Adult literacy provision and social class: Australian contexts

Stephen Black and Barbara Bee

Faculty of Arts and Social Sciences, University of Technology Sydney, Australia

Corresponding author: Stephen Black: [Stephen.black@uts.edu.au](mailto:Stephen.black@uts.edu.au)

Address: Faculty of Arts & Social Sciences

University of Technology, Sydney

Bldg 10, Level 4, 235 Jones Street, Broadway 2007, New South Wales, Australia

**Adult literacy provision and social class: Australian contexts**

Adult literacy provision began in Australia during a radical education era in the 1970s, and yet in recent decades social class as a construct has been largely absent in the academic literature on adult literacy. We argue however that social class is essential to understanding adult literacy provision and furthermore that working class people have not been well served by this provision since the time literacy assumed enhanced status as human capital from the 1990s. We make our case through asking and responding to questions relating to the social class backgrounds of students and their teachers, how people are assessed to need literacy, what is taught, who undertakes research, and who influences adult literacy policy. At the macro, structural level of analysis we discuss the influence on adult literacy provision of the ruling class agendas of international agencies (i.e. the OECD) and national agencies representing capital. At the meso level we discuss how the main adult literacy provider, technical and further education (TAFE), has failed to meet the adult literacy needs of working class students due to neo-liberal reforms. And at the micro, classroom level we discuss some implications of class disparities between adult literacy teachers and their students.

Key words: adult literacy, social class, neo-liberalism, educational inequalities

**Introduction and background**

This article considers adult literacy provision in Australia through a social class lens. We contend that whilst adult literacy provision in Australia first developed in a radical education era in the 1970s in which politics and social class were often prominent (see Harris 2014 for a reflective account of that era), through the coming decades social class has been largely absent in the adult literacy literature. As educational research paradigms have shifted in these decades, this absence of social class in adult literacy studies corresponds with its general underrepresentation in adult education theory (Nesbit, 2006), and its ‘erasure’ as a construct in the field of applied linguistics (Block, 2014). We further contend that whilst adult literacy provision has always targeted working class people, in the past two decades at least this provision has not been in their best interests as literacy conceptually has become synonymous with human capital and has been heavily promoted by ruling class interests. In this article we outline how the ideology of neo-liberalism has played a key role in these developments with its focus on competitive individualism and the primacy of the market, and it has taken a grip on the adult literacy field and education more generally, exacerbating inequalities in educational opportunities. To better understand the current field of adult literacy it is time once more to highlight politics and to make social class explicit.

***The beginning and nearly the end of adult literacy provision in TAFE***

The context for this article is adult literacy provision in Australia which for the most part involves programs in the vocational education and training (VET) sector. This has long been the sector where federal and state governments have funded and delivered most adult literacy programs. It began in earnest from the mid-1970s in the social democratic political era that followed the election of Gough Whitlam as Australia’s Prime Minister. Within this era public VET provision under the rubric of Technical and Further Education (TAFE) expanded its values beyond training and ‘skills’ to include lifelong education, sometimes called ‘second-chance’ learning, following the Kangan Report (Australian Committee on Technical and Further Education, 1974). This new, no-fees TAFE was designed to encourage the participation of working class people in VET.

The decade of the 1970s also represented the ‘discovery’ of adult literacy as a significant problem in many western societies, giving rise to the first national adult literacy campaigns in the UK based largely on volunteers (e.g. Charnley and Jones, 1980; Mace 1979). This was followed soon after with the rapid uptake of adult literacy provision in Australia. And so began the development of adult literacy in TAFE, often labelled in different states as adult basic education (ABE, the preferred term in New South Wales [NSW]) or adult literacy and basic education (ALBE, the preferred term in Victoria), which by the mid-1980s was being described in one TAFE NSW departmental study as a ‘growth business’ (Rustomji and Dent, 1986). Such a description, however, would hardly fit the field of adult literacy in TAFE today as funding cuts have affected all forms of provision except jobseeker programs, the neo-liberal emphasis on ‘user-pays’ has restricted enrolments in the remaining adult literacy courses, and federal and state government promotion of competition between VET providers has resulted in a steady dismantling of TAFE as the nation’s ‘public’ VET provider. Currently private providers account for about half of national VET training hours (NCVER, 2015).

This article does not aim to provide a detailed history of adult literacy provision in TAFE and VET generally, rather, to reiterate, we make the point that in the recent decades social class has rarely been mentioned in adult literacy policy, research or practice in Australia, and that the interests of working class people have not been well served during this time. Social class may well be implied in some of the academic literature, and it may well reside in the background beliefs of some teachers of adult literacy, but rarely does it come to the fore as an explicit construct that is documented. This situation we find incongruent with the realities of social class which we see to be essential for understanding the field of adult literacy in Australia and which we will demonstrate in this article.

***Naming the field***

An issue we need to confront early in this article is nomenclature. We have used the term adult literacy to describe the focus of our study but there has long been uncertainty over what to call the field. ABE and ALBE in TAFE contexts have already been mentioned. Numeracy often accompanies mention of literacy, as in literacy and numeracy (L&N) teaching, as too is the addition of languages (i.e. LLN – language, literacy and numeracy). And in recent years encapsulating all of these terms at a policy level in Australia is ‘foundation skills’ following the official release of the National Foundation Skills Strategy (NFSS) for adults in 2012 (SCOTESE, 2012). This shift is the result of viewing literacy primarily as a human capital skill enabling a broader redefining of the adult literacy field to include a strong focus on employability. For our purposes in this article, which include a critique of the foregrounding of human capital values, we will continue to use the term adult literacy, as do some of the key researchers of adult literacy outside Australia (e.g. Hamilton, 2012).

***Social class and neo-liberalism***

We need to briefly outline what we mean in this article by social class and neo-liberalism. Concurring with the recent work by Block (2014), we see social class from its Marxist origins as essentially materially/economically-based, and it can be measured in a socio-economic, stratified sense according to factors such as one’s income, occupation and formal educational levels, usually falling within the term socio-economic status (SES). We also view social class culturally as ‘lived experience’, expressed as a range of dispositions which Bourdieu refers to as ‘habitus’, with some dispositions conveying higher status/class and ‘distinction’ in society (e.g. Bourdieu, 1984). Underpinning our view of social class, and notwithstanding various critiques of Marxist concepts as deterministic or economistic, we concur with the view which we reflect strongly in this article that ‘the ideas of the ruling class are in every epoch the ruling ideas, i.e. the class which is the ruling *material* force of society, is at the same time the ruling *intellectual* force’ (Marx and Engels, 1970, p. 7). By the same token, we acknowledge the complexities of social class, and that at times, as this article indicates, it intersects with other identity constructs such as gender, race and ethnicity.

