

REFRACTIONS

What research has been/is being undertaken in adult literacy and numeracy and by whom and why: internationally and locally?

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Editor's note

In September 2013, the Australian Council for Adult Literacy held a forum in Sydney on the topic of Promoting Research in Adult Literacy and Numeracy. The keynote speakers were asked to offer material to generate discussion later in the day. The following is the thought-provoking contribution from Professor Lesley Farrell, one of the founding editors of *Open Letter*, the precursor to *Literacy and Numeracy Studies*.

Talk delivered at Australian Council for Adult Literacy Forum on Promoting Research in Adult Literacy and Numeracy, Sydney, 30 September 2013.

I want to address this question by focusing on three recent research reports. I have selected them, not because they represent the best of literacy and numeracy research, or because they represent the worst. I have selected them because each in their own way raises interesting important questions about **what** research is being undertaken, **by whom** and **why**.

Of the three reports, only one is, strictly speaking, directly concerned with literacy and numeracy research as we would usually understand it, and that was undertaken in Australia. The other two projects originated in the UK. They are, however, critically relevant to the Australian context, and to Australian research about adult literacy and numeracy. Their centrality to research on literacy and

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numeracy illustrates just how global policy travels and how research contributes to the way ideas move across national boundaries.

What research is being undertaken in adult literacy and numeracy?

The Australian research I want to discuss is the report *When Words Fail* (Australian Industry Group 2012). The research was undertaken by the Australian Industry Group (AiG) and funded by the (then) Australian Government Department of Education, Employment and Workplace Relations through Vocational Education and Training (VET) National Programs.

Many in Australia will be familiar with this report. Its focus is on the importance of literacy and numeracy skills in workforce development. One of the key findings was that 75% of respondents reported that their businesses were affected by the low levels of literacy and numeracy of all or some of their employees. Another key finding was the importance of linking workplace literacy and numeracy training to productivity through RIO - Return on Investment measures. Return on Investment figures are calculated by dividing the return on an investment by the cost of the investment and the sum expressed as a ratio.

Recommendations of the report were largely designed to influence very specific local policy development. Specifically, three (of nine) recommendations are: –

1. Position employers at the centre of the National Foundation Skills Strategy

Given the views expressed by employers about workplace literacy and numeracy it is important to view them as a key agent for change and enable them to be prominent in the implementation and the biennial review of the National Foundation Skills Strategy.

2. Re-focus the strategic direction of workplace LLN

The decision to create the National Workforce and Productivity Agency is a significant policy orientation which will enable industry to drive workforce development. Given the focus of this new Agency it is appropriate that workforce LLN also be included within its scope. It is recommended that the responsibility for workplace LLN programs, including WELL (Workplace English Language and Literacy Program)¹, be transferred to the Agency.

3. Incorporate Return on Investment measures into LLN workplace training

The use of Return on Investment indicators provided a key focus for employer involvement and trainer planning and preparation in the project. Return on Investment measures could be incorporated into all workplace LLN programs. As an initial step it is proposed that a set of measures be developed which include but are not restricted to: Productivity; Quality; Safety; Communication; Compliance; Further training; and Promotion (AiG 2012:vi-vii).

In this report Literacy and Numeracy are viewed as work-related skills that provide the foundation for the development of an appropriately skilled workforce – it is essentially the Human Capital argument.

The second research program is described in the book *The Global Auction: The broken promises of education, jobs and incomes*, first published in 2010 by Phil Brown, Hugh Lauder and David Ashton. The Economic and Social Research Council, the major research funding body of the UK, funded this research. The authors are senior academics at major UK universities.

The book reports on an ambitious project:

Our purpose is ...to understand the future of the American Dream, a task that can no longer be restricted to studying what lies within national borders. The world has become more integrated and networked, especially in economic activities. The market value of American workers is no longer judged solely in comparison to their neighbors. It is judged in a global auction for jobs. To capture these changes and what they mean for American and European workers and families. (2010:2)

In pursuit of these aims, the authors set out on a journey that included seven countries – America, Britain, China, Germany, India, Singapore, and South Korea, visiting 18 cities, including the Asian economic powerhouses of Bangalore, Beijing, Guangzhou, Hong Kong, Mumbai, New Delhi, Seoul, Shanghai, and Singapore. Although this is a book by UK academics, you will notice that they orient themselves to the USA, and that their empirical work covers the US, Europe and Asia.

We wanted to test the official account of how middle-class prosperity could be delivered in the future. Is it true that a knowledge driven economy accelerates the demand for employees with a college education? Will it be enough for individuals to invest in their talents and abilities as they had done in the past to secure a well-paid job via educational achievement? Could America succeed in attracting a large share of the global supply of high-skill, high-wage jobs? (2010:2)

The authors make a complex argument. I want to draw your attention to only two aspects of it.

