Beyond Economic Interests

Critical Perspectives on Adult Literacy and Numeracy in a Globalised World

Keiko Yasukawa and Stephen Black (Eds.)



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Beyond Economic Interests

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Edited by

Keiko Yasukawa and Stephen Black

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PREFACE

We would like to express our very sincere appreciation to all those who have contributed to the production of this book.

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KEIKO YASUKAWA AND STEPHEN BLACK

INTRODUCTION

Critical Perspectives in Adult Literacy and Numeracy in a Globalised World

Current dominant discourses of adult literacy and numeracy in many OECD countries foreground the economic interests of industry and nations and the benefits to their competitiveness arising from a literate and numerate workforce often at the expense of the interests of the workers themselves, and other actors in the field of adult literacy and numeracy (Hull, 1997; Jackson & Slade, 2008; Yasukawa, Brown, & Black, 2014). Thus, literacy and numeracy are now perceived primarily in terms of human capital, variously expressed as 'core', 'foundation', 'essential' or 'functional' skills that enable individuals, enterprises and nations to become more productive and competitive in the globalised economy. Such discourses often ignore the diverse meanings held about literacy and numeracy by the workers themselves and other key actors in the field, including learners, teachers and researchers, many of whom feel they have little influence on how adult literacy and numeracy as a disciplinary field, in its policy, pedagogy and research, are being shaped. These economistic discourses are a marked departure from the discourses of the field in its earlier, developmental phase in western industrialised nations in the 1970s and 80s, in which literacy and numeracy pedagogy featured an eclectic mix of liberal progressive discourses based on the perceived needs of individuals (Lee & Wickert, 1995), and emancipatory discourses deriving largely from the work of Freire (1972). And as much as those promoting the human capital agenda may see globalisation as primarily an economic phenomenon, globalisation represents more than this. In adult literacy and numeracy practices in and out of classrooms, the impact of globalisation is felt as much, if not more widely, in socio-cultural and political terms. The global movement of people, for example, is increasing the cultural and linguistic diversity of classrooms and workplaces, and the connectivity that new technologies bring is enabling people in geographically remote communities to develop new identities through online digital literacy practices that reach across cultural, linguistic and national boundaries (e.g. Kral, 2012). Thus, alternative discourses about literacy and numeracy that go beyond economic interests emerge when research can attend to contemporary accounts of people's local, everyday lived experiences and what literacy and numeracy means to them.

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This book draws on studies of historical and contemporary contexts and imagined futures to critique the one-dimensional discourse of literacy and numeracy as human capital. Many of the contributions in this book come from researchers working in the adult literacy and numeracy field in Australia and New Zealand. To date, their collective voice has rarely been heard relative to those in the United Kingdom (UK) and North America. The authors bring critical perspectives on adult literacy and numeracy from diverse sites of research: policy, classrooms, workplaces, cultural institutions and communities. The contributors from the UK, Mary Hamilton, Jeff Evans, Vicky Duckworth and Ludi Simpson provide wider international perspectives, and in doing so, illustrate the salience of the questions being asked in the southern hemisphere within the international research communities of adult literacy and numeracy. While the contributions are critical of the hegemony of the dominant discourse, they also offer insights not only on how particular discourses have come to dominate, but how these discourses might be challenged and resisted, and how and where to look for rich sites of literacy and numeracy learning for adults. The book thus helps to provide alternative perspectives to the narrow economic one that dominates, to enable policy makers, teachers, researchers and others, to imagine alternative futures for the field of adult literacy and numeracy.

GLOBALISATION, THE OECD, AND THE ROLE OF POWERFUL INTERNATIONAL SURVEYS

For the last two decades, adult literacy and numeracy has been discussed increasingly as part of a transnational agenda, particularly among OECD countries (e.g. Grek, 2010; Hamilton, 2014; Hamilton & Pitt, 2011; Lo Bianco, 2008; Sellar & Lingard, 2013a, 2013b; Tett, 2014; Walker, 2009). In Australia where the editors of this volume are located, much of the discussion – the 'discursive rhetoric' (Black, Yasukawa, & Brown, 2015) that has traction with policy makers has been initiated and promoted by industry and employer groups, and as a result an economistic discourse has increasingly taken centre stage influencing: how literacy and numeracy are conceptualised, the rationale for programs, the ways learners are talked about, and how the professional identities of practitioners are formed.

In a context of heightened global competition for skilled workers, policy makers across the spectrum of education, from primary schooling to adult literacy, invest trust in test scores to assess the availability of skilled labour. Increasingly we see "testing as policy" (Lingard, Martino, & Rezai-Rashti, 2013, p. 547), or 'literacy as numbers' (Hamilton, Maddox, & Addey, 2015). The International Adult Literacy Survey (IALS) in 1996 followed by the Adult Literacy and Lifeskills Survey (ALL) in 2006 and most recently by the Programme of International Assessment of Adult Competencies (PIAAC), all coordinated by the OECD with cooperation from government agencies of the participating OECD countries, have served to supply what government and industry stakeholders want. As summed up by Tett (2014), in her case study in Scotland, "[adult literacy and numeracy] policy implementation

is framed by the OECD's dominant human capital discourse concerned with the production of knowledge to increase global competitiveness" (p. 139). Researchers elsewhere in the OECD community have made similar observations (e.g. Atkinson, 2012; Black & Yasukawa, 2014; Hamilton, 2014; Walker, 2009).

Two major trends have emerged from these OECD initiatives. One is the ability for the adult literacy and numeracy performances of participating OECD countries to be compared in league tables. This is made possible because the OECD surveys standardise the assessment of populations across all of these nations, despite variations in languages and cultural contexts. The second is the increasing propensity for countries to analyse their population's performance in these surveys in relation to their national productivity agendas, which themselves are influenced by global trends. This in turn appears to lend credence to adult literacy and numeracy policy making not only privileging the economic interests of industry over other socio-cultural benefits of education and training, but to becoming a transnational exercise.

The first few chapters in this book by Mary Hamilton, Keiko Yasukawa and Stephen Black, and Jeff Evans set the scene by directly analysing and critiquing these global trends emanating from the OECD. Writing on her original research of adult literacy in the UK, Hamilton provides us with theoretical resources to analyse representations of literacy in policy, practice and media. Yasukawa and Black provide an Australian case study of the emergence of the current dominant discourse in Australia and trace the media coverage and the policy and industry artifacts that started to flow following the release of the ALL survey results in 2007. They illustrate the powerful alliances that were forged to make the ALL survey results the agenda setter for Australian adult literacy and numeracy policy. Evans takes us to the 'heart' of the PIAAC. He brings his knowledge of the PIAAC processes and his expertise as an adult numeracy researcher to help us understand the methodological and conceptual issues associated with the PIAAC that enable us to engage critically with the possibilities and limitations of international surveys informing research and practice.

NEGOTIATING IDENTITIES AND PRACTICES IN LOCAL CONTEXTS

Implicit in the design and use of international surveys such as the PIAAC is a generalising approach to understanding literacy and numeracy, that is, seeing literacy and numeracy as skills that are largely independent of context, and can be measured and tested using standardised tools (Evans, Wedege, & Yasukawa, 2013). Street (1984) refers to this conceptualisation as an 'autonomous' model of literacy. While not sharing an entirely united theoretical position, authors in this volume regard context as inseparable from the meanings literacy and numeracy acquire in people's everyday lives, and treat literacy and numeracy as social practices – as context dependent, and culturally and historically contingent. The social practices researchers resist the narrow interpretation of people's literacy and numeracy with

reference to generalised measures produced by large scale tests such as the OECD surveys.

As powerful as the dominant economistic discourses emanating from the OECD are, there are other ways in which globalisation is impacting on adult literacy and numeracy practices. In the second section of the book, the authors present how globalisation is shaping local communities and classrooms in other ways. Inge Kral's chapter shows how the global and local are connected in the everyday digital literacy practices in Aboriginal communities in the Central and Western Desert of remote Australia, where young people are making and remaking their online identities through social media engagement. Sue Ollerhead finds microcosms of the global in Australian adult literacy classrooms and her chapter examines how teachers' pedagogies are influencing the ways in which immigrant learners negotiate their learning and social identities within the classroom.

Learners and teachers find ways of resisting hegemonic discourses, and negotiating learning in the interests of the learners. This is illustrated by two contributions from New Zealand in this volume. Chris Holland's chapter shows how young apprentices in vocational courses are experiencing the intensification of the technicalities of literacy development in vocational courses: standards, qualifications, assessments, while the significance of social relationships in the learning environment is largely ignored. In this context, carefully designed mentoring relationships have been found to reduce some of the barriers to what has arguably become a technocratic educational system. The role of teachers in affording agency to learners is a focus of Pat Strauss's chapter. Strauss examines how teachers perceive the sense of agency and academic progress of their learners who are relegated to marginal status in colleges.

Adult literacy and numeracy learners and teachers are situated largely in institutions, whose official views and approach to literacy and numeracy may not necessarily align with those of their teachers and learners. Diana Coben and Niki McCartney, also writing in New Zealand, provide a case study of their own work as researchers and professional developers working at the interface of policy and practice. Having cognisance of the compliance and reporting burden that practitioners have been increasingly experiencing, they present and analyse how they have developed a model for organisations to use to monitor their progress in embedding literacy and numeracy against defined benchmarks.

Keiko Yasukawa and Jacquie Widin's chapter takes us into a different space from that of formal literacy and numeracy provision. Public museums in Australia are experiencing similar pressures to other public institutions, including tertiary education institutions in justifying their continued worthiness as publicly funded institutions. Like formal educational institutions, museums are seeking to widen their audience diversity. However, Yasukawa and Widin argue that museums operate and design their exhibitions with the assumption that new more diverse audiences will need to become literate about museums in the same way that the traditionally dominant audiences are, rather than the museums themselves learning to read a more diverse audience. They propose a new definition of 'museum literacies'.