We see neo-liberalism as an ideology concomitant with advanced capitalism in which the market reigns supreme and has resulted in the exacerbation of inequalities in society, in particular in material wealth and educational opportunities. As Harvey (2005) explains, neo-liberalism proposes the advancement of human well-being by liberating individual entrepreneurial freedoms within a context of strong private property rights, free markets and free trade. In recent decades the market logic of this form of advanced capitalism has ‘cascaded’ to all levels of education – schools, universities and vocational/technical education, in all western nations to the extent that, according to Connell (2013, p. 109): ‘Neoliberal politicians, businessmen, measurement experts, economists and education system managers now form the arena in which education policy is made’.

***The authors***

Before outlining the main themes and arguments in this article, it may be useful, especially in view of the ideological nature of the article, to locate ourselves in it as authors, as a means of indicating how our research interests in this article have been shaped by our individual life stories. And this may go back a long way as we discovered from reading each other’s doctoral theses. We both experienced formative childhood years in bombed-out English working class communities that suffered the devastation of the second world war (Coventry in the case of Barbara, East London in the case of Stephen), and we both experienced first-hand in various ways the inequalities of a class-based ‘tripartite’ English education system (described in a contemporary account at the time by Jackson and Marsden, 1962). In our later professional lives we have sought to identify with and promote the interests of working class people who lack educational opportunities in large part through their material life circumstances. We reflect this in our critical literacy research and practice orientations, drawing on Freirean concepts and understandings of literacy as social practices.

Both of us have had long careers working in the field of adult literacy. With Barbara it began in the late 1970s with her work in TAFE NSW, first in Outreach, and then in the Women’s Coordination Unit in ‘Special Programs’. With Stephen it began with prison education programs in 1980 and full time adult literacy teaching in TAFE NSW from the late 1980s. We both continued working in TAFE in various adult literacy and related roles for many years until retirement several years ago. Thus combined we have experienced adult literacy provision in TAFE NSW for almost its entire history of close to four decades, a period in which much has changed, and in recent times not all of it favourable for working class students.

***The way we were in adult literacy***

In light of our long engagement with the adult literacy field, we briefly explain what adult literacy provision was like at the time when we first began working in it. This will provide some context to the arguments we make later in the article.And to add a distinct flavour to those early days we draw attention to a plenary address at the 1984 national conference of the Australian Council for Adult Literacy. The speaker was Joan Kirner, a state Labour member of Parliament (and later Premier of the state of Victoria), and as part of her address she stated: ‘Freire saw literacy as a weapon to be used in the transfer of power from the powerful well-resourced few to the disempowered under-resourced many – the workingclass. I share this view’ (cited in Grant, 1987, p. 149). It would be unimaginable to find any mainstream Australian politician making similar comments about literacy today.

But whilst we might like to suggest that critical Freirean concepts of conscientisation and liberation featured prominently in adult literacy pedagogy in its early days in TAFE in the 1970s and 80s, it would be a difficult argument to sustain. Undoubtedly it did feature, in particular in the work of one of this article’s authors (Bee, 1990; 1993; 2014), one of the first teachers in TAFE NSW to apply Freire’s methods, but there is little evidence that such a pedagogical approach was widespread. Moreover, Lee and Wickert (1995) in analysing the discourses of adult literacy pedagogy in Australia based on early documentation of the field, note the absence of liberationist literature for social change. Rather, the field was dominated by what they describe as a humanist/liberal progressive discourse, with teachers focusing primarily on meeting the perceived needs of individuals in a reciprocal teacher/student relationship. Drawing on students’ own experiences and ‘empowering’ them to take more control over their lives, though not necessarily in a Freirean, conscientising sense, was a central feature of the discourse of adult literacy pedagogy, as reflected in the contemporary research (e.g. Grant, 1987). Provision focused on small group tuition (with a 6:1 ratio), and sometimes individualised, 1:1 tuition. It was a student-centred pedagogy in which learning was ‘negotiated’ between students and teachers (see Osmond 2016 for a reflective account of this pedagogy). Flexible, needs-based curriculum of this type enabled both students and teachers to have a degree of agency in the classroom, and, if teachers wished to pursue it, also enabled the implementation of a Freirean/liberationist agenda (as in the case of Bee, 1990; 1993; 2014).

It is important to mention other TAFE programs that included adult literacy – Outreach programs for example, which fell within what was once known as ‘Special Programs’ in TAFE NSW (Bee, 2014). These programs, which in the early days included specific Women’s programs undertaken through the Women’s Coordination Unit (closed down by the state Liberal government in 1988), were largely TAFE ‘community’ programs that were often delivered off-campus in local community centres. These programs frequently included adult literacy classes and they were designed to ‘reach out into the local community, identify needs which it might be possible to satisfy and when possible, assist people to overcome their personal barriers to education and/or employment (NSW TAFE Annual Report cited in Bee, 2014, p. 71). They often incorporated a critical, liberatory ethos. Bee (2014, p. 174) for example, describes some Women’s programs as ‘radical spaces for women to cross the boundaries of traditional gendered views of knowledge as well as raising expectations’. But these programs were rarely documented in an official way that would have featured in the analyses of adult literacy teaching discourses undertaken by Lee and Wickert (1995).

All students voluntarily chose to participate in TAFE adult literacy courses and all courses were fee-exempt. From the early 1990s (DEET, 1991), however, the discourses of adult literacy provision started to change as governments funded jobseeker and workplace programs primarily for their human capital outcomes, and some literacy students had far less choice in participating. Interestingly, Lee and Wickert (1995, p. 145) suggested that adult literacy teachers responded to this discourse with ‘mute opposition beneath passive acquiescence’. Whilst there are documented exceptions indicating resistance (e.g. Black 2010), we would contend that this disposition may reflect to some degree the social class of the teachers, which we explain in more detail later in this article.

In the following sections of this article we provide our case for arguing that social class features in all aspects of adult literacy provision and is not necessarily in the best interests of working class people. We do this by asking some key questions, beginning with who are the adult literacy students and who are the teachers? This will be followed by questions regarding how people are assessed to need literacy provision, what is taught (the curriculum), and what are the policies that determine both of these pedagogical aspects. Finally, we address questions of who does the research, and who influences policy.

