the day that the preliminary findings of the Australian SAS results were released by the ABS, there was a media release from the ABS (2013a) and another from the Australian Council of Education Research (ACER) (2013). The ABS release drew attention to the age-related differences in proficiency with their headline *Older Australians have lower levels of literacy and numeracy*, and brought the expertise of the ABS Director of the National Centre for Education and Training Statistics, Andrew Webster to explain the proportion of the sample who had performed at various proficiency levels for both Literacy and Numeracy, drawing attention to the poorer

performance for the older adults in the sample. Webster continued to be quoted with briefer comments about gender differences (more pronounced in Numeracy than in Literacy) and labour force participation (those not in the labour force tended to show lower proficiencies). The media release concluded with a short statement about what the SAS was about and where further information could be obtained.

The ACER's media release was titled *International study reveals serious adult literacy and numeracy problems* and started out with the statement: "Preliminary results from an OECD study released by the Australian Bureau of Statistics today reveals that many adult Australians do not possess the literacy and numeracy skills necessary to participate fully in modern life and work" (ACER, 2013). Quoting Dave Tout, ACER researcher and member of the OECD PIAAC Numeracy Expert Group, an emotive element was added: "This is **an alarming result** for a country that needs to lift the skill levels of its population to ensure a healthy society and a robust economy" (emphasis added). The statement was redolent of the news articles that fomented a crisis discourse about the state of adult literacy and numeracy after the ALL. The rest of the media release focused on percentages of adults performing at the lower levels, posed a question about the ability of teachers and trainers in the vocational education and training sector to identify and address the literacy and numeracy needs of adults and mentioned ACER's practitioner development initiative around assessment of literacy and numeracy.

The first newspaper report was published by the tabloid *Herald Sun* the day after the ABS and ACER media releases, with the headline, *We literally can't read* (Hadfield, 2013). It provided selected information about the results, focussing on Victorian adults, including the number of adults who were "struggling with basic literacy" and had "only the rudimentary maths skills", though not explaining what was

understood as ‘basic literacy’ or ‘rudimentary maths skills’. Like the ACER media release, it cited the percentage of the Australian adults in the lowest two bands for Literacy (44 per cent) and Numeracy (55 per cent). Dave Tout from the ACER was quoted as the authority for the assessment that the situation was “**alarming**” (emphasis added). The article also cited a spokesperson for the Victorian Education Minister who attributed the problem to the quality of school education, and made a commitment to “an ambitious reform agenda” for schools.

No other reports from traditional newspapers were identified by *Factiva* until a week later when *The Australian* published the article *Teens outperform greys on the two Ls* (“Teens outperform greys”, 2013). The article focused on this generation gap in literacy and numeracy and began with a suggestion that the findings showed that “more education is paying off”. The article cited Daniel Edwards, an ACER researcher and a then Melbourne University academic Leesa Wheelahan who agreed with this interpretation. The article concluded with some caution from the two researchers about an overly narrow skill-focus in education systems. In contrast to the *Herald Sun* article, this article was more focussed on a particular demographic aspect of the findings and sought to explain the findings as well as consider the implications with input from researchers.

The next set of reports from the traditional news media appeared some eight months later on 9 October at the time of the international release of the first set of SAS results. The ABS (2013b) published a media release with the headline *Young women lag behind young men on numeracy skills, but perform well on literacy*. It quoted ABS Director Myles Burleigh who unpacked this difference by different proficiency levels. Thus some meaning about the levels were provided in this media release, although there was little attempt to draw inferences from the information.

The *Australian Financial Review* published an article on the next day (Dodd, 2013a). The headline suggested a celebratory story *We lift our game in the latest OECD report*. Its opening line read

Australia's adult population ranks among the highest in the developed world in literacy but is only average in numeracy, says the OECD's first international survey of adult skills.

The article elaborated on the precise positions on the league tables, and noted that in Literacy Australia was “well ahead” of other English speaking countries that participated in the first wave of the SAS (United States, UK, Canada and Ireland). It also highlighted the relative small gaps in proficiency that were related to income levels as a positive finding, and made a particular comparison with Canada which had a gap “over a third wider”. Halfway through a largely positive assessment of the findings, the article turned its focus on numeracy where Australia was an “average performer, **although still ahead of other English speaking countries**” (emphasis added). It elaborated on the nature of Australia's Numeracy performance by revealing the large gap among the Australian adults at the top levels and the lowest levels, and that this gap was larger than in many other participating countries. As in the previous articles, an expert from the ACER was called upon for a comment; this time it was the research director Juliette Medelovits who urged further mining and exploration of the data.