Bob Boughton focuses on literacy in community development. He argues that mass literacy campaigns modelled around Freirian notions of literacy, illustrated by some of his own involvement in projects bringing Cuban literacy campaigners to Timor Leste and Australian Aboriginal communities, attends to the political economy of adult education and the emancipatory possibilities of education that could lead to collective agency in communities that have been marginalised by a long history of discrimination.

Together, the chapters in this section suggest that provision and participation at the coalface of adult literacy and numeracy learning are motivated by interests and possibilities much broader and richer than the economic interests of industry and the nation state. Many of these drivers cannot be understood when literacy and numeracy are understood in the generalised perspective of the OECD.

COLLECTIVE STRUGGLES FOR ALTERNATIVE FUTURES

While drawing on several different theoretical positions, authors in this volume share a critical stance on the dominance of the economistic approach to policy making that is underpinned by an individualised skills-based model of literacy and numeracy. The dominant discourses are backed by powerful transnational alliances, including the OECD, and regional bodies such as the European Union (Tsatsaroni & Evans, 2014) and are unlikely to be challenged through fragmented individual efforts. They have, in Street's (2011) terms, the 'power to name and define' literacy and numeracy.

The final chapters in this volume focus on forms and sites of collective activism in adult literacy and numeracy. Vicky Duckworth and Mary Hamilton, and Rob McCormack reflect on activism by practitioner groups in the UK, and the Australian state of Victoria, respectively, at different stages of adult literacy history. Duckworth and Hamilton present a case study of Duckworth's personal journey as a practitioner-researcher, and the important role that networks such as the Research and Practice in Adult Literacy group in the UK (RaPAL) plays in facilitating the promotion of research and practice in adult literacy. While faced with the challenges that many volunteer organisations of its kind face in sustaining itself and maintaining an independent voice, the history of RaPAL illustrates that practitioners can continue to find sustenance and strength to maintain their professional agency and voice through their research and advocacy work in partnership with their learners. McCormack's chapter, focusing on adult literacy and numeracy development in the state of Victoria, articulates and gives voice to marginalised discourses and pedagogies in an effort to keep them alive and open for re-articulation in the future.

Jeff Evans and Ludi Simpson are members of the UK based Radical Statistics group (RadStats). They reflect on the history of this group, who for over forty years have been campaigning for progressive social change by demystifying and critiquing official statistics that override subjective and local nuances in policies. RadStats, as the chapter will show, is a social movement that combines collective research, advocacy and educational efforts towards positive social change.

The final chapter in this section is written by Judy Hunter on the education of teachers themselves. She asks what education for practitioners needs to look like if we are to expect them to help their learners assume agency in their learning and lives. Her chapter is affirming of the concerns that many practitioners face in their everyday work when their professionalism is challenged by requirements to use standardised instruments that may not be in concert with their pedagogical principles. Hunter suggests that in this climate teacher educators have a moral and professional obligation to encourage their student teachers to develop their capacity for critical perspectives about the dominant policies and practices that are constraining their agency and judgement to act in the best interests of their learners.

The economistic discourse currently dominating the field is motivated by and designed to serve the interests of industry, and if it also serves the interests of the learners and their communities then it is more by chance, rather than by design. The studies in this volume provide resources that help participants in the field to develop a critical perspective about the dominate discourses and to imagine alternative futures for the field of adult literacy and numeracy that are centred on the affordances of literacy and numeracy in and for the lives of people and their communities – work that will take moral and political courage and a collective effort on the ground.

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PART 1

GLOBALISATION, THE OECD AND THE ROLE OF POWERFUL INTERNATIONAL SURVEYS

MARY HAMILTON

1. IMAGINING LITERACY

A Sociomaterial Approach

LITERACY AS A KEY ASPECT OF THE MODERN SOCIAL IMAGINARY

This chapter presents a theoretical model for analysing the different ways in which literacy is represented in policy, media discourses and everyday practices. There are many ways in which people have tried to define and explain how literacy functions in individual lives and in society, asserting its usefulness for the state and for other social and economic institutions. Over time and in different contexts, literacy has been imbued with a wide variety of aims: religious, moral, cultural and emancipatory. It has been enlisted to support nation building, wealth creation and universal human rights. As a term, literacy is elastic and slippery and it can be made to carry all kinds of hopes, judgements and expectations. These narratives about literacy are part of what shapes literacy education in different historical eras and places. They circulate in many places – in policy documents, in the news and popular media, but also in everyday social interactions in homes and classrooms. An interesting example of the way public discourses cross over to powerful effect can be found the forward to the 1999 report Improving Literacy and Numeracy: A Fresh Start which set the ground for the Skills for Life policy in England (Moser, 1999). In this forward, Claus Moser quotes from The Reader a novel by Bernhard Schlink (1998) which was widely popularised by United States (US) talk show star, Oprah Winfrey. Moser uses the novel to make the point that "illiteracy is dependence" and to claim that literacy offers liberation and independence (see Johnson & Finlay, 2001). Adult literacy policy and publicity often carries this message which encourages people to imagine themselves as being in a deficit state and in need of help even though they do not necessarily share this vision.

This vision of literacy which Brian Street has called the autonomous view, sees reading and writing as a set of individual cognitive skills, possession of which has universal effects (Street, 1984). In fact, the abilities and opportunities to read and write the printed word are woven into everyday patterns of social practice in locally specific ways. These patterns are diverse, varying with linguistic and cultural contexts, the availability of different materials and technologies for communication, and the use and valuing of other semiotic systems for representing meaning. This makes for a dynamic landscape of practice within which educational policy and practice takes place.

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The narratives we have developed about literacy help to organise and control this diverse and changing landscape. They facilitate interventions into it in the form of educational and social policy reforms. Some of these narratives are so familiar that it is difficult to get beyond them and the contradictions they embody to think in a fresh – perhaps more effective – way about the power of the written word. These narratives about literacy are also tightly integrated with others in adjacent areas of social life, linked for example, with views about citizenship, poverty and culture. This compounds their hold over our imagination and ways of thinking. Charles Taylor (2007) refers to this as the 'social imaginary': an implicit map of social place and relations which forms a horizon we are virtually incapable of thinking beyond. Because of their power to organise thinking it is crucial to examine these narratives – that is, to study the politics of representation. This includes analysis of how these public narratives emerge in different media and social domains (from policy texts to novels); how social actors (whether employers, teachers, media celebrities or parents) mobilise around them; how they are linked with other common cultural narratives and how they themselves contribute to the work of literacy in contemporary societies. Whilst similar processes occur in other areas of social life, in my book (Hamilton, 2012a) I argue that literacy is significantly implicated in our contemporary social imaginary and this is reflected in the stories we currently tell one another about reading and writing. Research itself carries particular visions of what literacy is and so it is important for scholars also to make the theories they use explicit to themselves and others.

Literacy has always been diverse because it is rooted in the cultures and languages that learners and users bring to written communication. These affect the resources, power relations, and identities produced (e.g. Street, 2005). Literacy is by nature multi-lingual and part of processes of social ordering. Sociologist Dorothy Smith (2005) explains literacy's co-ordinating role in what she terms 'the textually-meditated social world' and a number of researchers assert that this role is intensifying in contemporary society (e.g. see Iedema, 2003). Literacy is changing rapidly as linguistic and cultural groups move and intermingle as never before (Blommaert & Rampton, 2012; Kalantzis & Cope, 2012; Pennycook & Otsuji, 2015). Lankshear and Knobel (e.g. 2008) foreground the development of digital forms of communication as a key driver of these changes, which have recast existing forms of written communication and - it can be argued - create new literacies specific to digital environments. There is considerable ambiguity around the term 'digital literacies' (see Gourlay, Hamilton, & Lea, 2014), which are sometimes interpreted to mean general competence with digital devices. However, if we define the term as the ways in which meaning-making resources are used and produced in on-line settings, then the relationship with print literacies becomes clearer and the implications of digital technologies for literacy learning and teaching are key.

Literacy currently has a high profile within national and international policy because of the human resources view of the centrality of skills and training to prosperity which is promoted strongly through the Organisation of Economic Co-operation and Development (OECD). The human resource model of education sees literacy as a commodity to be exchanged within the global market place. It asserts that large sections of the adult population need to be 'upskilled' to cope with the rapidly changing competitive global environment, linking literacy directly with economic development, individual prosperity and vocational achievement in what are claimed to be universal relationships. This 'literacy myth' identified by Harvey Graff more than 30 years ago has, if anything, been re-inscribed more securely into international policy, despite much evidence that it oversimplifies and therefore is unlikely to deliver the outcomes it promises (see Graff, 2010). This human resources view of literacy learning that has dominated recent policy initiatives produces a moral order of literacy which organises our understanding of different sites of learning, the people active within them and the different forms of learning in which they engage. Formal learning is privileged over informal learning, standardised and measurable outcomes are preferred for demonstrating achievement. The 'good' literacy learner is constructed as a responsible citizen contributing to global prosperity. The autonomous approach to literacy is thus alive and well in the context of international policy discourse, where it is conducive to defining measurable skills that can be commodified within social development. I and others have called this a move to 'literacy as numbers' (see Hamilton, Maddox, & Addey, 2015).

HOW LITERACY HAS BEEN THEORISED AND UNDERSTOOD – CONTINUITIES AND CHANGE

The autonomous view of literacy described above has been widely and effectively critiqued over the last 30 years (see Barton, 2007; Collins & Blot, 2003) as creating an oppressive great divide between those who are seen to be literate and those who are not. This view is an ethnocentric one that focuses attention on alphabetic literacies and has been part of western colonial practices.