**Who are the students?**

To determine who the adult literacy students are in TAFE programs to a large extent involves tracing government funding, and for the past 25 years the federal government has provided funding for two main categories of students – those who are termed jobseekers, and those who are workers. Currently the jobseeker funding is provided under the Skills for Education and Employment (SEE) program. The workplace funding under the Workplace English Language and Literacy (WELL) program was recently discontinued as part of the first budget of the incoming conservative coalition government in 2014. But it should be noted that both programs until this time had been funded continuously (the jobseeker program under various names) since the 1991 Australian Language and Literacy Policy (ALLP, see DEET, 1991), a national policy recognised primarily for its promotion of human capital values (Lo Bianco and Wickert, 2001). Thus it is fair to say that a considerable number of adult literacy students for at least the past quarter of a century have fallen into either of these two program categories. And while this student population group has been described in various ways, including ‘disadvantaged’, ‘socially excluded’, ‘hard-to-reach’ or ‘marginalised, it is rare to find them described, as we do in this article (and elsewhere, see Bee, 2014; Black and Yasukawa, 2014) as ‘working class’.

***Jobseeker programs***

Under the jobseeker programs, various jobseeker agencies, in particular the main government agency Centrelink, refer their clients (we think coerce might sometimes be a more appropriate term) to attend adult literacy classes if lack of literacy and other basic skills are considered to be factors contributing to their inability to find a job or access training. These jobseekers are, almost by definition, of working class status, given that on two of the key measures of class and SES – income and educational level - there is likely to be a strong fit. For example, in addition to being on income support, as a recent evaluation of the SEE program states, more than half of SEE participants have completed Year 10 or less of schooling (ACIL Allen Consulting, 2015). Many of these jobseekers fit within a number of welfare sub-categories, including people who are young, mature-aged, single parents, those with disabilities, and those who are culturally and linguistically diverse (Guenther, Falk and Arnott, 2008). The recent evaluation of the SEE program (ACIL Allen Consulting, 2015) indicates that women and Indigenous Australians are overrepresented as participants, and overall 68% of participants are culturally and linguistically diverse. Thus, while this article indicates the significance of social class, it also intersects with other identity constructs including gender, race and ethnicity.

***Workplace programs***

The workplace programs under WELL tell a similar story, that particular types of people are targeted – primarily low paid/low status workers. In many work contexts they are referred to as ‘production’ or ‘factory-floor’ workers; in other work contexts they may be ‘aged care’ workers. In almost all cases they are the lowest paid employees in companies, and it is usually their workplace managers or supervisors who determine that these workers need improved literacy and/or numeracy skills and who apply for WELL funding. The rationale for workplace literacy programs is based on the belief that improved literacy (and numeracy) skills will automatically translate into improved productivity and hence profitability (this discourse is discussed later in the article). Thus the programs are delivered primarily from the perspective of the employers within a productivity perspective. In some industries (aged care in particular), the enterprise’s obligation to comply with new regulations and accreditation procedures may be a motivating factor for a WELL program. According to a recent evaluation of WELL (Third Horizon Consulting, 2012), in the period 2007-2011 most WELL programs funded were in the health care sector in response to the growth in the aged care market (i.e. targeting aged care workers), followed by the manufacturing and construction sectors. The manufacturing sector in particular has long been a strong promoter of workplace literacy and numeracy skills for its workers (e.g. Manufacturing Skills Australia, 2015). As with the jobseekers above, the social class of workers will necessarily intersect with other identity categories, such as ethnicity in the case of manufacturing workers, reflecting the migrant, non-English speaking backgrounds of many of these workers, and ethnicity/gender combined in the case of low paid aged care workers.

***Other adult literacy programs in TAFE***

There are other types of adult literacy students in TAFE but documentation is often lacking on their socio-economic backgrounds. For example, there are vocational students who receive literacy and numeracy support to assist them in their vocational courses. Predominantly these programs focus on literacy and numeracy support in traditional vocational/trade areas in TAFE, such as motor mechanics, panel-beating, fitting and machining, electrical trades, child care, aged care and hairdressing, areas that could be regarded as low paid and low status occupations (perhaps not electrical trades, but the latter three in particular).

From the beginnings of the ‘growth’ of adult literacy provision in TAFE in the 1980s, there have also been students who have enrolled in small group and individualised ‘community’ adult literacy programs, either on- or off-campus, including components of Outreach and specific Women’s programs which targeted isolated, housebound women. These programs fall firmly within the lifelong/‘second chance’ learning remit of the early Kangan version of TAFE, and in NSW these programs provided the mainstay of adult literacy provision for many years with adult literacy teachers and their representative union and professional associations fighting hard to ensure they remained fee-exempt to students (see NSW Adult Literacy & Numeracy Council, 2003). Specific data on the backgrounds of these students are often lacking, though in the Outreach and Women’s courses students and communities were specifically targeted because of their working class marginality. In many cases these courses originated from a ‘door-knock’ in blocks of public housing to begin the process of determining the educational needs of local community members (Bee, 2014). Studies of the more formalised (but nevertheless ‘community’) college-based small group provision have indicated that most featured adult students who were low SES and disadvantaged in various ways, often unemployed, and in many metropolitan TAFE colleges the students were also culturally and linguistically diverse (e.g. Bee, 1990; 1993; Black and Thorp, 1997). The shift in TAFE in recent years to a ‘user-pays’ philosophy commensurate with the neo-liberal focus on individualism and market forces (reflected in the current TAFE NSW policy euphemistically called *Smart & Skilled*), has ensured that for local community members, these forms of adult literacy provision are no longer ‘free’. Henceforth in recent years student numbers have declined to the point where, in a number of TAFE NSW colleges at least, ‘community’ adult literacy provision has almost ceased.