Two days later, the *Herald Sun* published *Australians lack basic literacy, numeracy skills*. (Hosking, 2013). This article focused almost exclusively on the ‘bad news’, starting with the statement that “a fifth of Australian adults score at the lowest levels of numeracy proficiency ...”. It added the kinds of problems that this group of adults could not manage:

Couldn't perform calculations with whole numbers and common decimals, failed to interpret relatively simple data in tables and graphs or struggled with simple measurements. About 6 per cent were below the lowest proficiency level.

However, the reader was left to imagine what kinds of questions were asked in the Survey to lead to these outcomes. The article acknowledged that Australian adults performed "far better in literacy" but was quick to point out that "12.5 per cent of adults scored at or below the lowest proficiency level". Again, Dave Tout, was cited as the authority who explained that low proficiencies in literacy and numeracy impacted negatively on people's social and economic futures.

In the following two weeks, the *Australian Financial Review* published two short (100 word) summaries of specific interpretations of findings from the background questionnaires. The first *Data point: High-level employment increases* (Dodd, 2013b) reported on the growth of jobs that require a high level of education, compared to jobs requiring lower level educational qualifications, though noting that there were more jobs lost that require middle level education. The article did not explain how the SAS analysis led to these findings, nor provide a more nuanced explanation about the precise meanings of high, medium and low levels of education. The second article, *Data point: Literacy linked to wage levels* (Dodd, 2013c) reported on the high correlation between Literacy level and wage level, and that this had been the strongest differentiating factor measured by SAS between those with high levels of Literacy and those with low levels of Literacy. It did note that high level of Literacy was also positively correlated with political efficacy, participation in volunteer activities, trust of others, employment status, and health. However, the article did not explain that findings related to these social outcomes were based on correlations between the literacy proficiencies measured by SAS and the survey participants' self-assessments of their personal attributes.

Another article was published two weeks following the international release of the SAS results in a regional paper. *The Observer*, published in regional Queensland, reported on the gender differences in the SAS numeracy results (Battersby, 2013) in *Could be that girls just wanna do sums*. Like the two *Australian Financial Review* articles (Dodd, 2013a, b), this article focused on factors related to proficiency level gaps, in this case between male and female performances in the SAS Numeracy component. Examining the size of the gender gaps in different age groups, the article pointed out that the gap was greatest between the oldest age group (55 to 74 year olds). It stated that the “the skill set for young female numeracy was steadily increasing”, suggesting that each young group had a narrower gender-based gap than an older group. Here again, an ACER expert, Juliette Medelovits was called upon, and she reiterated the comment cited in the *Australian Financial Review* (Todd, 2013a) on the need to see the SAS data not as a “*simplistic measure that draws a line between the illiterate and the literate – or their equivalents in numeracy*”.

The final report from the traditional news media to appear during the period considered was in *The Age* on 2 December. *Excellence in education is aim of PISA, developer says* in a lengthy article (1295 words) anticipating the publication of the PISA results. Andreas Schleicher from the OECD was extensively quoted, extolling the value of instruments such as PISA in informing national educational policy. The SAS was mentioned only in so far as to suggest the “close correlation between countries’ performance in the different cycles of PISA and the proficiency of the corresponding age groups in literacy and numeracy in later life”; particularly in relation to the link between literacy and numeracy and employment outcomes, including wage rates.

Discussion

The level/ intensity of the Australia media coverage of the SAS results,

The number of reports identified over the 12 months period covering the preliminary release of the Australian SAS results and the international release of the results eight months later is starkly different to the number of reports generated in the media after the release of the ALL results. The day after the release of the ALL, there were six newspaper reports announcing a crisis, and over the next month, there continued to be further alarmist media reports (Yasukawa & Black, 2016). In the case of SAS, there were effectively seven newspaper reports about the results: two following the preliminary release, and the rest following the international release, with only two which were ringing alarm bells.

Compared to the study of the national media reports about the SAS in Japan, the UK and France (Yasukawa et al., 2017), there seemed less interest by the press on the position that Australia held in the international league tables. The interest in international ranking by the Japanese press was expected as Japan came ‘top’ in both Literacy and Numeracy. For a different reason, the press in the UK and France, particularly the former, found their country’s positions as alarming given they were both below the OECD average in both Literacy and Numeracy. For the Australian press, coming fifth (out of 22) in Literacy was not as newsworthy as coming top or close to the bottom, though most reports acknowledged that Australian adults were performing well in Literacy. The position in Numeracy, just below the OECD average, was commented upon differently, as being “only average” (Dodd, 2013a). It is interesting, however, that the article added that it is “still ahead of other English speaking countries”, suggesting that it would be more unacceptable to be “only average” if other English speaking countries were ahead.