Scholars and practitioners critical of this dominant approach, have developed alternative analyses of literacy in terms of how it interacts with power relations and developed pedagogies that challenge these relations in order to emancipate rather than domesticate literacy learners (see Freire, 1972; Giroux, 1988; McLaren & Lankshear, 1993). A view of literacy as situated social practice takes up this interest in power relations but puts the opportunity to realise the diverse expressions of literacy at the centre of its emancipatory project, moving beyond the confines of formal education in order to explore these. Scholars working in this tradition view the meanings and values of literacy as contingent and situated, shifting according to context, purpose and social relations (Bartlett, 2008; Barton, Hamilton, & Ivanič, 2000; Brandt, 2005; Gee, 1990; Heath, 1983; Scribner & Cole, 1981; Street & Lefstein, 2007). They have described the vernacular, everyday practices of reading and writing and have generated a large body of ethnographic work, offering rich descriptions of situated literacy practices involving various print, digital and/or otherwise multimodal resources among different groups (e.g. Barton & Hamilton,

2012; González, Moll, & Amanti, 2013; Gregory & Williams, 2000; Pahl & Rowsell, 2006; Street, Pahl, & Rowsell, 2009).

This distinct approach – referred to in this article as 'literacy studies' – has developed alongside sociocultural theories of learning that foreground the social, acknowledging the role of informal learning and the multiple spaces of learning (see Gutierrez, 2008; Lave, 1988; Lave & Wenger, 1991; Scribner & Cole, 1981). There have also been parallel developments in theories of discourse that link language with action and social structure (Fairclough, 2013; Scollon, 2001). Fairclough and other critical discourse analysts assume that discourse plays a key role in social change. Change is 'talked into being' through discourses such as 'illiteracy as deficiency'. These discourses "shape and reshape" social reality (Chouliaraki & Fairclough, 1999, p. 4); they are part of the way people act together (and against one another) in the world in habitual ways (p. 21). Chouliaraki and Fairclough do not argue that all social life is discourse but that discourse is one constitutive element of social practices, along with action and interaction, social relations, persons and the material world (see also Fairclough, 2003, p. 25).

Developments in our understanding of literacy in social life and the worlds of new media have inevitably led to a broader understanding of literacy as part of semiosis, meaning-making and material representative practice. Kress (2009), for example, argues that social semiotic theory is essential for understanding the place of literacy within other meaning-making systems (see also Jewitt & Kress, 2003; Menezes de Souza, 2008). A social semiotic approach to discourse offers a vocabulary for analysing the properties of texts including the visual multi-modal aspects of the digital including number (van Leeuwen, 2008). Like the theory of literacy as social practice, social semiotics puts the concept of situated practice at the centre of the analysis of discourse, and sees the producer of meaning as actively choosing from and assembling semiotic resources of all kinds. Different semiotic resources have different affordances, or potentials for action which are realised differently in different contexts (see also O'Halloran, 2008). Van Leeuwen (2008) is interested in social categories of meaning that may be realised in a variety of ways using linguistic and these other semiotic resources to 'recontextualise' social practices. This enables analysis of the specifics of how language and other meaningmaking resources are chosen and combined and are active within the broad social landscape described above.

New views of literacy as social practice have gained solid ground within academic research and practice communities, and critical literacy approaches have remained strong in international education and development programmes. However, the autonomous view has retained its power within much policy and assessment. A view of literacy as a stable set of information processing competences exercised within different contexts is firmly embedded in the international surveys that hold increasingly important place in the imagination of policymakers and the general public across many countries (see Hamilton, Maddox, & Addey, 2015). How is it possible to understand and resolve these contradictory positions and the hold they

have over different parties who care deeply about the future of literacy? I hope to contribute to such an understanding in the next section of this chapter.

A SOCIOMATERIAL APPROACH TO LITERACY

Scholars of literacy studies have concentrated on describing the vernacular, everyday practices of reading and writing. They view institutions as selecting and privileging certain practices and policy regimes are one example of this. However, to date literacy studies has not elaborated much on the institutional processes involved in such privileging (Brandt & Clinton, 2002). The tools and methodologies of Science and Technology Studies (STS) and the material semiotics of Actor-Network Theory (ANT) can supplement and strengthen the insights of literacy studies to help us get a better grasp on the role of literacy within individual, collective and institutional life and to understand the contradictory strands of literacy that are in play. Building on Foucault's work on the geneology of social orders (Kendall & Wickham, 1999) ANT scholars have focused on the social, material and institutional processes that accompany specific technological innovations (see Callon, Lascoumes, & Barthe, 2009; Latour, 2005; Law, 1994 for clear introductions), exploring the performative, embodied 'doing' and 'making' of technologies and the multiple or collateral realities that are created in the process of realising a social innovation (see Law, 2013; Mol, 2002); They are concerned with the 'back-room' and often invisible workings of these projects, their failures as well as their successes. Their ideas can be applied to educational policies which can be seen as social projects that aim to organise and make tractable diverse everyday lived experience by applying new technologies of governance (see Fenwick & Edwards, 2010; Fenwick, Edwards, & Sawchuk, 2011; Hamilton, 2011). A socio-material approach to literacy therefore can explore how literacies are assembled through public discourses and materialised through everyday, educational testing and policy practices.

In the case of the international assessments of literacy, this involves conceptual discussions about how international literacy data is produced, for what purposes and under what systems of transparency and accountability – a move towards what Gorur (2014) has called 'a sociology of measurement in education'. It pays attention to the networks of people and things through which international assessments are assembled; the agencies that function as 'distant centres of calculation' and their invisible background work constructing and maintaining the performance of literacy as numbers. It focuses on the delegation of agency to assessment artefacts and procedures and the processes of change whereby social innovations become stable and naturalised so that they are no longer questioned.

Rather than seeing society as a set of structures within which individuals exert agency, ANT views it as a fluid space within which competing projects of social ordering (such as a scientific innovation or a government policy initiative) gather or lose influence. A project of social ordering is more or less powerful dependent on the size of the network of actants (both people and things) that gathers around it. Social

projects are not stable but are constantly emerging and also unravelling through everyday activities.

Such a view of social reality seems particularly apposite to the field of adult literacy given the contradictory context described above. We can see literacy being assembled as part of different projects of social ordering of which international tests are just the latest development. Policy strategies which come and go within national spaces are social projects in the making. In the case of the *Skills for Life* strategy in England, it is illuminating to follow it across the decade when it had the backing of a powerful actor network – a national government and its associated agencies together with international alliances – to the present when in a period of economic austerity and under a different political administration, this project is no longer being sustained and some of its achievements are already falling into disrepair despite the continuing strength of international influences.

While this approach emphasises the socio-material aspects of practice, it also acknowledges that in the creation of new social projects, a great deal is accomplished at the discursive level of social action. In other words, texts are seen as part of what constitutes socio-material practices. They are devices through which realities are framed and shared so that material effects travel through and with them. Texts are not inert beings but have real effects when they are activated through networks. Both literacy studies and sociomaterial theory thus maintain that artefacts, of which texts are a significant category, are integral to moment by moment social interactions, acting as points of contact and fixity for developing shared meanings within the flow of social life. Artefacts, then, have both material and semiotic aspects and as Burgess (2006, p. 9) notes, the events within which these artefacts are embedded can be seen as "analytical doorways into an understanding of social systems" (see also Burgess, 2008).

Sociomaterial theory uses ethnographic methodologies to analyse the trajectory of a project of social ordering, the flow and concentration of resources within this project through the enrolment of actors in networks. A key aspect of this methodology is to track the ways that artefacts (Latour calls these 'immutable mobiles' – see Law & Singleton, 2005) circulate through organisational structures, connecting different actors or agents and shaping specific social interactions in ways which tangle people in the very processes they also resist, a feature Callon (1986) calls 'interessement'. Artefacts mediate a number of key processes: *translation* which is the realisation of equivalencies between disparate entities in order to enrol them into the social project being developed; *deletion* of features seen as insignificant to the social project. ANT therefore has particular affinities to literacy and discourse studies through the notion of 'immutable mobiles' and through its emphasis on the 'framing' of competing social projects which, it claims, is accomplished through socio-material practices of which discourse is one dimension.

Latour (2005) has identified two further processes which help make the link with complexity theory more generally. The first consists of localising moves in which actors interpret and adapt general categories in the light of local contexts,

making locally appropriate choices among a set of options. The second, on the other hand, consists of globalising connects, which align local actors with collectives; synchronising individual actions with those of others. Such moves fit with the notion of glocalisation espoused by social complexity theorists. John Urry explains this as follows, emphasising the two-way flow of influence between local and global:

Within the phase space of various possibilities, the trajectories of many social systems worldwide are increasingly drawn into the attractor of "glocalisation" ... By this I mean that there are parallel, irreversible and mutually interdependent processes by which globalisation-deepens-localisation-deepens-globalisation and so on. The global and local are inextricably and irreversible bound together through a dynamic relationship, with huge flows of "resources" moving backwards and forwards between the two. Neither the global nor the local exists without the other. The global-local develops in a symbiotic unstable and irreversible set of relationships in which each gets transformed through billions of worldwide iterations dynamically evolving over time. (Urry, 2003, p. 84)

Urry's vision of social complexity emphasises the 'flows' of social and material events – agency is constantly shifting, social formations and networks are malleable. However, he also acknowledges the importance of the moorings around which institutional processes can be anchored. The framework of sociomaterial theory enables us to look at a range of glocalising mechanisms at work in the adult literacy context and in my own research I have focused especially on texts which, as a powerful class of 'immutable mobiles', may act as 'moorings' within global flows and networks. I have used both discourse analysis to focus on the policy texts (e.g. Hamilton & Pitt, 2011a, b) and sociomaterial theory to assemble, trace or excavate ethnographic evidence of their associated practices (Hamilton, 2009, 2011). In the final section of this chapter I summarise some of this work and related studies to show how these ideas can be applied to literacy.

CIRCULATING DISCOURSES OF LITERACY

It is possible to identify and analyse public discourses that have framed and 'stabilised' the problem of adult literacy at different points, and search for voices and silences. To illustrate this I will refer to two related examples: the assembling and unravelling of the *Skills for Life* policy mentioned above and the development of international assessments of adult literacy through the International Adult literacy Survey (IALS) and the Programme of International Assessment of Adult Competences (PIAAC).