***The role of the OECD’s international surveys***

It may seem obvious, common sense in fact, that those we term the working class - the lowest paid, those who are unemployed, and those with the lowest SES, are the ones who are targeted by government literacy programs, because these are the people long asserted to be most in need of improved literacy. For the past two decades international literacy survey data under the auspices of the OECD have been used to substantiate this assertion (Australian Bureau of Statistics [ABS], 1997; 2008; 2013). These OECD surveys, and the Adult Literacy and Life Skills (ALLS) survey in particular (ABS, 2008), have strongly influenced policy and practice in Australian adult literacy. The ALLS survey results are used to underpin the rationale for the NFSS, providing the essential data to show that there is a literacy and numeracy ‘crisis’ in Australian society which affects the nation’s economic standing in a globally competitive world. These survey data show that people with the lowest literacy scores include those: with 10 years or less formal education; who are unemployed; who are employed in areas of work such as manufacturing and construction; and in particular who are classified as labourers and machine operators. These groups of people, essentially low SES, overwhelmingly comprise the lowest levels on the survey’s 5 levels of literacy/numeracy competency, in particular those who fall below level 3, regarded by the OECD as the ‘minimum required for individuals to meet the complex demands of everyday life in the emerging knowledge-based economy’ (ABS, 2008, p. 5). Thus, for example, the manufacturing sector can claim ‘that in 2011-12 over 50% of the manufacturing workforce had literacy skills at a level that was below the level required to function effectively (i.e. **skill level 3**)’ (Manufacturing Skills Australia, 2015, p. 10. original emphasis).

***The absence of social class in the literature***

There is a general absence in the Australian adult literacy literature of references to the social class of those who fare so poorly in these surveys, about why this is so, and of the influence of the broader structural relations of poverty and inequality. Similarly with the literature in the UK where the provision of adult literacy programs and VET systems are comparable in many ways with those in Australia. From the beginnings of adult literacy provision in the UK with the volunteer campaigns of the 1970s, there has been little discussion of the social class of students beyond an occasional observation such as ‘the professional/managerial background was the exception’ (Charnley and Jones, 1980, p. 57). And in the ensuing decades in the UK, which have included a host of studies under the auspices of the National Research and Development Centre for adult literacy, a specific focus on social class as a construct has been largely absent. Of note however is recent work by Duckworth (2013) which draws on the theoretical work of Bourdieu to examine the intersections of class and gender in the learning trajectories of working class students in a northern England community.

**Who are the adult literacy teachers?**

Having considered the class status of adult literacy students, it is now time to consider their teachers. To date however the social class of adult literacy teachers has rarely been documented, though in the early UK literature on adult literacy involving volunteer tutors we do find some references to class backgrounds. Mace (1979) for example, identifies herself as typical of middle class (and mainly female) literacy tutors who ‘tend to be desk workers, people who make a living of some kind via literacy’ (p. 12). And going further back in time Mace explains that the roots of the 1970s campaigns can be related to the ‘rediscovery of poverty’ (p. 11) by the middle classes in England in the late 19th century and how ‘the idea of the literate, the educated, as the elite, with moral virtues and culture to donate to the poor and ignorant, dominated those early years’ (p. 12).

A recent study by Circelli (2015) throws some light on the social class backgrounds of Australian adult literacy teachers. Circelli surveyed ‘foundation studies’ teachers nationally through a convenience sampling methodology, using a range of social media and organisational networks which resulted in almost 700 respondents. The survey found that the majority of teachers were female (79%), most respondents were between 45-64 years of age, and 41% worked in TAFE. Their formal educational qualifications however, provide the clearest indication that foundation studies/adult literacy teachers are predominantly middle class. They are highly qualified with multiple educational qualifications – some with doctorates, many with Masters degrees (126 respondents), and a number described as ‘prolific’ (p. 27) with Graduate Diplomas (over 200 respondents).

While the social class of the adult literacy workforce and its possible implications have rarely been documented in academic forums (though Duckworth and Cochrane, 2012 in the UK touch on the subject), in the schools sector the social class of teachers has long been highlighted as an important factor. Connell et al (1982, p. 196) for example, in their seminal Australian study *Making the difference*, saw relations between teachers and students in comprehensive high schools signifying ‘the social separation between teachers as a group and the working class as a group, which embodies a profound disconnection between knowledge and social life’. More recently researchers of schools in the UK point to the ‘unacknowledged position of middle class normality’ to explain how teachers approach pedagogy in working class schools (Lupton and Hempel-Jorgensen, 2012, p. 612; Reay, 2006). Similar arguments in relation to adult literacy provision are rare, though the social class separation between adult literacy teachers and their students surely exists and has implications, especially for pedagogy. A US study in 1991, for example, notes that volunteer adult literacy organisations ‘uphold strong middle class orientations in such matters as interpretations and definitions of literacy, the type and method of training provided, and the goals they attempt to reach’ (Davis, 1991, p. 34). The point we make in this article is that the ‘social separation’ between adult literacy teachers and their students based on class differences merits discussion, where currently there is none, at least not in Australian contexts. For example, when Lee and Wickert (1995, p. 145) comment that adult literacy teachers respond to the human capital discourse with ‘mute opposition beneath passive acquiescence’, can this response be seen to reflect the social class background of teachers, and in what way? On the face of it, the highly educated, middle class social worlds of adult literacy teachers would appear to be in sharp contrast to their working class students. In material, power and dispositional senses adult literacy teachers are less likely to have experienced the lived realities of the students they are teaching.

**How are people assessed? What is taught?**

As we explained briefly in the introductory section of this article, in the early days of adult literacy programs in TAFE there was no defined assessment or curriculum, rather, both were ‘negotiated’ between students and teachers. Under the principle of the ‘primary of the individual’ (White, 1983, p. 118), it was the students’ perceptions, needs and aspirations that determined their literacy assessment and the content of what they were taught. This started to change from the early 1990s as curriculum became accredited and a national reporting framework was developed (Coates et al., 1995). Currently, every participant in the SEE program and the (now disbanded) WELL program is obliged to be assessed, and their course progression recorded, according to the Australian Core Skills Framework (ACSF). The ACSF (see <https://www.education.gov.au/australian-core-skills-framework> ) is a five-level assessment tool developed originally in the mid-1990s as the National Reporting System (Coates et al., 1995) to report individuals’ language, literacy and numeracy skills against national benchmarks. People are assessed in five core skills – learning, reading, writing, oral communication and numeracy – that range hierarchically in levels of competence from low (1 and 2) to high (4 and 5).

