Critically Reading the OECD Survey of Adult Skills

Keiko Yasukawa and Jeff Evans

University of Technology, Sydney & Middlesex University, London

The first round of the OECD Survey of Adult Skills conducted during 20011/2012 sought to measure adults' proficiency in literacy, numeracy, and "problem solving skills in technology rich environments". This paper reports on a critical examination of the findings of the performances of two participating countries: Japan and France, as reported in the official reports of the OECD and by the media in the two countries.

Introduction

On 8 October, 2013, the Organization for Economic Co-operation and Development (OECD) released the results of the Survey of Adult Skills (SAS) for 23 of the 24 countries that participated in the survey's first round. (Results for Russia have been delayed.) There is growing scholarship around the increasing influences of international assessments, such as the PISA and the OECD adult literacy surveys, on educational policy making and curricula at the national levels (Black & Yasukawa, 2014; Hamilton, 2012; Meyer & Benavot, 2013; Tsatsaroni & Evans, 2013; Grek, 2010; Walker, 2009). Following the historical record of public reporting of the results enables us to trace what is taken up (and what is not) in related educational policy processes emerging from such survey results. While this paper focuses on only two countries, France and Japan, critical comparative studies can begin to highlight salient themes that are highlighted by the OECD and picked up by the national media to build public understanding about transnational policy processes.

Critically Examining the Survey of Adult Skills

During 2011/2012 the first round of the Survey of Adult Skills (SAS), the international survey element of OECD's Programme of International Assessment of Adult Competencies (PIAAC), was conducted in 24 OECD countries. SAS was the third in a series of international adult skills surveys that have been conducted over the last two decades: the previous two being the International Adult Literacy Survey in the 1990s and the Adult Literacy and Lifeskills Survey conducted in the 2000s. SAS was designed to measure adults' proficiencies in the three areas of (reading) literacy (L), numeracy (N) and "problem solving in technology rich environments" (PS). Proficiencies for the L and N domains were assessed on a numerical scale (0 to 500) and then ranked in groups from Below Level 1 (lowest) through to Level 5 (highest).

The survey targeted the adult population (16 to 65 year olds) in the participating countries. The three areas assessed are regarded by the OECD as representing "cross-cutting cognitive skills that provide a foundation for effective and successful participation in the social and economic life of advanced economies" (OECD, 2012, p.10). The OECD argues that SAS together with the PISA (Programme of International Student Assessment) for 15 year olds could provide insights into how the performances observed in the PISA are "maintained, reduced or increased as the cohorts pass through subsequent education and training" (p. 11).

The influence of the OECD in shaping national education policies and understandings of literacy and numeracy is complicated by existing local educational and economic debates. A critical examination of the ways that international surveys such as the SAS are received and circulated can expose the cultural and political dynamics of the policy process and in turn the popular representations of literacy and numeracy (Hamilton, 2012; Rubenson & Walker, 2014; Thomas, 2005). One of the longer term aspects of our focus is how the possible tensions between the purported dual economistic and social aims of PIAAC are played out in local contexts.

This paper draws on a study by our colleague Mary Hamilton and ourselves, on the media reporting of the first SAS results in late 2013. We chose three countries to represent the top (Japan), middle (UK) and lower (France) ends of the "league tables" that were produced from the L and N results of the Survey. Another reason for the choice

of countries was that, within the research team, we had the capacity to read the press reports in the languages of publication (English, French, and Japanese).

The initial reports in the largest national newspapers in UK, France, and Japan were sourced from the internet and analysed according to the issues that they highlighted, the credibility they brought to their interpretation of the findings, and any policy implications that were identified or suggested. A comparative analysis of the reception in the three countries was then made.

Another important critical dimension relates to ways in which "numbers" are used to build stories about the L, N, and PS proficiencies of adults in the different countries. In such large-scale international surveys, the methodological challenges are enormous, and the numbers that mainstream media use to report on findings are but a very tiny proportion of what is available as "data".

"Numbers" featured prominently in the media reports and we examined how the media's emphasis and interpretation of these "numbers" compared with those of the OECD. We investigate which of these data were picked up by the media, and how the choices they made were woven into the stories about the SAS results for public consumption. We conclude with some observations about the significant role that the SAS might play in transnational policy making, and thus the heightened importance of exercising critical numeracy in the reading of the results.