This analysis, presented in more detail in Hamilton (2012a), involves a critical discourse analysis of key documents produced by the government and the media, accounts from key people and my own experience as a researcher in the field. Stories, or narratives, are not just expressed in the form of words. In the *Skills for Life* strategy, a great range of media were used: The Get On! campaign used Gremlin figures to encourage people to sign up for literacy and numeracy classes (see Hamilton &

Hillier, 2006). There were many kinds of associated logos and artefacts used in the campaign and images of successful learners were also circulated widely along with their testimonies of how literacy classes had changed their lives. The Gremlins also carried a kind of metaphor about literacy as a monster or demon to be struggled with and overcome and other metaphors were coined by policy makers and practitioners, such as 'spikey profiles' to describe the uneven competences of adult learners, 'the hard to reach' and the 'low hanging fruit' to talk about how difficult or easy it was to engage with different learners.

The other pervasive way in which narratives about literacy are expressed is through the use of numbers and statistics. Looking at how literacy and literacy learners are represented in policy documents shows that numbers are used to create narratives and to make arguments throughout, using statistical findings and visualisations such as tables which are used to relate numerical categories to many other different kinds of information.

This is illustrated in the government document announcing the *Skills for Life* strategy (Department for Education and Skills [DfES], 2001). New measurements of literacy generated by national and international research had produced increased estimates of the need for adult literacy from two to seven million adults. This figure is used to justify committing public funding to this policy area and is re-iterated many times through the 58 page strategy document (seven times as an overall figure and a further twenty times as the basis for estimates of subgroups in need of help). This figure was also widely reported in the media at the time. The neoliberal economic discourse familiar to this period is drawn on in the document to equate a lack of literacy with reduced employability and earnings and a threat to national prosperity:

A shocking seven million adults in England cannot read and write at the level we would expect of an eleven-year-old. Even more have problems with numbers. The cost to the country as a whole could be as high as £10 billion a year. The cost to people's personal lives is incalculable. People with low basic skills earn an average £50,000 less over their working lives, are more likely to have health problems, or to turn to crime. (David Blunkett, Secretary of State for Education in his foreword to *Skills for Life*, DfES, 2001)

In the strategy specific groups of adults are targeted as a 'priority' for literacy education, all of whom are characterised by negative attributes. These include unemployed and low skilled, short-term workers; benefit claimants, especially lone parents; homeless and those living in disadvantaged communities; prisoners and those on probation, those with drug and alcohol problems, mental health issues; refugees and other non native English speakers. The specification of such groupings, and the new discourses associated with them mark struggles between governments' desires to control their unruly populations at times of economic and social change, as well as to provide support for them. The groups represent the latest incarnation of an underclass that has been constructed by successive governments (see Welshman, 2006). Discourse theory argues that categorisations like this are social labels that

bring into being and maintain certain kinds of subjectivity (Pitt, 2002; Rose, 1989; Smith, 2005). The *Skills for Life* document introduces these new categories into the field of adult education, obliging British providers to focus their programmes on those who can be fitted into one of the groups described.

We can see in this example the important process of the discursive configuring of the policy space and the people within it. In Hamilton (2012b) I looked at other relevant dimensions of this public discourse including discourses defining literacy itself, discourses of learning and discourses of citizenship.

In the *Skills for Life* policy, literacy is referred to as 'basic skills' aligning it with vocational discourses. It is assumed that literacy tuition is always in English despite the fact that there are many different language varieties now in use across communities in the UK. Understandings about the diversity and situatedness of learning are constantly eclipsed by the preoccupation with institutional systems and standards (Hamilton, 2009) leaving informal learning spaces marginalised – either by being drawn into the procedures and scrutiny designed for more formal settings or by being left out of these systems to their own devices

Duty to learn becomes an obligation and a condition for benefits. In the case of adult literacy, views about rights and responsibilities for learning – who should pay, who is entitled and what kind of literacy is appropriate – are currently changing. These changes can be clearly traced by comparing current ideas with those expressed in the early days of the 1970s literacy campaign (see Hamilton & Pitt, 2011a). Dwyer (2004) has documented the prevalence of a discourse of conditionality across a wide area of contemporary social policy, both national and international. He suggests that this signals an underlying shift in thinking about citizenship and that this has material effects on the resources made available to different groups (such as welfare payments) as well as the educational opportunities on offer to them. In this example of the *Skills for Life* policy we can see how public discourses converge and flow across the domains of media, policy and enter the everyday where the lived experience of literacy may be very different from the ways in which it is talked about and justified.

The statistics used to promote the *Skills for Life* policy were produced from a mixture of home-grown national assessments and results from the International Adult literacy Survey (IALS) carried out by the OECD (2000). Comparative surveys like the IALS are increasingly ordering our knowledge of literacy across countries through the actions of apparently distant agents like the OECD and this makes them a prime site for applying a sociomatieral approach. Gorur (2011) does this by identifying steps in the construction of such surveys through which divergent realities and knowledges are translated into numerical test scores turning 'matters of concern into matters of fact' (Latour, 2004). The steps she describes are:

- What and Who to Measure?
- Choose items to represent domains of knowledge
- Translate these across cultures and languages

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- · Choose a sample to represent the population
- · How to measure and interpret findings?
- · Agree on methods of data collection
- Apply statistical techniques
- · Interpret indicators.

Researchers are beginning to investigate how these significant translations take place. Maddox (2014, 2015) has carried out ethnographic studies of test item construction and of the actual testing interactions that take place when teams from the testing agency enter peoples' homes. O'Keeffe (2013) takes the study of test interactions in a different direction by following the process of e-assessment used by the newest test of adult literacy, the Programme for the International Assessment of Adult Competencies (PIAAC). He uses methods of trace ethnography (Geiger & Ribes, 2011) to reconstruct the decisions and procedures encoded in the testing software, and shows how teacher agency is effectively delegated to the technology with a variety of consequences.

In tracing the life of an international test like the IALS or the PIAAC, we can also look at what happens next, at the ways in which the findings are reported and displayed in various formats to a range of audiences: the generic and specialist educational media, the research and policy communities via reports and policy briefings. Guidelines are developed for teachers alongside derivative instruments for use in national contexts. Visualisations are key to this stage of translation.

The results are read by people in different countries, both those that participate in the surveys and those that do not. This stage of translation through policy diffusion is also attracting research attention. Achieving 'buy-in' from the different national governments, creating a global community of competitors (see Rizvi & Lingard, 2010) is a key task for the OECD. Grek (2015) focuses on the main institutional players involved in developing international assessments – the OECD, the European Union (EU), the United Nations Educational, Scientific and Cultural Organization (UNESCO) – and the relationships between them. She describes the growing convergence between them as the assessments become stabilised as a recurrent feature of the policy landscape.

In her work on policy borrowing Steiner-Khamsi describes the international tests as a global solution in search of local problems and draws attention to the phenomenon of policy tourism as national governments rush to find out about the educational systems of the league leaders in order to inform their own policies (Steiner-Khamsi & Waldow, 2011). Addey (2015) explores the growth of international assessments in lower- and middle-income countries and what lies behind a country's decision to participate. She concludes that they employ strategies of both 'scandalising' and 'glorifying' their positions in the league of international assessment findings (Steiner-Khamsi, 2003) and form 'a global ritual of belonging'.

Using such analyses we can follow the actors, the artefacts and the discourses as the surveys travel through media, policy and educational practice in national

contexts that are by turns enthusiastic, variable or indifferent in their response to the findings. Pinsent-Johnson (2015) and Atkinson (2015) report from Ontario, Canada, on the reception of the IALS findings in a context that is highly supportive of OECD policy intentions. In this case, the literacy framework used in the international test is taken directly into educational practice through the development of curricula and screening tests based on it. This takes the survey beyond its original intended arena of application and both authors argue that this has negative effects on pedagogy and inequality among adult literacy learners.

Using data from two case study countries in Europe, Germany, Switzerland, Beiber, Martens, Niemann and Teltemann (2015) explore how far responses to the findings from PISA can be detected in educational policy. They look at how school reforms, in autonomous governance, curriculum and standards, have materialised in line with recommended OECD policy and conclude that the picture is very variable depending on the existing educational context and political constraints.

A study carried out by Evans, Hamilton and Yasukawa (in preparation) on the media coverage of the PIAAC findings in October-December 2013 focused on several countries placed differently in the PIAAC league table. The analysis from the UK offers an example of an indifferent response to this survey of adult skills. Detailed coverage was restricted to just a few articles carried in the two days immediately following the release of the findings, with data displays and items, quickly decaying to repeated headlines which are then incorporated into existing wider debates and blur into other survey findings - in this case issues about the curriculum and school-based examinations. Although the findings put the UK around the average of countries tested, the media adopt a language of catastrophe. The findings are not just reported in terms of other reference countries (Schriewer & Martinez, 2004) but are used to tell an intergenerational story about declining standards of literacy within the UK – a story that is highlighted in the OECD's country summary. Departing from the OECD's guidance, however, the three key dimensions of the PIAAC survey were unevenly reported with most focus on literacy and some on numeracy. While digital technologies are emphasised in the test itself, the media coverage and subsequent debate equates literacy with print and with 'reading books' ignoring other media and textual genres. The lifelong learning orientation of the PIAAC is completely overshadowed by a preoccupation with children and schools and, like the other national contexts we analysed, the voices of experts are everywhere dominant.

These examples show how the meanings and effects of literacy are assembled through public discourses and material strategies that reflect the agendas of particular interest groups whether politicians, teachers, advocates, religious leaders or psychometric experts This chapter has argued that, of the available theories of literacy, a sociomaterial approach can most productively describe and analyse this diversity enabling us to better understand and effectively intervene in educational projects whether local, national or international.