The ACSF establishes national literacy and numeracy standards and can be viewed as part of a nationally regulated, ‘top-down’ competency-based training agenda constructed according to the prevailing ideologies of political and industrial elites. In the (now former) WELL program for example, only those workers assessed at level 3 and below on the ACSF could receive assistance with literacy and numeracy, and this assistance could only be provided to workers enrolled in units of competency derived from peak industry endorsed national training packages. In the SEE program, federal government funding to providers is conditional on students/clients demonstrating progression according to the ACSF levels, and the regulatory ‘audit culture’ of the VET system (Black and Reich, 2010) aims to ensure compliance with these national standards. This tightly controlled policing of assessment and curriculum in adult literacy programs is designed to ensure that there can be little deviance in program delivery practices from the national standards established by peak ruling industry bodies and their representatives (Black, 2010).

***Mapping against OECD measures***

There is moreover an international dimension to Australian adult literacy assessment and curriculum. In recent years the ACSF levels of competency have been mapped against those of the OECD’s international survey, the ALLS (Circelli et al., 2012). Thus assessing and monitoring student literacy achievement according to the ACSF aligns with international OECD measures of literacy which have gained increasing policy prominence in Australia (SCOTESE, 2012). It could be argued therefore that developments in Australian adult literacy policy and practice increasingly fall within the regulatory function of the ‘global eye’ of the OECD (Lingard, Martino and Rezai-Rashti, 2013, p. 540). As various researchers point out (e.g. Sellar and Lingard, 2013) the OECD plays a role beyond that of ‘think-tank’ supporting the interests of rich nations. Increasingly it takes on significance as a policy actor promoting education policies that are congruent with capitalism in its neo-liberal form. In social class terms, the dominant and globalised ruling class agenda of the OECD and its constituent nations reaches into local adult literacy classrooms through assessments and curriculum that are aligned with that agenda, a process which has been documented in Australia (Black and Yasukawa, 2016; Yasukawa and Black, 2016) and quite extensively in other OECD countries (e.g. Hamilton, 2012; Hamilton, Maddox and Addey, 2015; Pinsent-Johnson, 2015).

**What are the policies?**

The NFSS provides the dominant policy that currently drives adult literacy provision in Australia, and the human capital values it promotes can be traced back to the previous 1991 national policy, the ALLP (Black and Yasukawa, 2016). According to the NFSS, literacy has value primarily for its economic benefits for individuals, enterprises and the national economy, and the strategy begins with a quote from the federal Minister for Tertiary Education that ‘More than 7.5 million Australian adults do not have the literacy and numeracy skills needed to participate fully in today’s workforce’ (SCOTESE, 2012, p. 1). This political ‘deficit’ perspective contrasts strongly with Joan Kirner’s Freirean comments about literacy delivered three decades earlier. The key drivers of the NFSS are cited in the strategy document, including the Productivity Commission, and industry representatives such as the Australian Industry Group, Industry Skills Councils and Skills Australia (which was later renamed the Australian Workforce and Productivity Agency). As we indicated earlier, the OECD survey data the ALLS, provides the underpinning rationale for the strategy/policy, in particular the large percentages of the Australian adult population that fall below that ‘minimum required’ level 3 established by the OECD. The NFSS states that the nation’s leading intergovernmental forum, the Council of Australian Governments (COAG), has also adopted the level 3 criterion for individuals to meet ‘the complex demands of work and life in modern economies’ (SCOTESE, 2012, p. 4). Thus, legitimised by international and national political and economic ruling elite groups such as the OECD, COAG and the nation’s leading productivity, industry and skills organisations, the NFSS provides the case for the national imperative to improve adult literacy and numeracy levels. In this discourse literacy has become naturalised as a key instrument of human capital formation in a globally competitive world.

**Who does the research?**

Research in adult literacy not surprisingly has traditionally been undertaken in the higher education academy, a sector where academics might reasonably be seen as middle class. Block (2014), for example, in an analysis of the broader field of applied linguistics, attempts to explain why academics in their studies of inequality have largely erased ‘redistribution’ arguments involving social class in favour of a focus on identity factors such as race and gender. He argues that as researchers’ interests are shaped by their personal and individual life stories, and as academics largely live in a middle class world, there is ‘often a tendency to impose on research a view of the world that emanates from and reflects a middle class position in society’ (p. 170). Thus Block (2014, p. 170) explains:

A possible explanation for why so many academics in the social sciences and applied linguistics have so little to say about social class is that it is not a dimension of human existence that is immediately obvious to them.

Whether, or to what extent these arguments relate to higher education researchers in the field of adult literacy remains unexamined.

**Whose research influences policy?**

What is clear in the Australian adult literacy policy context, however, is that since the 1991 national policy on language and literacy (DEET, 1991), academics in higher education have had increasingly less influence on adult literacy policy. As the NFSS demonstrates, the research that counts in a policy sense is based primarily on ‘survey literacies’ (Hamilton, 2015) produced by the OECD, and the complementary promotional work of industry and skills groups and private consultants, sometimes termed ‘policy entrepreneurs’ (Black and Yasukawa, 2016). The NFSS acknowledges the influence of these groups in its citations, in particular research by the Australian Industry Group (AIG, 2012), a peak national organisation representing the interests of mainly private industry. The Australian Industry Group has been funded extensively by the federal government in recent years to undertake adult literacy research, and it should be of little surprise to find that the first recommendation of its major research report (2012, p. 78) states: ‘Position employers at the centre of the National Foundation Skills Strategy’. This type of research *for* policy (as distinct from research *of* policy undertaken largely in higher education, see Lingard, 2013), represents the interests of dominant capitalist groups – the ruling elite in Australia. For these groups, as we have indicated in relation to the NFSS, literacy has significance predominantly as an instrument of human capital designed to increase economic advantage at the national level, bottom line profitability at the local enterprise level, and jobs at the individual level. These are the ‘ruling ideas’ of adult literacy.

**Discussion and conclusions**

We have demonstrated that social class from our perspective is essential to understanding the adult literacy field; that adult literacy students and their teachers hail from disparate social classes, and that adult literacy policy, programs, pedagogy and research all feature fundamental social class disparities. Moreover, we would argue that these disparities are hidden within the hegemony of ruling class discourses on literacy, discourses which at various levels of analysis – macro, meso and micro – can have the effect of controlling working class people and exacerbating educational inequalities.