The first is **the globalisation of high skills associated with higher education**. Global higher education enrolments have doubled from 1995-2005 – from 33.4 to 62.9 million. China had (in 2006) 27 million students enrolled in higher education – more than the US. As access to higher education has become more widespread it has outstripped the demand for high-skilled workers, and this has placed downward pressure on wages everywhere.

The Australian Industry Group's interest in literacy and numeracy education may, at least in part, be traced to this finding – there is a global auction for jobs and Australian employers are increasingly competing with global firms who have access to a highly trained, probably contingent, workforce which may be local or may be remote but is literate and numerate enough to work locally. Globally oriented companies have access to a skilled workforce that is relatively inexpensive and very willing. The prominence of the Return on Investment metric in the research report reflects the urgency with which AiG views global competition.

From many potential employees' perspective the payoff for successful completion of higher education is likely to be disappointing. We have generally expected education to lead to jobs that lead to financial and lifestyle rewards. Now, in many industries and in many parts of the world, education just gets you into the category of 'under consideration'. It doesn't guarantee you a job, and it doesn't guarantee you a good income.

The second aspect of Brown et al's argument that I want to touch on is Digital **Taylorism**.

Taylorism, according to Wikipedia (2014), ‘was a theory of management that analyzed and synthesized workflows. Its main objective was improving economic efficiency, especially labor productivity. It was one of the earliest attempts to apply science to the engineering of processes and to management.’

Digital Taylorism involves ‘translating the knowledge work of individuals into working knowledge –through the extraction, codification and digitalisation of knowledge into software prescripts that can be transmitted and manipulated by others, regardless of location’ (Brown & Lauder 2012). This process routinizes work that would otherwise be creative or manual work, reliant on individual human effort, skill and thought. Control of work routines can be remote because it is built into the software.

Both intellectual and manual work have been digitised, with robots playing an increasingly important role in manufacturing and software programs codifying and routinizing professional decision-making and problem solving. In both cases reading and writing are currently required in order to use the software and to complete quality assurance and other documentation. Without a literate and numerate workforce AiG’s members cannot exploit the new modes of work their global competitors can access. Australia does not yet have the vast numbers of highly educated under-employed young people who are available in India and China and elsewhere to do this kind of work. Many companies are, however, employing people at a distance and paying them less. It can be difficult to control employees remotely, but not impossible.

What I am suggesting here is that the specific literacy and numeracy research program conducted by AiG in relation to local workforces can only be properly understood in the light of the research conducted by Brown, Lauder and Ashton. The plight of low paid, low skilled workers in Australia can only be understood if we attend to the global labour market as a whole and the impact of the global auction for jobs.

The third research project is reported in *An Avalanche is Coming* (2013). This report was commissioned by the Institute of Public Policy Research (IPPR). IPPR is an independent progressive think tank in the UK. The IPPR commissioned Pearson Research to undertake the research. The research question, summarized from the executive summary is this:

Is a university education a good preparation for working life and citizenship in the 21st century?

Or, more precisely

Will it continue be seen as good value given the remorseless rise in the cost of university education over the decades?

This report, too, covers a great deal of ground and I will foreground only one aspect of its findings. It takes up and extends the arguments of the global auction for jobs in relation to higher education. It focuses on the consequences of the radical expansion of higher education sector globally, not so much for employment but for education as an endeavour but also as an industry sector, itself. It points out that national governments are no longer in control of higher education – education is a global industry with global participation and global standards. It identifies the high debt levels that governments and individuals incur in achieving increased higher education participation and argues that national governments cannot sustain traditional models of higher education. It points out that there are now many non-university providers of higher education globally, and that universities are increasingly competing with each other through developments like MOOCs and other forms of digital delivery.

It raises the question: How does a government ensure the quality of a degree, or accredit a degree when it is from an institution in another country – or situated over a number of countries. The higher education sector is increasingly diversified and issues of accreditation are fundamental and increasingly complex. The authors don't raise this matter directly but their very own employer – Pearson – has elements of its higher education activities accredited by the UK government – and questions of conflict of interest have been raised in relation to some of these activities.

This increasingly diversified higher education sector will lead – indeed, is already leading – to the bundling and unbundling of awards, and of higher education generally. What this means is that students from around the world will increasingly be able to study one or two subjects from different institutions, complete various forms of assessment, potentially building distinctive portfolios that employers

will value for specific niche jobs over a long or a short period of time. People are likely to keep their CVs and work profiles current by studying and gaining credit for the most up to date subjects in their professional fields. Universities or private providers all over the world may provide these opportunities.

This development has direct implications for literacy and numeracy education and for other forms of foundational skills development. In relation to foundational skills, especially dispositional skills like ‘employability’ or ‘work readiness’ this is already happening. The new private Torrens University is offering online courses in Workplace Etiquette and similar subjects for commencement in 2014. Bill and Melinda Gates have commissioned research on the usefulness of MOOCs and other forms of digital delivery to provide access education for students who would otherwise not qualify for a college education.