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2. POLICY MAKING AT A DISTANCE

A Critical Perspective on Australia's National Foundation Skills Strategy for Adults

INTRODUCTION

2012 marked a milestone in adult literacy and numeracy policy making in Australia. In September of that year, at an electronics factory outside Adelaide, South Australia, the Parliamentary Secretary for Higher Education and Skills unveiled a National Foundation Skills Strategy (NFSS) for Adults (Standing Council on Tertiary Education, Skills & Employment [SCOTESE], 2012), the first major national policy initiative in adult literacy and numeracy in over 20 years. Although there was little media fanfare surrounding the release of the Strategy, it was nevertheless more than two years in the making from the time the initiative for the Strategy was first made public.

The Strategy is a 32 page document, with a Foreword by the then Minister for Tertiary Education, Skills, Science and Education, Christopher Evans, whose opening remark is:

More than 7.5 million Australian adults do not have the literacy and numeracy skills needed to participate fully in today's workforce. (p. i)

He then states:

We know that the jobs of the future will increasingly be highly skilled and will require higher levels of training and education.

We know that it is imperative that more Australians are able to access quality training to improve their language, literacy, numeracy and employability skills. (ibid.)

Further on in his Foreword he states that the national, state and territory governments "have set a target that by 2022, at least two-thirds of working age Australians will have the literacy and numeracy skills needed to take full advantage of opportunities afforded by the new economy" (ibid.). He concludes by stating that the Strategy "will guide national, collaborative and jurisdictional efforts to equip the Australian workforce for the future Australian economy" (ibid.) and complement efforts underway in other education sectors.

The Strategy emerged as a response to a demand for policy renewal by a wide range of stakeholders, through numerous public consultations and lobbying, and support from some of the most powerful stakeholders. By the time the Strategy was released, a high level of consensus had been reached among some of the most influential stakeholders about what was needed to achieve the literacy and numeracy target in the Strategy. Indeed several of these stakeholders had already made significant investments, with government support, in research and development to ensure that their shared interests could be met. Why then does the Strategy have the effect of alienating some stakeholders in the field of adult literacy and numeracy, including the authors of this chapter? This chapter is in part our effort to understand this sense of alienation, not only towards the Strategy, but the discourse surrounding it. We aim to examine and explain what is in 'dispute' between how the Strategy represents the meanings and values of adult literacy and numeracy, and the meanings and values that we hold based on our own professional engagement in the field and research. In doing so, we show the construction of the unequal power relations involved in this dispute.

In the next section, we provide a brief explanation of who 'we' are and the perspectives that we bring to the work we do in adult literacy and numeracy, and outline the kinds of disagreement we have with the view of literacy and numeracy projected by the Strategy and the views informing not only our own work, but of those who share similar or complementary perspectives. In the third section, we outline some theoretical resources for investigating this disagreement, including Boltanksi and Thevenot's (1999) work on 'orders of worth' in different social worlds. The Strategy represents the achievements of a number of stakeholders coordinating their approaches and mobilising new tools and resources that leave little room for contestation. We introduce the theoretical resources that enable us to examine these tools and resources; these include Latour's (1987) Actor Network Theory (ANT) concepts of 'centres of calculation' and 'immutable mobiles', Bowker and Star's (1999) work on classification systems, and Thevenot's (1984) work on the significance and consequences of investing in 'forms'. In the fourth section, we trace key actors (people, groups, events, documents, technologies) in Australian adult literacy and numeracy from the time when the international Adult Literacy and Lifeskills (ALL) survey results for Australia were released in 2007 to the creation of the Strategy and its supporting resources (Australian Bureau of Statistics [ABS], 2007, 2008). The final section seeks to identify some lessons learned and discusses how an analysis such as this may begin to offer an effective counter discourse.

VOICES FROM THE MARGINS

So who are these alienated authors who are writing this chapter, and why is it so difficult for them to acquiesce to the dominant discourse on adult literacy and numeracy? Both of us are in privileged positions at the time of writing this of working in a University – Keiko as a teaching and research academic, and Steve as

a researcher. While Keiko is involved in the teacher education of people entering the field of adult literacy and numeracy, neither she nor Stephen are under pressure to implement and comply with the instruments of the discourse represented by the Strategy.

In relation to the international adult literacy and numeracy research community, we are strongly informed by socio-cultural perspectives on literacy and numeracy as social practices. New Literacy Studies (NLS) ('New' has increasingly been dropped in recent years) which has evolved from works by researchers such as Street (1984), Baynham (1995), Barton and Hamilton (1998) and Baker (1998) have been significant influences in pointing us to ways of researching local literacies and numeracies in the particular situations where they are produced and used. Studies of practices as activity systems in the recent reformulations of Cultural Historical Activity Theory (CHAT) (Engeström, 2001) have also afforded us with further critical perspectives on literacy and numeracy, in particular as practices in activity systems in workplaces (Yasukawa, Brown, & Black, 2013, 2014) and vocational education and training (Black & Yasukawa, 2013).

The view of literacy and numeracy – or rather literacies and numeracies, that are produced, shaped and reshaped by people in their local practices in the home, community, workplaces as well as but not exclusively within formal educational institutions sits uncomfortably with initiatives that treat literacy and numeracy as something whose worth can be measured objectively. An example of an 'objective' measurement of literacy and numeracy is the International Adult Literacy Survey (IALS) which has now been conducted three times across many Organisation for Economic Co-operation and Development (OECD) countries, and has been the subject of critique by NLS scholars (see for example: Atkinson, 2012; Hamilton, 2001; Hamilton & Barton, 2000; Hamilton & Pitt, 2011). A key element of our alienation with the tenets of the Strategy stems from the all too eager appropriation of the results of the 2006 IALS – the Adult Literacy and Lifeskills (ALL) survey as the rationale for policy and policy-related responses. Aligning ourselves with those researchers cited above who have critiqued the IALS, we fail to see that such surveys can tell the story about the meaning of literacy and numeracy in people's lives.

As we will show in greater detail, the ALL survey has been largely responsible for spurring the review and realignment of a national assessment framework for adult literacy and numeracy, as well as new national competencies for adult literacy and numeracy teachers, trainers and assessors and also a new set of national competencies for learners in the vocational educational and training system. We will illustrate how the Strategy encapsulates the propensity by the literacy and numeracy 'industry' to build a unifying system of equivalences between the different instruments that the Strategy has spawned. This enables, for example, an internally consistent mapping of an adult learners' assessment using one tool to be mapped to levels used by another tool, that is, an equivalence between the ALL survey levels and the national assessment framework (known as the Australian Core Skills Framework – the ACSF). The question that is critical for us is not whether they are equivalent, but

why it is important to achieve these equivalences, and what do these equivalences mean beyond achieving internal consistencies within the policy framework. What do these equivalences enable, and for whom? Why is it troubling while at the same time difficult to challenge?

RESOURCES FOR INVESTIGATING THE DISPUTE

Equivalences and Their Attractions

Boltanski and Thevenot (1999) provide a framework for analysing disputes and disagreements. When people are in dispute, they bring items and facts that each party tries to show is more worthy than what the other party brings. But they say that the worthiness that each party argues "must be justified with reference to a principle of equivalence which clarifies what they have in common", and this principle rests on the "mode" or "regime of justification" (1999, p. 361) that is assumed to be operating in the dispute. They argue that in analysing disputes, we need to recognise the particular kind of social world in which they are situated: each type of social world is characterised by the kinds of human qualities that are valued, the social relations that matter, the format of the valued information and the underlying measure of 'worth'. They identify, without claiming they are exhaustive, six social worlds: the world of inspiration, the domestic world, the civic world, the market world, and the industrial world. Each of these worlds has different regimes of justification that come to the fore in dispute situations, and worthiness of arguments is evaluated within the relevant regime. We summarise their characterisations of dispute settling in the industrial world in particular because as we argue, the Strategy and the surrounding resources operate on the basis of establishing equivalences according to the modes of justification of the industrial world.

Boltanski and Thevenot (1999) explain that in the industrial world, the mode of evaluation of worth is based on the notions of productivity and efficiency. In the industrial world, worthy people are those who are professionally competent and expert in their industry, the kinds of social relations that matter are those that establish and sustain functional links, and the information used by parties in the industrial world often take the form of criteria and standards that are measurable.

The valuing of standardised forms in the industrial world is examined closely by Thevenot (1984). He focuses on the creation of industrial instruments that are codified for the purposes of managing labour, for example, occupational codes and industrial awards. He argues that organisations may make investments in standard forms because in doing so, equivalences are more easily determined – for example, a person's job is described by a particular occupational code which is used to determine the rate of pay they should receive. Investment in standardised form, he argues, increases circulation as well as the lifespan of the form whereas localised forms have less investment value because they cannot be used to make comparisons across organisations. It is for these same reasons, that standardised forms may be

resisted, or the extent of standardisation limited by those who feel that their existing 'above standard' conditions may be reduced to the lowest common denominator. The trajectory of localised forms becoming absorbed (with or without resistance) into standardised forms may be understood by understanding these objects as 'boundary objects'.

The concept of 'boundary object' was developed by Star and Griesemer (1989) When Star (2010) reflects on the concept later as it gets taken up, she explains that "[b]oundary objects are a sort of arrangement that allows different groups to work together without a consensus" (p. 602). The dynamics of this are as follows:

The object (remember, to read this as a set of work arrangements that are at once material and processual) resides between social worlds (or communities of practice) where it is ill structured.

When necessary, the object is worked on by local groups who maintain its vaguer identity as a common object, while making it more specific, more tailored to local use within a social world, and therefore useful for work that is NOT interdisciplinary.

Groups that are cooperating without consensus tack back-and-forth between both forms of the object. (pp. 604–605)

Boundary objects can take different forms, and there are four different types identified by Star and Griesemer (1989), one of which is particularly relevant to our study: the 'standardised forms':

These are boundary objects devised as methods of common communication across dispersed work groups ... The advantages of such objects are that local uncertainties ... are deleted. (p. 411)

When a collection of boundary objects that are circulating across intersecting communities are brought together to facilitate cooperative work at a larger scale, they become 'boundary infrastructures' that can form standards that have wider ranging consequences on local practices – creating equivalences across a wider set of domains and erasing the textures and particulars of local practices (Bowker & Star, 1999, p. 241).