At the macro, structural level the OECD, representing neo-liberal capitalism, plays a significant global role via its international surveys in promoting particular conceptualisations and measures of literacy and the role literacy plays in the economies of western societies. Australian governments and peak productivity, industry and skills organisations are fully aligned with the OECD discourse on literacy, and as a ruling class bloc, they are ‘singing off the same hymn sheet’ (Black and Yasukawa, 2016, p. 173). Whilst no doubt literacy in the dominant form promoted by these groups is a significant set of skills that can assist individuals to function in the modern world, especially in the world of work, this ‘common-sense’ understanding can be viewed differently from a critical, social class perspective. As Black and Yasukawa (2014) have argued recently, drawing on the work of Harvey Graff (1979), the idea that delivering literacy provision to adults is some kind of panacea for economic success or for the upward mobility of working class people, is a myth. Moreover, there are political interests for ruling elites. In workplaces for example, there are now multiple in-depth studies that indicate the link between workers assessed to have literacy deficits and productivity is complex, and that this focus on literacy deficits often relates more to the exercise of power and control by workplace managers and supervisors (for detailed analyses, see Black and Yasukawa, 2014; Black, Yasukawa and Brown, 2014; 2015).

Studies of employability programs of which literacy provision is invariably a major element also highlight that the answer to unemployment is rarely about improving literacy skills. Atkins (2013, p. 35) for example, in a UK study focusing on young people, concludes that the ‘real impact’ of employability programs ‘is to prepare young people for a lifetime of marginalisation in the form of low-pay­-no-pay cycle, whilst also ensuring they lack the agency or cultural capital to question the status quo’. Similar arguments about the effects of cyclical adult literacy/vocational programs and their ‘low knowledge-skilled’ students are made by Brine (2006, p. 649), who claims that these students ‘are not only those *at* risk, they are increasingly constructed as *the* risk’. In other words, working class people, especially in times of high unemployment and difficult economic times, potentially pose a threat to the socio-political/economic status quo and they need to be regulated and controlled by ruling elites. Literacy provision associated with employability, which is how ‘foundation skills’ in SEE programs are conceptualised, is one way of doing this. Literacy has traditionally provided an ideal medium for the promotion of elite economic interests (Black and Yasukawa 2014). Whilst presenting as the normative rules of the game (e.g. the axiom literacy = jobs), this promotion of literacy at the international and national policy levels effectively reinforces social divisions and inequalities in society in the interests of ruling elites.

At the meso (middle) level which includes organisations that provide adult literacy programs, TAFE in particular, the past couple of decades in Australia have represented the progressive reinforcement, indeed the exacerbation of educational inequalities for working class people. As we outlined at the beginning of this article, in the social democratic political era of the Kangan Report in 1974, lifelong learning which incorporated adult literacy was a key element of TAFE’s remit. In the latter part of the 1970s and for most of the 1980s, not only was adult literacy a ‘growth business’, but other related areas within ‘Special Programs’ (in TAFE NSW), including Outreach and Women’s programs, flourished. TAFE in this post-Kangan era provided the working class with ready access to an organisation that provided them with educational opportunities and encouraged equity. In fact, as Bee (2014, p. 75) points out, the community ‘outreach’ focus of some of these programs meant that students ‘would not need to enrol in TAFE but TAFE would come to them’. However, from the time of the ascension of a state Liberal/conservative state government in NSW in the late 1980s, and with the broader national governmental focus on skills and human capital formation (Dawkins and Holding, 1987; DEET, 1991) and the increasing grip of economic rationalism in the public sector (Pusey, 1991), adult literacy programs started to change their form and their focus. Some TAFE equity units such as the Women’s Coordination Unit were closed down, followed by the demise of ‘Special Programs’ itself and the mainstreaming of several of its units. ‘Stand-alone’ adult literacy programs shifted in large part from what can be termed ‘general education’ to vocational preparation programs whose curriculum was competency-based and nationally accredited. During the latter part of the 1990s a leading adult literacy academic asked the question: ‘Where to now for adult literacy?’ (Wickert 1998), though the question was rhetorical. In order to secure government funding adult literacy in TAFE necessarily became an integral part of the economistic, mainstream vocational agenda. Similar developments have occurred overseas in the UK as the commitment to providing ‘wider access’ to literacy provision under the *Skills for Life* initiative gave way to a narrow focus on employability skills, and especially targeting young people (Appleby and Bathmaker, 2006).

As a site of struggle, at the policy level at least, literacy educators have lost control of the agenda to industry and its representatives. Thus it hardly seems surprising to find that in recent years industry organisations such as the Australian Industry Group are the main recipients of government project funds for adult literacy and a key driving force, along with productivity and skills organisations, promoting literacy for economic ends in Australian society.

As a consequence of these changes literacy programs since the 1990s in TAFE, despite some local resistance from teachers in their classrooms (Black, 2010), have become less about the education and empowerment of working class individuals and their communities and more about how their skills can be regulated to the needs of enterprises and the economy generally. As we have seen there appeared little choice for students and teachers as assessment and curriculum became tightly regulated, nationally centralised and enforced through an intrusive and ubiquitous audit culture which controls and regulates public officials in the interests of ruling groups (Apple, 2007). And despite some early victories in the fight to retain the fee-exempt status of adult literacy courses, eventually the neo-liberal user-pays philosophy prevailed. Hence, while throughout the 1980s and 1990s there was excessive demand and long waiting lists for students wishing to participate in community adult literacy courses in all metropolitan TAFE NSW colleges, now there are few students and adult literacy teaching sections (i.e. ABE) and related sections such as Outreach are in a parlous state (Bee, 2014). There is nothing to suggest that the local community demand or need for adult literacy has changed, rather the provision has changed. Working class people do not have the financial resources to participate in these courses, and for those with more general educational/literacy needs (i.e. not just for jobs), these courses are unlikely to meet their needs. Thus we argue that class inequalities have been exacerbated in recent times as working class people have reduced access to educational opportunities in TAFE.

At the micro level of pedagogy, of teacher/student interactions in adult literacy programs, the argument that adult literacy teachers control working class people and exacerbate inequalities is less obvious, but we would contend that the best interests of working class students are not always served. This comment of course flies in the face of the several decades-long documented success story of adult literacy in TAFE (e.g. Grant, 1987; Balatti, Black and Falk, 2006), but based on our own anecdotal observations in this field, we offer some cautionary notes to this story which may relate to social class disparities between teachers and students. For example, in local workplace literacy programs, a key element of adult literacy programs for several decades, teachers inevitably become collaborators with managers in enterprises in their attempts to locate and remedy the literacy ‘problems’ or ‘deficits’ of workers on the production floor (Black, Yasukawa and Brown, 2015). Teachers often see their role primarily from the perspective of management, which is hardly surprising because workplace literacy programs are structured in this way; it is managers who formally seek (and pay for) the assistance of adult literacy teachers in workplace literacy programs. But the enthusiasm and commonality with which many adult literacy teachers align with enterprise managers and their agendas, would indicate some resonance with Lee and Wickert’s (1995, p. 145) comment two decades ago about the ‘mute opposition beneath passive acquiescence’ of teachers to the human capital discourse. And this could be viewed broadly as middle class ideology which may run counter to the best interests of workers.