In this short presentation I have not done justice to any of these research projects – I have merely touched on some aspects which I believe to be salient to any consideration of adult literacy and numeracy research. My argument is that each of these research reports has important implications for literacy and numeracy research, for understanding how foundational skills fit into the global higher education sector and the global labour market, and for understanding how global forces play out in local sites, like Australia.

Who is undertaking the research? For what purpose?

We have also been asked to address the question of who is undertaking this research, and for what purpose.

I’m sketching the argument here that, like the higher education sector generally, the research landscape has expanded and diversified dramatically. There are new players in the field and their research has as much, or in some circumstances more, authority than traditional academic research in policy debates. This new diversity can potentially provoke productive debates and discussions in arenas that may impact on policy. In my view there is no realistic possibility of our research influencing policy unless we take account of the whole research/policy environment of which we want to be a part. In taking account we need to consider where the research is coming from, who is paying for it, and in whose interests it is conducted. I chose these three research projects because, taken together, they

provide an illuminating picture of the rich tapestry of research of which we are a part.

In the case of *The Global Auction*, the research is undertaken by academic researchers with excellent traditional research track records employed by distinguished universities. Their work is publically funded through the UK Economic and Social Research Council. In that sense it is very traditional.

The authors have not, however, confined themselves to their familiar audiences – academics in similar disciplines in the UK around the globe. Their book is explicitly directed to a US audience (they recognise the importance of global reach) and it is written in a style that is likely to appeal to interested readers well beyond academia. They have made targeted approaches to policymakers, and industry, in the UK, Europe and globally and their presentations to the World Bank are on the web. There is a clear aim to influence public debate and public policy.

In contrast, *An Avalanche is Coming* was written by commercial researchers employed by a large multinational company. This is by no means uncommon. Governments increasingly commission professional service companies (PWC, McKinsey) to provide research rather than do it in-house or commission a university. In this case, the choice of Pearson is an interesting one. Pearson is the largest publishing house in the world. While its print market is declining, its digital market is increasing exponentially – 9% according to its mid year report, with a 19% increase in digital registrations.

To quote the the blog (entitled African Outcomes) of the CEO, John Fallon : ‘the world is nibbling at the edges of intractable learning problems, Now is the time for scale.’

<http://blog.pearson.com/african-outcomes/September 24 2013>.

Pearson has refashioned itself from a publisher to a leading Education Company ‘providing educational materials, technologies, assessments and related services to teachers and students of all ages.

‘Though we generate approximately 60% of our sales in North America, we operate in more than 70 countries. We publish across the curriculum under a range of respected imprints including Scott Foresman, Prentice Hall, Addison-Wesley, Allyn and Bacon, Benjamin Cummings and Longman.’

We are also a leading provider of electronic learning programmes and of test development, processing and scoring services to educational institutions, corporations and professional bodies around the world' (<http://www.pearson.com/about-us/education.html> May 5 2014).

Much of that new work is with higher education, particularly MOOCs. Pearson is invigilating examinations and undertaking other forms of accreditation, which is shifting the higher education landscape. They are 'a player' in higher education globally, and they are an increasingly significant player. When they conduct this research they do so as an interested party (and some would argue that the same applies to university-employed academics researching higher education). In making these comments I am not reflecting negatively on this research. The research, analysis and conclusions are, in my view, defensible, and the researchers are in many respects well placed to do the work.

It is nevertheless the case that they have an interest in promoting the developments they seek to describe. In Australia, for instance, this and related work informs the views of Andrew Robb, who investigated the role of MOOCs and digital delivery generally in reshaping the Australian higher education industry (<http://www.andrewrobb.com.au/Media/Speeches/tabid/73/articleType/ArticleView/articleId/1440/Speech--Online-Education-in-the-Asian-Century--The-Australian-Opportunity.aspx>) The financial viability of Pearson relies on the expansion and diversification of higher education globally and the promotion of digital education.

With this context in mind it is easier to understand why AiG was awarded a significant sum by government to conduct a study on employers' perspectives of literacy and numeracy at work. While the explicit recommendation of the study was to influence public policy it is also the case that the very conduct of the study situated employers differently in relation to literacy and numeracy education. We know that participating in research can change the views and understandings of participants. My reading of the report is that a significant aim of the project was to raise awareness of global competition in relation to a literate and numerate workforce and to create a sense of urgency around the issue. In other words, if literacy and numeracy are the answer, what is the question? And the question is: 'how can we be more competitive in a hyper competitive global market with a cheap labour force globally available?'

In this sense the research was not only designed to *influence* policy, it was also designed to *implement* government policy around global competitiveness.

This raises many questions for me about the future direction of literacy and numeracy research – nationally and internationally. Most immediately, for our purposes here, how do we frame a research agenda that speaks into broader policy debates without being confined to them?

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¹ The Workplace English Language and Literacy Program (WELL) is a program, commencing in 1991 and funded by the Australian federal government, that assists businesses to train employees in need of improving their English language, literacy and numeracy needs.