But what are the mechanisms by which certain boundary objects come together and become standards, and others are left out and rendered "residual categories" (Star, 2010, p. 615)?

Making Equivalences Count

Science and Technology Studies (STS) offers us some valuable theoretical resources to follow the development of new technologies from a socio-cultural perspective, including symbolic technologies such as policies and 'forms'. We employ the theoretical resources of Actor Network Theory (ANT) developed by

Latour (e.g. 1987), Callon (e.g. 1987), Law (e.g. 1987) and others to trace how a particular powerful discourse about literacy and numeracy has emerged, and other discourses have been rendered invisible in the national policy context in Australia. A central idea of ANT is that of 'translations' – the transformation of claims made by stakeholders into 'facts' in such a way that the 'facts' serve the interests of the actors that are going to be part of the project, for example of constructing policies and other symbolic artefacts (or indeed material artefacts). Through enrolling more actors into a network formed around compatible interests, the 'facts' that are constructed gain legitimacy and greater resistance to contestation from outside the network. ANT's ideas of 'centres of calculation' and 'inscription devices' are key concepts to guide our analysis of the means by which a particular and singular discourse of literacy and numeracy accumulated purchase power in Australia.

Prior to the emergence of ANT, STS scholars challenged earlier theses of technological determinism (that technology, once developed takes a life of its own) with social constructivist theses that theorised technology as a construction of society, created to respond to and reflect socio-cultural values and needs of the creators. Thus the determinists saw society being shaped by autonomous technologies, while the social constructivists saw technologies as being the product of social endeavours. ANT's significant contribution was the blurring of the distinction between humans and technology, and viewing them as mutually constitutive. Thus, ANT takes into account the determinists' view that technologies do in fact have both anticipated and unanticipated effects on society, while also recognising the range of cultural, economic and social conditions in which certain technologies (but not others) evolve at a particular time in a particular place under particular social conditions.

Employing ANT in educational research, and more specifically in adult literacy policy research is not an original contribution of this study. Hamilton (2011, 2012) and Hamilton and Pitt (2011), for example, employed ANT to examine the making of an adult literacy policy in the United Kingdom (UK). Given adult education policies in the UK and Australia share some similar histories of ideological shifts and tensions, sharing ANT as a central resource for investigation will necessarily yield similarities between Hamilton's studies and this study.

One of the key theoretical constructs in ANT is that of an 'inscription' which Latour (1999) defines in the following way:

A general term that refers to all the types of transformations through which an entity becomes materialised into a sign, an archive, a document, a piece of paper, a trace. Usually but not always inscriptions are two-dimensional, superimposable, and combinable. They are always mobile, that is, they allow new translations and articulations while keeping some types of relations intact. Hence they are also called "immutable mobiles", a term that focuses on the movement of displacement and the contradictory requirements of the task. (pp. 306–308)

A policy is an example of an inscription. Policies are documents that are applied in a number of relevant contexts, interpreted and translated into local and specific strategies, and articulated in practice – for example, education policies are articulated in teachers' classroom practices. Latour (1987) also introduces the notion of 'inscription devices', those instruments, which can be anything from a thermometer to a government statistical institution that produces the inscriptions. The inscriptions that are produced 'at a distance' through distinct means may be translated and combined at a centre for calculation, while operating as 'immutable mobiles' in the wider sphere.

Star and Griesemer (1989) also draw on ANT, and acknowledge that what they call 'standardised forms' are akin to what Latour calls 'immutable mobiles'. Crucial to the possibility of making calculations with a number of immutable mobiles is the assumption that some sort of conversion or transformation can be made between the different inscriptions. Thus the notion of 'equivalence' is critical for centres of calculation. Being able to draw equivalences, Latour (1987) argues, increases the mobility and combinability of the inscriptions. Inscriptions that undergo a number of translations become immutable mobiles – objects that carry with them some features that are immutable, while at the same time subject to articulation in different social worlds.

In this study we will examine how literacy and numeracy are iteratively rerepresented into measurable forms that can then be combined and equated with other calculated entities to produce new equivalences. ANT leads us to examine these iterations of 'translating' literacy and numeracy interests as ways of expanding the network that the centres which are performing these calculations can influence and control, thus transforming disparate boundary objects into more robust boundary infrastructures.

CREATING POWERFUL STANDARDS (AND RESIDUAL OBJECTS IN THE PROCESS)

We examine the creation of powerful standards in the lead up to the release of the NFSS by considering the activities of some key actors (humans and symbolic artefacts), and media activities and reports surrounding them. We will see how some of these actors become important boundary objects that circulate in and through certain social worlds to build a boundary infrastructure that strongly privileges an economic perspective of literacy.

The Adult Literacy and Life Skills Survey

We commence our 'archaeology' of the Strategy in 2006, the year when an international survey of adult literacy, the Adult Literacy and Lifeskills (ALL) survey was conducted in Australia. This survey was coordinated by the OECD and

Statistics Canada and conducted in twelve countries. Our choice of excavating no further back than 2006 is partly a pragmatic one; nothing is completely ahistorical but there has to be reasonable limits to how far back we can go in one small study. But also, the representation of literacy and numeracy in the reporting of the ALL survey proved significant in the building of the Strategy; all representations of literacy and numeracy in the boundary objects that emerged since the ALL survey have a translation back to the release of the ALL survey results. In direct contrast to the findings of the first national adult literacy survey in Australia that there was *No Single Measure* of adult literacy (Wickert, 1989), the discourse that is now gaining increasing power is aimed to ensure that there is and must be a single measure to which all other measures of literacy and numeracy can be equated (Black & Yasukawa, 2014).

The ALL survey results for Australia were first released in 2007 (and re-released in 2008) by the Australian Bureau of Statistics (Australian Bureau of Statistics [ABS], 2008). The Media Release on 28 November, 2007 accompanying the results introduced the results by stating:

There were fewer Australians with literacy assessed as being in the lowest category than there was a decade ago ... The 2006 Adult Literacy and Life Skills Survey of Australians aged 15 to 74 years assessed prose literacy (e.g. ability to read newspapers), document literacy (e.g. ability to use bus schedules) as well as numeracy and problem solving skills, and the ability to understand health related information (e.g. first aid advice).

Approximately 17 percent (2.5 million) of people were assessed at the lowest prose literacy level (down from 20 percent in 1996), while 18 percent (2.7 million) were assessed at the lowest document literacy level (down from 20 percent in 2006).

Comparisons between the ALL survey results and the earlier results for Australia in the 1996 International Adult Literacy Survey (IALS) is thus the first point of interest that the reader of this Media Release (ABS, 2007) is drawn to. The rest of the one-page Media Release lists a selection of findings, including:

Just over half (54 percent) of Australians aged 15 to 74 were assessed as having the prose literacy skills needed to meet the complex demands of everyday life and work. Results were similar for document literacy with 53 percent and numeracy with 47 percent achieving this level ...

Internationally, Australia was ranked in the middle across the different types of literacy with results closely aligned with those from Canada. (ABS, 2007)

Other findings that are listed make comparisons of literacy levels according to gender, employment status, income levels, educational qualification levels, and language backgrounds. There are many observations that can be made just from this Media Release. The first is that a mechanism for making statistical comparisons

of prose and document literacy levels was already in place when the ALL survey results were released. In Star's (2010) terms, the IALS could be seen as a 'boundary infrastructure' that affords comparisons of levels to be made across time, as well as across countries and demographic groups.

Secondly, the Media Release suggests that equivalence relations exist between the ALL survey performance and people's ability "to meet the complex demands of everyday life and work". The ABS explains that level 3 is regarded by the survey developers as the "minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy" (2008, p. 2). The ABS cites a Statistics Canada report for this equivalence between the ALL survey level 3 and the "minimum required", and as we shall see this translation of the ALL survey level 3 has been a significant boundary object in the history of the Strategy. One could legitimately ask how anyone could determine such a minimum, not to mention the contestability of what the complex demands are, and the definition of a 'knowledge-based economy' (see Black & Yasukawa, 2014 for an investigation into the obscure origins of the level 3). However, the equivalence between the level 3 and the "minimum required" appears to be an immutable mobile, or in Star and Griesemer's (1989) terms, a 'standardised form' of boundary object where local uncertainties about the actual meaning of the level 3 are deleted in the way it is used.

The release of the ALL survey results was promulgated with emotive media headlines. The day after the Media Release, a South Australian newspaper reported:

Half of Australians illiterate.

Survey shows many school leavers and adults struggle with basic tasks such as reading a map or bus timetable.

Almost half of Australian adults do not have the basic reading and writing skills needed for everyday living and have difficulty finding information in newspapers, using a bus timetable or understanding directions on medicine labels, a new report reveals ... (Hiatt, 2007)

On the same day, another newspaper paper reported that:

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

VICTORIA is in danger of becoming the dunce state, with half of our adults unable to read or count well enough to get through daily life.

Victoria only beats Tasmania in the adult literacy stakes, and ranks above the Northern Territory and Tasmania in numeracy.

Australian Bureau of Statistics results released yesterday show just over half of Australians had the literacy skills to meet the basic demands of everyday life and work. ... (Metlikovec, 2007)

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Here we see a reference made to the level 3 as the minimum needed "to meet the basic demands of everyday life and work". Other papers responded on the same day, and we also see a league table being constructed by states and territories – the Australian Capital Territory (Canberra) at the top, and Tasmania at the bottom:

Tasmania bottom of the class. (Killick, 2007)

Canberra leads way in life and literacy. (Rudra, 2007)

Within a fortnight, in South Australia, examination of the state's performance lead to the media declaring a:

LITERACY CRISIS: Half of us lack basic life skills. Daily tasks a struggle, says study. (Novak, 2007)

The corpus of the media responses to the Media Release from the ABS suggests that a consensus is developing that it is a 'fact' that half of the Australian adult population are in deficit in relation to 'the minimum level of literacy and numeracy'. There are in fact two powerful 'facts' being constructed – that of a 'deficit' population, and that there is a 'minimum' level that can be measured and below which a person 'can't cope' with the demands of life and work.