The OECD Reports

Besides the overall international reports (OECD, 2013c, 2013d), for most participating countries, including France and Japan, the OECD published a Country Note (OECD, 2013a, 2013b, respectively). These reports contain general information about the SAS methodology, a summary of the proficiency results for the country, and a list of key issues identified by OECD for that country's results.

What is noticeable about these presentations is the effort to rank and compare each country's performance with those of other countries using quantitative language: *highest levels*; *average*; *lower than average*; *relatively equitable distribution*. We now present key aspects of the country notes for our two countries.

(a) France

In France some 7000 adults 16 to 65 were surveyed from September to November, 2012. Key findings identified in the Country Note (OECD, 2013a, p.1) include:

- Literacy and Numeracy skills of the French are among the lowest of countries participating. But the differences between generations are rather marked, compared with other countries. (Problem solving scores were not measured in France.)
- 2. Literacy and Numeracy scores of the French varied noticeably, according to level of education and their social origin, and to a greater extent than in the average participating country: France displays a comparatively high level of inequality in L and N scores.
- 3. Differences in Literacy skills among individuals born in France and those born abroad are more pronounced than the average for the countries participating, and the improvement of skills with the length of residence in the country is very limited.
- 4. According to survey respondents, literacy and ICT skills are little in demand for professional staff, nor are those for resolution of complex problems. On the other hand, French employers are among those who require more the numeracy skills of their workers.
- 5. In France, as in all participating countries, a positive and significant relationship is detected between the level of Literacy skills and both hourly wages and the probability of being employed. However, these relationships are weaker for France than on average.

France was ranked 21st for Literacy (of 23 countries) and 20th for Numeracy. Yet there was some hope in one of the demographic differences of most interest to policy-makers and the media: the youngest SAS age group (16-24) obtained better results than the older (55-64); this was a substantial gap between age groups, similar to that seen in Finland and the Netherlands (which had high average scores overall on L and N), and Korea (middling average scores overall). This differs from the UK, where there was no such age difference; these latter

results are more worrying for policy makers and others looking for an improvement in the younger generations.

The other two distinctive features of the French data that were to attract attention in the media were the differences to do with place of birth (3. above), and the extent to which workers' measured skill levels (in L and N) correspond with the extent to which their holders perceive these skills to be used in the workplace (4. above).

(b) Japan

In Japan 5200 adults aged 16 to 65 were surveyed between August 2011 and February 2012 (OECD, 2013b, p. 1). The Country Note identifies the key issues as:

- I. Adults in Japan display the highest levels of proficiency in literacy and numeracy among adults in all countries participating in the survey.
- 2. The performance of Japanese adults in the assessment of problem solving in technology-rich environments is around average. In Japan, younger adults perform lower than the average in this domain.
- 3. There is a relatively equitable distribution (i.e. low dispersion) of proficiency in information processing skills (i.e. Literacy, Numeracy and PS scores) across the Japanese adult population, with only small differences between groups such as the old and the young and the better and less well educated.
- 4. Japanese women have high levels of L and N proficiency, but have low rates of participation in the labour force. Thus, they represent an underutilised resource of skill.
- 5. For these high levels of proficiency to translate into economic growth and well-being, competences must be put to their best use. Japanese employers do not appear to be making the best use of their workforce's competences. Furthermore, the returns to proficiency in terms of higher wages and employment rates are lower than in other participating countries (OECD, 2013b, p.1).

While Japan came "first" in L and N, when the proficiencies are broken down by age, the very high levels of L and N among the oldest

age groups in Japan (compared with the same age groups elsewhere) made the Japanese results distinctive:

While the average proficiency of 16-24 year olds is [high and] similar to that of cohorts of the same age in Finland, Korea and the Netherlands,... the proficiency of 45-54 year olds and 55-65 year olds in Japan is well in excess of their counterparts in other countries. (OECD, 2013b, p. 2)

Nevertheless, the 16-24 group scored higher (on average) than the 55-65 age group by an amount around the OECD average. However, other socio-demographic differences such as those related to educational levels, parents' educational levels, and occupational categories are shown graphically to be below OECD average. The Report explains that the gap in mean score for those with a tertiary qualification over those with less than a completed upper secondary qualification is among the lowest among participating countries. Furthermore, it points out that "the proficiency of Japanese adults with less than a full secondary education is the highest of all countries in the survey" (OECD, 2013b, p. 3).