Jobseeker literacy programs under the SEE program provide similar arguments. If teachers are ready to accept uncritically that jobseekers are unable to find employment due to their literacy deficits, and that those deficits can be accurately measured and remediated according to the national assessment instrument, the ACSF, then we would suggest that social class factors may be at play in this accommodation with the status quo. And if teachers in any form of adult literacy provision are prepared to diligently comply with all the regulatory and controlling ‘tick and flick’ demands of the audit regime without questioning or enquiring if this is in the best interests of their students, then again we would suggest the social class status of teachers may play a role. Of course we are mindful in making these comments that teachers may have little choice but to comply with the regulatory demands of their employer, in this case TAFE, though by the same token, more critically aware teachers can resist dominant agendas and often do explore pedagogical spaces for a more empowering pedagogy (Black, 2010).

The central point we make in this article is the relative absence of social class as a construct in adult literacy studies in recent times, despite the long argued politics of literacy which sees it more as a mechanism for social control than a universal social good, and adult literacy provision from its earliest origins involving middle class teachers teaching working class students. From our perspectives, with lengthy backgrounds in adult literacy pedagogy in TAFE, along with our academic studies of the field, issues of social class, which includes its complex intersections with identity factors such as gender, race and ethnicity, remain at the forefront of our understandings and interest in the field. It may well be, as Block (2014, p. 170) suggests, that for many in the higher education academy social class ‘is not a dimension of human existence that is immediately obvious to them’. But in writing this article we are hoping to demonstrate that as a construct in understanding and addressing contemporary educational inequalities in Australian society, at least in relation to adult literacy, it should be.

**References**

Apple, M. (2007) ‘Education, markets, and an audit culture’, International Journal of Educational Policies, 1(1), pp. 4-19.

Appleby, Y. and Bathmaker, A.M. (2006) ‘The new skills agenda: Increased lifelong learning or new sites of inequality?’ British Educational Research Journal, 32(5), pp. 703-717.

Australian Bureau of Statistics (ABS). (1997) Aspects of Literacy: Assessed Skill Levels, Australia. Canberra: ABS.

Australian Bureau of Statistics (ABS). (2008) Adult Literacy and Life Skills Survey, Summary Results, Australia. Canberra: ABS.

Australian Bureau of Statistics (ABS). (2013)Programme for the International Assessment of Adult Competencies, Australia, 2011–2012. Canberra: ABS.

Australian Industry Group (AIG). (2012) When Words Fail: National Workforce Literacy project. Melbourne: AIG.

ACIL Allen Consulting. (2015) SEE Programme Evaluation. Final Report to the Department of Education and Training. Melbourne: ACIL Allen Consulting.

Atkins, L. (2013) ‘From marginal learning to marginal employment? The real impact of ‘learning’ employability skills’. Power and Education, 5(1), pp. 28-37.

Australian Committee on Technical and Further Education. (1974) TAFE in Australia: Report on Needs in Technical and Further Education. Canberra: AGPS.

Balatti, J., Black, S. and Falk, I. (2006) Reframing Adult Literacy and Numeracy Courses: A Social Capital Perspective. Adelaide: NCVER.

Bee, B. (1990) ‘Teaching to empower: Women and literacy’, Australian Journal of Reading, 13(1), pp. 53-60.

Bee, B. (1993) ‘Critical literacy and the politics of gender’, in: C. Lankshear and P. McLaren (eds) Critical Literacy: Politics, Praxis and the Post-Modern*.* New York: State University of New York Press, pp. 105-131.

Bee, B (2014) Transformative Learning and Frontline Teaching in NSW Technical and Further Education since Myer-Kangan: An Adult Educator’s Account. PhD thesis, University of Technology Sydney.

Black, S. (2010) ‘Working the interstices: Adult basic education teachers respond to the audit culture’, Literacy and Numeracy Studies, 18(2), pp. 6-25.

Black, S. and Reich, A. (2010) ‘The elephant in the room’: Audit culture and TAFE teachers. Paper presented at the 2010 AVETRA Annual Conference, Surfers Paradise, April 7-8.

Black, S. and Thorp, K. (1997) ‘Everyday literacy practices and multilingual students: Implications for ABE pedagogy’. Prospect: A Journal of Australian TESOL, 12(1), pp. 63-75.

Black, S. and Yasukawa, K. (2014) ‘Continuing literacy myths: Adapting Graff’s thesis to contemporary policy discourses on adult ‘foundation skills’ in Australia’, Critical Studies in Education,55(2), pp. 213-228.

Black, S., Yasukawa, K. and Brown, T. (2014) ‘Changing conceptualisations of literacy and numeracy in lean production training: Case studies of two manufacturing companies’, Studies in the Education of Adults,46(1), pp. 58-74.

Black, S., Yasukawa, K. and Brown, T. (2015) ‘The literacy and numeracy crisis in Australian workplaces: Discursive rhetoric vs. production floor realities’, Journal of Education and Work, 28(6), pp. 607-630*.*

Black, S. & Yasukawa, K. (2016) ‘Research that counts: OECD statistics and ‘policy entrepreneurs’ impacting on Australian adult literacy and numeracy policy’, Research in Post Compulsory Education, 21(3), 165-180.

Block, D. (2014). Social Class in Applied Linguistics. London: Routledge.

Bourdieu, P. 1984.Distinction: A Social Critique of the Judgement of Taste (R. Nice, transl.). Cambridge, Mass: Harvard University Press.

Brine, J. (2006) ‘Lifelong learning and the knowledge economy: Those that know and those that do not – the discourse of the European Union’, British Educational Research Journal, 32(5), pp. 649-665.

Charnley, A.H. and Jones, H.A. (1980) The Concept of Success in Adult Literacy. London: ALBSU.

Circelli, M. (2015) ‘Who is delivering foundation skills? A survey of the LLN and education and training workforces’. <http://rit.statedevelopment.sa.gov.au/upload/NFSS/report/ncver-report.pdf>

Circelli, M., Gillis, S., Dulhunty, M., Wu, M. and Calvitto, L. (2012) Does 1 = 1? Mapping Measures of Adult Literacy and Numeracy. Adelaide: NCVER.