These comparisons suggest that particular kinds of ‘numbers’ are important catalysts for the media to be mobilised – either to highlight national pride or national shame. Performing ‘quite well’, and ‘about average’, it could be inferred, is not as newsworthy, even if they leave room for someone with a historical eye to interpret these as improvements from the apparent ‘crisis’ of only six years prior.

Newsworthy issues or aspects of the SAS results on which the media focussed

The *Herald Sun* articles were the two out of the seven which appeared to argue an ‘alarming state of affairs’; the other reports tended to discuss aspects of socio-demographic data and other aspects selected from the background questionnaire, for example age and gender related differences, and links to labour market participation. Due both to the scarcity of articles, and the tone and focus of the articles (with the exception of the *Herald Sun* articles), there is not a sense of a ‘crisis discourse’ being projected by the newspaper media. Rather there is an attempt to explain (although only briefly) and attract interest in particular demographic phenomena. Equally the corpus is too small to argue that there is a pattern or consensus among other policy actors, except for an acknowledgement repeated by the quality press that there is more than a single finding coming out of the SAS.

It is important to note too, that while the media reporting on the ALL survey results could make reference to the de facto benchmark Level 3 (which the majority of survey respondents didn’t achieve in numeracy, and just less than half didn’t achieve in literacy), there was no such benchmark identified in the official media release for the SAS results. While there was no shortage of numbers that could be and were reported in relation to the SAS, there was no single measure that the media could readily use to attract interest as did the media reports of the ALL. Thus issues need to be translatable

into a rallying cry or a popular catchphrase in order to be seen newsworthy enough to forge relationships with other possible actors.

Experts informing the media

Unlike in the study by Yasukawa et al. (2017), this study found little explicit use by the media of the OECD as the voice of authority. Neither did the range of industry policy actors who were featured by the media in the ALL reports feature again in the media responses about the SAS. Apart from the ACER featuring prominently, the assemblage that was mobilised when the results of the ALL survey were released has not been extended or in any other way disturbed – or even awakened by the SAS results. Three different ACER researchers were called upon for their expertise by different newspapers: the *Herald Sun* called upon Dave Tout on two occasions to boost their ‘crisis’ message; *The Australian* cited Daniel Edwards’s explanations of age-related differences, and the *Australian Financial Review* and *The Observer (Gladstone)* cited Juliette Mdelovits’ call for closer study of the SAS data. If there had been a hope to create a unified ACER rally cry over a crisis, it was not realised.

Although the ABS published explanations to inform interpretations of aspects of the SAS findings as did the *OECD Country Note*, the media did not assume an active role of educating the readership on the underlying assumptions and designs of the SAS; this was not dissimilar to the reports from other countries examined by Yasukawa et al. (2017). As far as the media were concerned, the SAS was a black box whose history was of little interest.

Policy implications

As in Yasukawa et al.’s (2017) study, there was interest by the Australian press in factors that could explain or reflect differences in proficiencies. However, Unlike in

Japan where the current education system was blamed for the younger respondents performing less well than the older respondents (Yasukawa et al. 2017), In Australia, the younger group performed better than the older population. In Australia, Literacy and Numeracy levels and labour market outcomes correlated positively, giving no obvious newsworthy policy failure to be highlighted., within the well-entrenched human capital discourse of literacy and numeracy. Apart from those who may have been spellbound by the alarmist *Herald Sun* articles, people would see little cause from the media reports to doubt that the existing adult literacy and numeracy policies were doing anything other than serving the country well. The issue of there being a policy and what its aims were was not even raised as an issue in any of the media, another key difference from the ALL media reports where a wide range of stakeholders were featured in their united call for political action. Thus the NFSS which emerged after the ALL survey had become securely black-boxed, not even worthy of attention.

One consistent observation across the three studies was the lack of media interest in how the Survey results correlated with what adults could do with literacy and numeracy in their lives. Media did not report on the views of adult literacy and numeracy practitioners nor researchers of adults' everyday literacy and numeracy practices in any of these studies. Given the chance, they may well have presented a different view of the significance of the assessment results and what policy response was needed. However, the media appear to treat the SAS framework as a black box, which for those seeking to promote the SAS definitions of literacy and numeracy is advantageous, confirming the concerns expressed by Jablonka (2015) about the unproblematised promotion of OECD's models of numeracy and mathematical literacy.

Taken together, the studies of the Australian ALL reporting, the SAS reporting in Japan, France and the UK, and the Australian SAS reporting, the findings about the

media's lack of nuanced and more broadly informed treatment about the actual state of adult literacy and numeracy education resonates with Canadian studies about the media and mathematics education: media do not see their role as problematising popular discourses or educating the public readership to generate informed debate about the state of adult numeracy or young people's mathematics education.