The Australian Economy Needs an Education Revolution

Only a few days before the release of the ALL survey results, another arguably more significant event took place in Australia. After over a decade of a conservative government, The Australian Labor Party won government and Kevin Rudd assumed the Prime Ministership. Early in the election campaign, he and another Labour politician, Stephen Smith had released the policy position paper *The Australian economy needs an education revolution: New Directions Paper on the critical link between long term prosperity, productivity growth and human capital investment* (Rudd & Smith, 2007). This paper made a strong case for investment in education at all levels in order to secure its economic returns. This policy position paper, with its heavy human capital orientation, is another boundary object in the history of the Strategy to which many later developments can be traced back. Within a month of the release of the ALL survey, the media, and then later industry peak bodies began speculating about the impact of the ALL survey on the economy:

Basic skills deficit hampering growth.

AUSTRALIAN Bureau of Statistics (ABS) figures show literacy and numeracy skills crucial for business growth are inadequate. ...

An OECD comparison of 14 countries estimated that a one percent increase in a nation's average adult literacy level led to a 2.5 percent increase in labour productivity and a 1.5 percent rise in GDP per capita. ("Basic skills deficit hampering growth", 2007)

Thus a new equivalence is introduced that adds to the economic rationale for literacy: 1 percent increase in literacy level = 2.5 percent increase in productivity = 1.5 percent increase in GDP.

Others media reports followed, such as the one in January of the following year:

Half lack skills to live in "knowledge economy"

... 46 percent of the population, or seven million people, would struggle to understand the meaning of newspaper and magazine articles or documentation such as maps and payslips.

And 53 percent reached just the second of five levels in a practical numeracy test, while 70 percent, the equivalent of 10.6 million people, only managed to progress to level 2 in a series of problem-solving exercises. "Level 3 is regarded by the survey developers as the minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy," said the ABS report, Adult Literacy and Life Skills. (Lunn, 2008)

We begin to see the ALL survey level 3 criterion representing 'the minimum' marrying well with the government's human capital agenda of the 'education revolution'.

More actors start to join the economic discourse of literacy. In February 2008 the Australian Broadcasting Corporation posted a report quoting Dave Tout, the spokesperson for the Australian Council for Adult Literacy, the peak professional body of adult literacy and numeracy practitioners:

We talk about skills shortages and having to upskill our workers, well if they don't have the core skills of literacy and numeracy then my argument would be, how can they undertake their training to improve their workplace skills?

So it carries implications for the workplace as well. (Roberts, 2008)

In the same news report, the then Deputy Prime Minister and Minister for Education, Julia Gillard is quoted as follows:

We understand that people who are of working age need to be literate and numerate for the rest of the training that they may receive to be meaningful, she said.

I mean I think we all intuitively know that if you can't read and write then learning other things is very difficult indeed.

That's why in designing these training packages we're making sure that we're focused on those people who are locked outside work now because they lack basic skills. (ibid.)

The 'education revolution' also starts to unfold in skills sectors. Within six months of winning government a new policy advisory organisation, Skills Australia was established by an Act of Government in 2008 with a mission to:

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provide independent and high quality advice to ensure the government's investment in education and training promotes the development of a highly skilled workforce, increases workforce participation (especially among less advantaged groups), meets the needs of industry and increases Australia's productivity. (Australian Workforce and Productivity Agency – http://www.awpa.gov.au/about-us/Pages/History.aspx)

Anticipating a New Strategy

The emergence of the representation of literacy as a resource for productivity and economic growth is accelerated when on 30 August, 2009, Heather Ridout, the Chief Executive Officer of the peak industry organisation, the Australian Industry Group (AIG) announced Federal Government funding awarded to an AIG project to examine the impact of 'low literacy and numeracy' on businesses, citing the previously referred equivalence relations in a media release:

The OECD has estimated that a one percent increase in a population's literacy skills will lead to a 2.5 percent increase in labour productivity and a 1.5 percent increase in per capita GDP. Considering that ABS data ... has found that almost half of working Australians have less than the minimum literacy and numeracy levels required to meet the demands of everyday work, there is a huge potential to lift productivity. (AIG, 2009)

By the next day, a number of voices supporting the AIG project were heard in the media:

Australian Council of Trade Unions (ACTU) president Sharan Burrow welcomes the programme and says improving workplace safety is paramount.

Most professions rely on capacity to communicate, to make sure that work processes – particularly where there are dangerous goods or dangerous equipment – that those communication processes are absolutely clear.

But beyond safety, it is also an issue of opportunity, capacity to anticipate and productivity really for the employers themselves, so all round literacy is a key issue. (Herbert, 2009)

By March 2010, the AIG was supported by Skills Australia which launched *Australian Workforce Futures: A National Workforce Development Strategy.* This report made an explicit recommendation for the development of "a national adult literacy and numeracy strategy" (Skills Australia, 2010, p. 41) as one of its 12 recommendations. Although the recommendation is elaborated in ways that suggests broader benefits than just economic returns, the first point made is to "reframe language, literacy and numeracy as central to participation and productivity" (p. 41).

A clear government endorsement of the recommendation is made public when on 10 May, 2010, the Federal Treasurer in his Budget speech said:

... I announce tonight a new Skills for Sustainable Growth strategy.

A strategy that will invest \$661 million in the skills of our workforce and ensure our education and training systems are flexible and responsive to our economic needs. . . .

It will improve the quality and accessibility of training – strengthening the link between training and business needs.

And it will provide greater access to training in core foundation skills such as literacy and numeracy.

Mr Speaker, infrastructure investment is a key driver of productivity.

(http://www.budget.gov.au/2010-11/content/speech/html/speech.htm)

The 2010–2011 budget allocated an extra \$100 million over four years for a 'Foundation Skills' package of initiatives including a significant expansion for job seeker and workplace programmes, and a commitment that:

The Government will also develop a National Strategy for Foundation Skills in consultation with the States and Territories by the end of 2011. The National Strategy will provide a framework for foundation skills provision across all jurisdictions for the next decade. (http://www.budget.gov.au/2010-11/content/bp2/html/bp2 expense-08.htm)

To advance the development of the Strategy, the National Centre for Vocational Education Research (NCVER) hosted a conference in September, 2010 to explore what the Strategy should focus on, bringing a number of stakeholders including representatives from the practitioner peak bodies, educational economists, government representatives and specialist consultants together (NCVER, 2011). Listed in the main points emerging from the conference was:

Measure success.

What we are measuring and how we are measuring it are important considerations.

The longer-term outcomes of language, literacy and numeracy programs, from both a workplace and individual perspective, also need to be investigated. Having both pre- and post-assessment would assist in determining longer-term outcomes from programs.

Greater awareness of the applicability and utility of the Australian Core Skills Framework is required to enable wider use of it. This is particularly important for teachers and service providers. (Note that NCVER is currently conducting a mapping exercise between the Australian Core Skills Framework and ALL survey.) (NCVER, 2011, pp. 43–44)

Here we see reference made to the Australian Core Skills Framework (ACSF), a 'standardised form' of assessment in the adult literacy and numeracy field in Australia. It is described as a framework which "provides a rich, detailed picture of real life performance in the five core skills of learning, reading, writing, oral communication and numeracy" (Department of Industry, Innovation, Science, Research and Tertiary Education, 2012, p. 2) and is a compulsory instrument for assessment and reporting learner outcomes in Commonwealth funded job seeker and workplace literacy and numeracy programmes. The ACSF manual says that it:

has been developed to facilitate a consistent national approach to the identification and development of the core skills in the diverse personal, community, work, and education and training contexts. It offers:

Shared concepts and language for identifying, describing and discussing core skills.

A systematic approach to benchmarking, monitoring and reporting on core skills performance. (Department of Industry, Innovation, Science, Research and Tertiary Education [DIIRSRTE], 2012, p. 2)

Thus the reporting of the NCVER conference outcomes foreshadows the creation of an equivalence relation between the ACSF, which measures, monitors and reports on individuals performance in the 'core skills', and the ALL survey which measured the performance of different populations in similar skill areas. This leads to an initiative to further standardise the form of the ACSF so that it is more widely applicable, to the extent of making it comparable with the OECD population survey levels. This had, in fact, already been anticipated nearly two years prior, in an Agreement by the Council of Australian Governments (COAG) which specified that the proportion of the working-age population with literacy and numeracy levels at ALL survey levels 1, 2 and 3 be monitored (COAG, 2008).

Although the ACSF claims to be a tool for supporting development not only in work, but also education and training contexts, its significance in the human capital discourse of literacy and numeracy becomes increasingly evident. In August, 2010, a researcher in the Productivity Commission, a research and policy advisory body of the Australian Government, released the report *Links Between Literacy and Numeracy Skills and Labour Market Outcomes* which used econometric models with the ALL survey results:

to formally estimate the effect of functional literacy and numeracy skills on labour force participation and on hourly wages (which is an indicator of productivity). (Shomos, 2010, p. 67)

Key findings from the study included:

Results confirm previous research in the human capital literature – that improving literacy and numeracy skills has a positive, statistically significant effect on labour market outcomes.

More specifically, it was estimated that an improvement in literacy and numeracy skills from level 1 to level 3 would:

- increase the likelihood of labour force participation by about 15 percentage points for women and about five percentage points for men
- increase hourly wage rates by about 25 and 30 percent for women and men respectively. (Shomos, 2010, p. viii)

This was followed in early 2011 with the release of the *National Foundation Skills for Adults Consultation* paper (Foundation Skills Working Group, 2011). The proposed definition of foundation skills: "language, literacy, numeracy and employability skills in the information age" (p. 4) confirms the positioning of the Strategy in the human capital discourse of the 'education revolution': this is primarily about literacy and numeracy for producing an economically productive workforce.