Coates, S., Fitzpatrick, L., McKenna, A. and Makin, A. (1995) National Reporting System. Melbourne: Ministry of Education.

Connell, R., Ashendon, D., Kessler, S. and Dowsett, G. (1982) Making the Difference: Schools, Families and Social Division. Sydney: Allen & Unwin.

Connell, R. (2013) ‘The neoliberal cascade and education: An essay on the market agenda and its consequences’, Critical Studies in Education, 54(2), pp. 99-112.

Davis, D. (1991) ‘Adult literacy programs: Towards equality or maintaining the status quo?’ Journal of Reading, 35(1), pp. 34-37.

Dawkins, J. and Holding, A.C. (1987) Skills for Australia. Canberra: Australian Government Publishing Service.

Department of Employment, Education and Training. (1991) Australia's Language and Literacy Policy.Canberra: Australian Government Publishing Service.

Duckworth, V. (2013) Learning Trajectories, Violence and Empowerment Amongst Adult Basic Skills Learners.London: Routledge.

Duckworth, V. and Cochrane, M. (2012) ‘Spoilt for choice, spoilt by choice: Long-term consequences imposed by social background’, Education + Training, 54(7), pp. 579-591.

Graff, H. (1979). The Literacy Myth: Literacy and Social Structure in the Nineteenth-Century City. New York: Academic Press

Grant, A. (1987) Opportunity to do Brilliantly: TAFE and the Challenge of Adult Literacy Provision in Australia. Canberra: AGPS.

Guenther, J., Falk, I. and Arnott, A.R. (2008) The Role of Vocational Education and Training in Welfare to Work. Adelaide: NCVER.

Hamilton, M. (2012) Literacy and the Politics of Representation. London: Routledge.

Hamilton, M. (2015) ‘Survey literacies’, in: V. Duckworth and G. Ade-Ojo (eds) Landscapes of Specific Literacies in Contemporary Society. London: Routledge. pp. 47-60.

Hamilton, M., Maddox,B. and Addey, C. (eds). (2015)Literacy as Numbers: Researching the Politics and Practices of International Literacy Assessment.Cambridge: Cambridge University Press.

Harris, K. (2014) ‘Praxis: The making of Australia’s Radical Education Dossier’, Journal for Critical Education Policy Studies, 12(1), pp. 101-116.

Harvey, D. (2005) A Brief History of Neoliberalism. Oxford: Oxford University Press

Jackson, B. and Marsden, D. (1962) Education and the Working Class. London: Routledge

Lee, A. and Wickert, R. (1995) ‘Reading the discourses of adult basic education’, in: G. Foley (ed) Understanding Adult Education. Sydney: Allen & Unwin. pp. 134-146

Lingard, B. (2013) ‘The impact of research on education policy in an era of evidence-based policy’, Critical Studies in Education,54(2) pp. 113-131.

Lingard, B., Martino, W. and Rezai-Rashti, G. (2013) ‘Testing regimes, accountabilities and education policy: Commensurate global and national developments’, Journal of Education Policy, 28(5) pp. 539-556.

Lo Bianco, J. and Wickert, R. (eds). (2001) Australian Policy Activism in Language and Literacy. Melbourne: Language Australia.

Lupton, R. and Hempel-Jorgensen, A. (2012). ‘The importance of teaching: Pedagogical constraints and possibilities in working class schools’, Journal of Education Policy, 27(5), pp. 601-620.

Mace, J. (1979) Working with Words: Literacy Beyond School. London: Chameleon.

Manufacturing Skills Australia. (2015) ‘Foundation Skills in the manufacturing industry’ <http://www.mskills.com.au/downloads/Foundation%20Skills%20in%20the%20manufacturing%20industry_March%202015.pdf>

Marx, K. and Engels, F. (1970) The German Ideology. London: Lawrence & Wishart.

National Centre for Vocational Education Research. (2015) Total VET Students and Courses 2014. Adelaide: NCVER

Nesbit, T. (2006) ‘What’s the matter with social class?’ Adult Education Quarterly, 56(3), pp. 171-187.

NSW Adult Literacy & Numeracy Council. (2003) Literacy at a Price. Sydney: NSWALNC

Osmond, P. (2016) ‘[What happened to our community of practice? The early development of Adult Basic Education in NSW through the lens of professional practice theory](http://epress.lib.uts.edu.au/journals/index.php/lnj/article/view/4821)’, Literacy and Numeracy Studies, 24(2), pp. 3-23.

Pinsent-Johnson, C. (2015) ‘From an international literacy assessment to the classroom: How test development methods are transposed into curriculum’, in: M. Hamilton, B. Maddox, and C. Addey, (eds) Literacy as Numbers: Researching the Politics and Practices of International Literacy Assessment.Cambridge: Cambridge University Press. pp. 165-186.

Pusey, M. (1991) Economic Rationalism in Canberra: A Nation-Building State Changes Its Mind. Cambridge: Cambridge University Press.

Reay, D. (2006) ‘The zombie stalking English schools: Social class and educational inequality’, British Journal of Sociology of Education, 54(3), pp. 288–307.

Rustomji, L. and Dent, K. (1986) Basic Education: A Growth Business. Sydney: TAFE NSW

Standing Council on Tertiary Education, Skills & Employment (SCOTESE). (2012) National Foundation Skills Strategy for Adults. Canberra: SCOTESE

Sellar, S. and Lingard, B. (2013) ‘The OECD and Global Governance in Education’, Journal of Education Policy,28(5), pp. 710-725.

Third Horizon Consulting Partners. (2012) Strengthening Foundation Skills in the Workplace: An Evaluation of the Workplace English Language and Literacy Programme. Canberra: Department of Innovation, Industry, Science, Research and Tertiary Education.

White, K. (1983) ‘Conflict, principles and practice in adult literacy’, Australian Journal of Reading, 6(3), pp. 117-127.

Wickert, R. (1998) ‘Where to now for adult literacy?’ <http://www.acal.edu.au/publications/papers/occasional/rosie_wckert_article.html>

Yasukawa, K. and Black, S. (eds). (2016) Beyond Economic Interests: Critical Perspectives on Adult Literacy and Numeracy in a Globalised World. Rotterdam: Sense Publishing.