The Report gives findings related to employment and labour market issues. It suggests that Japanese women, who performed highest among women in participating countries, are an "untapped supply of high quality human capital" because a significant number of them are not in the labour force (OECD, 2013b, p. 3). Further criticisms are made about the use of available human capital by employers:

A sizeable share of Japanese workers—close to 10%—are in jobs for which their literacy competencies are higher than required. (OECD, 2013b, p. 7)

The Media Reports

Initial reactions to the SAS findings in French and Japanese newspapers published from 8 October when the results were released internationally, up to 1 December 2013, were analysed. Media attention on the SAS results in both countries declined rapidly after the first week. A crowd-sourced project produced an archive of articles

relevant to understanding the reception of SAS. This was supplemented by a search using Factiva and the newspapers' websites.

(a) French Media

Analysis of media reports in the French press is based on five national papers: the three main dailies, *Le Monde* (circulation 314,000, left), *Le Figaro* (circulation 321, 500, centre-right), and *Libération* (circulation 134,800, far-left), supplemented by *Les Echos* (circulation 120,000, right) and *La Croix* (106,000, Roman Catholic); estimates of circulation and political position are according to Wikipedia[3].

The French newspapers had relatively bad news to convey; this may have led to coverage "petering out" faster over the first week than in the other countries studied. In addition, composing the headlines appears to have posed challenges; the words used officially by SAS for L and N, *littératie* and *numératie*, are not widely used in France. Thus, papers mentioned "the written (domain)" [*l'écrit*] or "reading" [*la lecture*] and "calculation", "figures" or "maths". In only three of the papers were L, N, and PS defined, or even used. Thus the terms used in France may undermine the arguments of those policy-makers, researchers and teachers who have argued for adult literacy and adult numeracy to be seen as rich and distinctive concepts.

First, considering the issues and findings that are highlighted, most newspapers reported the proportion of French respondents who scored at very low levels in L and N, as the proportion in levels 1 or below 1. *Le Monde* reported those up to level 2 versus those at level 3 and beyond, while *Le Figaro* and *Libération* reported the proportion of high scores as levels 4/5. The low percentages were compared with the OECD average, or sometimes with Spain and Italy, which scored below France in both L and N. In most reports, Japan and Finland were mentioned as "good students", reflecting a pervasive school-like metaphor. PS was largely ignored, presumably because France (like Spain and Italy) did not participate in that part of the Survey. Nonetheless, several indicators, such as the extent to which literacy, numeracy, "ICT" and "complex problem solving" are (perceived by respondents to be) in demand by French employers, were available, from the Background Questionnaire.

All five papers were focused on broadly the same demographics and their relation to L and N: namely, age, respondent's level of education, and parents' level of education. *Le Monde* went somewhat further in its interpretation: "Social origin and level of education play a more discriminating (stratifying) role in France than in many countries. Just like being born in France or not." But the main finding highlighted was that "the young (16-24 years) obtain better results than the older (55-64)". And "as in Korea and Finland, the gap between the two [age groups] is substantial in France." Glenda Quintini, an economist with OECD, is quoted in *La Croix*, as conjecturing that the difference between the two age groups is "tied to the increase in the level of education" (*Le Monde*, 15.10.2013), over time.

Le Monde's article finishes by quoting an "expert" at OECD, to the effect that "what is most problematic is the inequalities in the system", relating to age, place of birth, level of education, and parents' level of education. (This issue is taken up in Eric Charbonnier's blog ["Education Déchiffrée"] for Le Monde, (15.10.2013.) The inequalities mentioned in the Libération headline, in contrast, appear to relate to inequalities between countries. Only Le Monde indicates that some questions remain open: "OECD is unable to say if the older [lower performers] left the system with a mediocre level, or if their competences deteriorated in their professional life." This continues to be a live question in reactions to the findings in many countries.