Conclusions

This study analysed the Australian media response to the results of the country's SAS results, and compared it to the media's sustained interest and role as a policy actor following the release of the previous ALL results, and the national media responses to the SAS in Japan, the UK and France. By taking a socio-material approach and considering both human and non-human actors that could mobilise a policy network, the study showed that the presence or absence of particular kinds of non-human actors are critical in attracting the media to play a role. One kind of non-human actor is the 'numbers' that are generated by international assessments. The previous two studies showed how the ability to associate these numbers with a sense of national pride or shame creates newsworthiness. However, when the numbers are not exceptional, the results are less newsworthy, as was the case with the SAS results in Australia. Thus, numbers that are remarkable in some way, can become immutable mobiles that combine with other elements to generate policy narratives, however, numbers that cannot gain traction and are unremarkable fail to have any effect.

While the media did play a role in bringing out some of the important demographic differences in performance, for example gender-related and age-related differences in numeracy performance, they were not followed up, for example with

commentaries from people with expertise. Thus, it remains to be seen whether educators will be alerted to any possible pedagogical implications of the SAS findings.

Another significant difference between the Australian media response to the previous OECD survey and the SAS was the national political context. The ALL results were released just after the Labor Government came into office with a mandate for an ‘education revolution’ to improve economic growth. The ALL results which the media presented as evidence of a ‘crisis’ helped to mobilise industry groups to advocate for an urgent policy response. By the time the SAS results were released, there was a change in government, with no strong mandate in the adult education arena. This meant that even the few alarmist calls found little traction with policy-makers. One interpretation for this is to say that the ‘crisis’ has been resolved. Another is to say that the machinery of assessment frameworks and training materials that was set in motion following the ALL, is still in motion, albeit as a black box, indifferent to its own history.

Media can be powerful policy actors in the complex transnational policy environment; however, research based on a socio-material approach indicates that their appetite for such a role is influenced by which other powerful local policy actors can be enrolled, and which powerful non-human actors they can engage to sustain newsworthiness of the policy issue.

Notes

¹ In addition to the 22 member countries, Cyprus and the Russian Federation also participated.

² For example, OECD’s SAS and its predecessors, the Literacy Assessment and Monitoring Programme (LAMP) administered by the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the OECD Programme of International Student Assessment (PISA).

³ See <https://theconversation.com/au/who-we-are>

References

- Australian Bureau of Statistics. (2008). *Adult literacy and life skills survey, summary results, Australia*. Canberra, Australia: ABS.
- Australian Bureau of Statistics. (2013a, 15 February). *Older Australians have lower levels of literacy and numeracy* (Media release). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mediareleasesbyReleaseDate/1C9DEC10F0169A32CA257BFE00150C37?OpenDocument>
- Australian Bureau of Statistics. (2013b, 15 February). *Young women lag behind young men on numeracy skills, but perform well on literacy* (Media release). Retrieved from <http://www.abs.gov.au/ausstats/abs@.nsf/mediareleasesbyReleaseDate/0E0314CD24010332CA257BFE001FA351?OpenDocument>
- Baroutsis, A., & Lingard, B. (2017). Counting and comparing school performance: An analysis of media coverage of PISA in Australia, 2000-2014. *Journal of Education Policy*, 32(4), 432-449.
- Battersby, E. (2013, 23 October). Could be that girls just wanna do sums. *The Observer* (Gladstone), p. 5.
- Barwell, R., & Abtahi, Y. (2015). Morality and news media representations of mathematics education. In S. Mukhopadhyay & B. Greer (Eds.), *Proceedings of the Eighth International Mathematics Education and Society Conference* (pp. 298-311). Portland, OR: Portland State University.
- Black, S., & Yasukawa, K. (2014). Level 3: Another single measure of adult literacy and numeracy. *The Australian Educational Researcher*, 41(2), 125-138.
- Callon, M. (1987). Society in the making: The study of technology as a tool for sociological analysis. In W. E. Bijker, T. P. Hughes & T. Pinch (Eds.), *The social construction of technological systems* (pp. 83-103). Cambridge MA: MIT Press.
- Chorney, S., Ng, O-L, & Pimm, D.(2016). A tale of two more metaphors: Storylines about mathematics education in Canadian national media. *Canadian Journal of Science, Mathematics and Technology Education*, 16(4),402-418.
- Cort, P., & Larson, A. (2015). The non-shock of PIAAC – Tracing the discursive effects of PIAAC in Denmark. *European Educational Research Journal*, 14(6), 531-548.