Credibility is established, in all of these newspapers – by quoting at least one OECD official: presumably being based in the same city as the HQ of OECD facilitates such access. Most quoted was Stefano Scarpetta, Director of Employment, Labour & Social Affairs at OECD; *Le Monde* also quoted a second official, Eric Charbonnier, (who also does a blog for *Le Monde*). *La Croix* quoted Glenda Quintini, an economist with OECD. On the other hand, *Libération*'s report quoted Angel Gurria, Secretary General of OECD and Androulla Vassiliou, Commissioner for Education for the EU, speaking at a press conference in Brussels on the day of the release of results.

As for citing the survey's methodological features, the overall sample size (166 000) is mentioned in only three newspapers, and that in France (7000), in two.

Concerning policy-related conclusions, all the main articles were published in the day or two after the Survey, so they are "first reactions". *Le Monde* mentions "inequalities" (see above), and *Le Figaro* mentions the "spread" of scores; *Libération*, considers that "in too many European

countries, the future of children is pre-determined by the situation of the parents" (quoting Vassiliou). When seeking factors responsible for the problem, *Les Echos* considers it to be "first tied to the large numbers of adults whose parents did not do HE, i.e. the socioeconomic milieu." They go on to quote Scarpetta at the OECD: "The school forms initial competencies. But these develop next at work ...which implicates [economic] ministries, but also enterprises: France has a problem of skill, and of use of skills: many talents are not exploited... The OECD is concerned by the high number of fixed term and part-time contracts, which reduces the level of skill use." He is also concerned that "continuing education tends to prioritise the most skilled, and deepens the gap with the weakest". In *La Croix*, Glenda Qunitini, largely echoes Scarpetta, in citing the lower commitment in France to lifelong learning, and the idea that French workers are "less incentivised to use the ensemble of their skills at work ... or to develop new know-how".

In terms of what should be done, *Le Monde* implies that inequalities within France must be tackled. *Le Figaro* quotes Scarpetta at the OECD, who emphasises "three important dimensions: access to education and training; development of competences throughout professional life; use of skills adequate for the post held". *Libération* considers "immediate measures needed at European level" (quoting Vassiliou), presumably to tackle inequality between countries. More generally, Gurria of the OECD considers the results "a wake-up call, to see what others [countries] do, and to draw lessons from that". For *Les Echos*, "France must act to better use its talents."

(b) Japanese Media

The corpus of Japanese media reports was sourced from the three largest national newspapers in Japan: Yomiuri Shimbun (circulation 10,042,075, right), Mainichi Shimbun (circulation 3,974,559, liberal/centre) and Asahi Shimbun (circulation 8,093,885, left); estimates of the circulation figures and the political positions are sourced from Wikipedia (http://en.wikipedia.org/wiki/Japanese_newspapers).

All three newspapers provided broad information about the SAS methodology: the number of participants overall and the number of participants in Japan. They also provided information about the levels used in the different assessed domains.

The Asahi and Mainichi published rankings of the top five countries in each of the three areas, showing the country's name and the mean score achieved in the relevant domain. For PS, the percentages of survey respondents in these countries scoring at the top two levels combined were also shown, and indicated that Japan came tenth.

Problems of translation and meaning in the Japanese newspaper articles are significant, though not acknowledged as such. The terms L and N in the PIAAC have been developed with considerable deliberations by international expert groups (OECD 2013d). Even in English, the language in which the expert groups' reports were first written, L and N are often associated with "basic skills", that is those skills that people might be expected to learn in primary school. In Japanese, SAS has been translated as 成人力調査 (survey of adult ability), and L as 読解力 (reading comprehension ability) and N as 数的思考 力 (numerical thinking skills); and it is unclear whether literacy and N are intended to be understood as inherent abilities of individuals or whether they are understood as learned skills. Moreover, in some articles, L is used interchangeably with 学力 which can mean both "being learned or educated" and "academic ability". In some articles, examples of the types of questions in the SAS were described to illustrate what was being assessed in these domains.