- Dodd, T. (2013a, 10 October). We lift our game in latest OECD report. *Australian Financial Review*, p. 14).
- Dodd, T. (2013b, 14 October). Data point: High-level employment increases. *Australian Financial Review*, p. 24.
- Dodd, T. (2013c, 21 October). Data point: Literacy linked to wage levels. *Australian Financial Review*, p. 24.
- Fenwick, T., & Edwards, R. (2011). Considering materiality in educational policy: Messy objects and multiple reals. *Educational Theory*, 61(6), 709-726.
- Gorur, R. (2011). ANT and the PISA Trail: Following the statistical pursuit of certainty. *Educational Philosophy and Theory*, 43(S1), 76-93.
- Gorur, R., & Wu, M. (2015). Learning too far? PISA, policy and Australia's 'top five' ambitions. *Discourse: Studies in the Cultural Politics of Education*, 36(5), 647-664.
- Grek, S. (2014). OECD as a site of coproduction: European education governance and the new politics of 'policy mobilization'. *Critical Policy Studies*, 8(3), 266-281.
- Hadfield, S. (2013, 16 February). We literally can't read. *Herald Sun*, p. 16.
- Hamilton, M. (2011). Unruly practices: What a sociology of translations can offer to educational policy analysis. *Educational Philosophy and Theory*, 43: 55-75.
- Hamilton, M. (2012). *Literacy and the politics of representation*. London: Routledge.
- Hamilton, M., Maddox, B., & Addey, C. (Eds.). (2015). *Literacy as numbers: Researching the Politics and Practices of International Literary Assessment*. Cambridge, UK: Cambridge University Press.
- Hosking, W. (2013) Australians lack basic literacy, numeracy skills. (2013, 11 October). *Herald Sun*. Retrieved from <http://www.heraldsun.com.au/>
- Jablonka, E. (2015). The evolvment of numeracy and mathematical literacy curricula and the construction of hierarchies of numerate or mathematically literate subjects. *ZDM Mathematics Education*, 47, 599-609.
- Latour, B. (1987). *Science in Action: How to follow scientists and engineers through society*. Cambridge, MA: Harvard University Press.
- Law, J., & Hassard, (Eds.). (1999). *Actor network theory and after*. Oxford: Oxford University Press.
- Maslen, G. (2013, 2 December). Excellence in education is aim of PISA, developer says. *The Age*, p. 14.

- Organisation of Economic Development and Cooperation. (2013a). *OECD Skills outlook: First results from the Survey of Adult Skills*. Retrieved from http://www.oecd-ilibrary.org/education/oecd-skills-outlook-2013_9789264204256-en
- Organisation of Economic Development and Cooperation. (2013b). *Australia – Country Note – Survey of Adult Skills: First results*. Retrieved from https://www.oecd.org/skills/piaac/Country%20note%20-%20Australia_final.pdf
- Rodney, S., Rouleau, A., & Sinclair, N. (2016) A tale of two metaphors: Storylines about mathematics education in Canadian national media. *Canadian Journal of Science, Mathematics and Technology Education*, 16(4), 389-401.
- Tsatsaroni, A., & Evans, J. (2013). Adult numeracy and the totally pedagogised society: PIAAC and other international surveys in the context of global educational policy on lifelong learning. *Educational Studies in Mathematics, Special Issue: Social theory and research in mathematics education*, 87(2), 167-186.
- Waldow, F., Takayama, K., & Sung, Y-K. (2014). Rethinking the pattern of external policy referencing: Media discourses over the ‘Asian Tigers’ PISA success in Australia, Germany and South Korea. *Comparative Education*, 50(3), 302-321.
- Walker, J. (2009). The inclusion and construction of the worthy citizen through lifelong learning: A focus on the OECD. *Journal of Education Policy*, 24(3), 335-351.
- Walker, J., & Rubenson, K. (2014). The media construction of an adult literacy agenda in Canada. *Globalisation, Societies and Education*, 12(1), 143-163.
- Yasukawa, K., & Black, S. (2016). Policy making at a distance: A critical perspective on Australia’s National Foundation Skills Strategy for Adults. In K. Yasukawa & S. Black (Eds.), *Beyond Economic Interests: Critical perspectives on adult literacy and numeracy in a globalised world* (pp. 19-39). Rotterdam: Sense Publishers.
- Yasukawa, K., Hamilton, M., & Evans, J. (2017). A comparative analysis of national media responses to the OECD Survey of Adult Skills: policy making from the global to the local?. *Compare: A Journal of Comparative and International Education*, 47(2), 271-285.