For a country that came first in the international league tables, it is not surprising that the headlines in all three papers highlighted this:

Japan's "adult skills", number 1 in 2 areas ... weakness is IT (Yomiuri)

International adult skills survey – a survey of adults' academic ability (literacy): Japan comes top, reflection of compulsory education and training (*Mainichi*)

Unexpected, but proud, Japan world 1st in adult skills survey (Asahi)

Interpretations are added to the statistical expressions of the survey performance by citing educational experts. The *Mainichi* cites Takashi Hamano, an educational sociologist from Ochanomizu Women's University who explained how the overall favourable results pointed to the high standard of compulsory education: "compared to the West,

our [curriculum is] high in the degree of consistency and density". The *Mainichi* also quotes a researcher in comparative education from the National Institute of Education Policy Research, Yasuo Saito, as saying that "the power to maintain academic ability / literacy is another explanation for the favourable results because academic ability / literacy generally falls when they are not used". Saito is quoted as saying that "in Japan, there are many adults who read the newspapers and magazines, and this makes it more difficult for ability / literacy learned in school to decline".

Mainichi reports on the OECD finding that the average scores of Japanese respondents whose highest qualification was junior high school completion (year 9) had average scores higher than those who had completed senior high school in Germany and USA.

However, the top position in the league table is examined more critically in the *Yomiuri*. It explains that while Japan's overall mean in L and N came top, the proportion of the survey respondents who scored at levels 4/5 in L was highest in Finland, then Australia, the Netherlands, Sweden, and then Japan as fifth. In N, the order was again Finland as first, and then Japan as seventh.

A focus is also placed on the "less good" outcomes in L and N in the younger age groups, compared to the older groups (i.e. when comparing both internationally). The Asahi reports that some attribute this to the policy change, known as yutori kyoiku, a move to de-intensify the curriculum. A counter view to that extolling the virtues and success of the traditional compulsory education system that enabled the older generations to perform well is voiced by Manabu Sato, an education professor from Gakushuin University (Asahi). He points to the significantly lower percentage of immigrants in Japan compared to many of the other OECD countries, and how a greater linguistic diversity in the population could have markedly changed the results. In response to Japan's recent "less good" outcome in PISA (eighth in literacy, ninth in mathematical literacy, out of 62 countries), Sato is cited as saying that the difference between the PIAAC and the PISA should not be explained by saying "the education that the adults had received was correct". Rather, he attributes this to a problem in senior high school and university education and an over-reliance on industry for the education of adults.

Many of the articles repeated or sought to interpret the key issues identified in the OECD country report. Thus the poorer performance

shown in PS compared to L and N was also picked up in two headlines:

International adult skills survey, success of basics focussed education, "cell phone" generation not *au fait* with PC (*Yomiuri*)

Detection of tardiness [in] information literacy education, ... (Yomiuri)

Interestingly, however, the underutilisation of skills held by women identified by the OECD as a key issue was not taken up with any emphasis by the papers.

Discussion and Conclusion

Our paper examines early reports of the OECD SAS in two countries, and how the Survey findings are interpreted by the OECD, a transnational organisation, and in national media, as a way to begin to understand their effects on local policy processes and curricula. First, our analyses illustrate the heavy emphasis on international comparisons, particularly with reference to league tables. These are based on rankings according to average country scores or proportions in the 'highest levels'. This is mirrored by a corresponding relative neglect of the spread (dispersion) of scores, within the national media at least – though the OECD is clearer about pointing to these spreads as measures of *inequality!*

Second, we have pointed to concerns raised in a number of countries, represented here by Japan, when the scores of the younger (16-24) age group *seem* 'lower' than those of their elders (see above). This feeds into the existing anxiety on the part of politicians/policy makers on the impact of any curricular reforms on the competitiveness of the future population in the globalised economy.

Third, even if the opposite finding, that of the superior performance of the younger age group over the older, engenders "relief" in a country like France, there are nevertheless concerns about the "decay" of skills over the life-span. Our reading of the media in the two countries revealed a range of explanations suggested for this putative "decay" To begin with, it may be the result of a lack of on-the-job

training. Or it may be the result of the lack of cognitive demands on employees in many jobs (French papers and OECD). Or again, we have the explanation from Japan that "literacy falls when it is not used", and that the Japanese avoid this by reading newspapers and magazines. Or it may be the sparse provision of lifelong opportunities as noted by one French paper, as compared, say with Finland, which came second to Japan in L and N.

Overall, although a large amount of socio-demographic information was collected in the SAS, the strong human capital discourse in the OECD reports suggests that the extent to which the findings inform workforce development and labour market policies alone, or whether implications will also be drawn for broader lifelong learning policies is a space to be watched critically.

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