The Strategy as a human capital agenda is further strengthened on 4 April, 2011 when the 11 Industry Skills Councils (ISCs) jointly published the report *No More Excuses*: *An industry response to the language, literacy and numeracy challenge* (ISC, 2011). They make a call for action within the vocational education and training system, and for the COAG to establish a blueprint for action. This is supported later in the year by Skills Australia (2011) in their report *Skills for Prosperity*. A year earlier Skills Australia Chief Executive Robin Shreeve, had said in relation to foundation skills, "the most important first step is getting all the key players "singing off the same hymn sheet" ("Literacy and numeracy are holding Australia back", 2010), and by mid 2011, Government, policy makers, economists and industry representatives were doing just that. In Latour's (1987) terms, a 'centre of calculation' has been built linking the Government and its policy advisors and industry representatives, all ready to produce inscription devices that would help measure and calculate the productivity benefits of literacy and numeracy.

The Release of the Strategy

Before the Strategy was even released, much of what the Strategy would call for had been implemented. In early 2012, a new ACSF was released, and the project was well underway to map the ACSF levels against the ALL survey levels (Circelli, Gillis, Dulhunty, Wu, & Calvitto, 2013). A number of foundation skills 'products' that had earlier been anticipated in a paper entitled *Foundation Skills in VET Products for the 21st Century* (National Quality Council, 2010), such as a new training package for foundation skills delivery and clarification of the relationship between employability skills and foundation skills were under development before the Strategy was released. Thus when the Strategy was finally released on 28 September, 2012, there were few surprises, no announcements of additional funding, and little that was picked up by the media. The Strategy could be seen by many in the field as a summary of all of the initiatives that were already in place.

In January, 2013, the report of the project to map the levels of the ACSF and the ALL survey was published as $Does\ 1 = 1$? Mapping measures of adult literacy and numeracy (Circelli et al., 2013). The report states:

So, does 1 = 1? This study has shown there to be a close alignment in the complexity of Level 1 reading and numeracy constructs between the Adult Literacy and Life Skills survey and the Australian Core Skills Framework. However, the alignment between each performance level across the two frameworks was not as direct for higher skill levels. For example, as we have seen, for the reading construct, ACSF exit Level 3 appeared to be more similar to ALLS Level 2 than ALLS Level 3, and ACSF exit Level 4 was more closely aligned to ALLS reading Level 3.

... as the results are suggesting, ALLS Level 3 in reading and numeracy is approximately equivalent to ACSF exit Level 4, then adult literacy and numeracy programmes that are delivered and reported against the ACSF may need to specify ACSF exit Level 4 as the desired outcome if the implied workforce skills development objective is to be met. (p. 14)

From this project, there are now equivalences between the ALL survey levels and the ACSF, and the ALL survey level 3 that played a large role in marrying literacy and numeracy with the productivity agenda can be substituted by the level 4 of the ACSF, the widely used assessment and reporting framework in Australia.

Has the centre of calculation finished its work? The mapping report suggests otherwise:

The results from this study could be used to map other similar frameworks or programmes onto the Australian Core Skills Framework and/or the Adult Literacy and Life Skills survey. For example, the Adult Migrant English Program (AMEP), if considered to have similar constructs in terms of reading/numeracy, could also be mapped onto the Reading and/or Numeracy complexity scales developed in this particular study.

Similarly, the new, yet to be released Core Skills for Work Framework (CSFW; ITHACA Group, 2012), which has been designed to have five developmental levels across ten skill areas (to complement the ACSF), could also be empirically validated using a similar methodology to that employed in the current study ... In addition to empirically validating the framework in terms of its architectural structure etc., it may also be desirable to map certain skills sets within its framework to the ACSF. (Circelli et al., 2013, p. 16)

There is more that will keep the centre of calculations busy for another little while. Less than six months after the release of the NFSS, the preliminary results of the most recent OECD survey Programme of International Assessment of Adult Competencies (PIAAC) was released, and immediately, the Australian Council for

Educational Research (ACER) issued a media release, quoting a senior research fellow of the Centre, David Tout:

The preliminary PIAAC results from 2011–12 show that about 7.3 million or 44 percent of adult Australians achieved in the lowest two bands for literacy, while about 8.9 million or 55 percent achieved in the lowest two bands for numeracy.

Of significance for employers and those in the VET sector, PIAAC also shows that 38 percent of employed adults achieved in the lowest two bands for literacy, while 48 percent achieved in the lowest two bands for numeracy.

"This is an *alarming result* for a country that needs to lift the skill levels of its population to ensure a healthy society and a robust economy," Mr Tout said. (ACER, 2013, emphasis added)

REFLECTIONS ON THE EXCAVATIONS

The national Strategy is a product of the cooperation of a number of different actors both inside and outside the Australian adult literacy and numeracy industry. Indeed it is when cooperation started to extend to other industries and internationally that the work flourished and established a powerful centre of calculation. The centre calculated equivalences that enable an individual's literacy and numeracy levels to be interpreted in relation to the literacy levels of populations in OECD countries. The impetus for such calculations could be found in the productivity driven agenda of the Government's 'education revolution'. Similar impetus could be found in policy work in other OECD countries such as Canada (Employment and Social Skills Canada, 2013) and the United Kingdom (see for example discussion in Wolf & Evans, 2010), hardly surprising with the globalisation of the economic system. As Walker (2009) argues, OECD policies on lifelong learning, while espousing a rhetoric about social inclusion are biased towards education that creates "worthy citizens" who are employable, productive and wealthy (p. 348).

One observation that can be made from retracing the evolution of the Strategy using the theoretical resources from ANT is the amount of 'investment in forms' that was made. These are the kinds of forms that Star and Griesemer (1989) call 'standardised forms' that are designed to eliminate local uncertainties. Even prior to the development of the Strategy, instruments such as the ACSF had been critical boundary objects between the practitioners, providers and government to report on and monitor learners and workers' performance in literacy and numeracy. Referring back to the one national framework of levels of performance, the ACSF provided a communication tool between these different communities of practice. But projects like the "Does 1=1?" (Circelli et al., 2013) extend the circulation of the ACSF to the OECD by providing a mechanism for equating the different levels of the ALL survey

to the ACSF, making it easier to monitor the performance of learners in relation to OECD averages.

What is this all about? What kind of a world are we living in? The actors circulating in and out of the centre of calculation which produced the Strategy exist in what Boltanski and Thevenot (1999) characterise as the industrial world, where the mode of evaluating worth is in terms of productivity and efficiency and where relevant information for evaluating is statistical. When literacy and numeracy are captured as prominent actors in the industrial world, those who see literacy and numeracy in other social worlds, for example the civic, domestic or inspired worlds – if we are to use Boltanksi's and Thevenot's (1999) categories, are using different 'regimes of justification' to discuss the value of literacy and numeracy. Such actors, and we include ourselves among them, may be valuing literacy and numeracy for the purposes of some collective interest in the community, or serving a role in life within the learner's family, or expressing one's creativity.

Literacy and numeracy do exist in different social worlds – and this is precisely what NLS research reveals: there are multiple literacies and numeracies that mean and are valued differently in different social contexts. But the industrial world has made strong investments in constructing standardised forms to enable the measurement and monitoring of the literacy and numeracy learning and productivity. There, a pluralist notion of literacy and numeracy is outside the regime of justification. It is not possible to even have a dispute about what 'counts' as literacy and numeracy unless it is framed in terms of productivity. This accounts for the alienation that we experience, as stakeholders in the field of adult literacy and numeracy, along with other researchers who view literacy and numeracy from a social practice perspective.

Many who consider themselves 'in the field of literacy and numeracy' – practitioners, researchers, as well as policy makers and industry representatives – held high optimism when discussions about a new Strategy commenced. The authors too expressed our optimism in our contribution to the NCVER Search conference (Black & Yasukawa, 2011) and in earlier discussions of 'foundation skills' (Black & Yasukawa, 2010). But the Strategy that emerged was a Strategy firmly located in only one social world, away from some of the other possible worlds where literacy and numeracy practices also exist. A Strategy is more easily evaluated within this one 'industrial' mode of evaluation, against one clear set of goals rather than within multiple modes of evaluation for multiple goals. And such a Strategy carries authority because it has roots in a very powerful centre of calculation that includes transnational organisations such as the OECD.

This chapter has provided an elucidation of why it is difficult to imagine how literacy and numeracy that exist in other social worlds can win a 'dispute' or even enter a debate with those who engineer literacy and numeracy in the industrial world. Such an analysis is not particularly empowering because it provides neither a way for alternative understandings of literacy and numeracy to co-exist as different but legitimate perspectives in the current policy space, nor a way for these alternative understandings to be strengthened in the absence of any policy support. These are

larger questions that we are not able to provide solutions to; however, we do believe that even if practitioners and researchers have to work with the current National Strategy and its implications for practice, it is important to know where this Strategy came from and what it was designed to achieve. Blindness to the political agenda of policy only strengthens the centre of calculation.

NOTE

The summary report of the results (ABS, 2007) qualifies that the numeracy levels cannot be compared with the quantitative literacy levels of the 1996 IALS because numeracy was defined more broadly in the ALL survey than in the IALS.

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3. WHAT TO LOOK FOR IN PIAAC RESULTS

How to Read Reports from International Surveys

INTRODUCTION

In October 2013, results from the Organisation for Economic Co-operation and Development (OECD) sponsored Programme for the International Assessment of Adult Competencies (PIAAC) for 24 participating countries (mostly in Europe, but also including North America, the Far East, and Australia) became available. As the successor to the International Adult Literacy Survey (IALS) in the 1990s and the Adult Literacy and Lifeskills (ALL) survey in the 2000s, PIAAC aims to provide information as an international comparative survey. It also has many similarities with national studies, such as Skills for Life in the United Kingdom (UK). Unlike international school level surveys (e.g. Programme for International Student Assessment [PISA], Trends in International Mathematics and Science Study [TIMSS]¹), which gain access to 'captive populations' in schools, PIAAC has needed to use a combination of household survey and educational testing methodologies. It represents a development from the earlier studies, in several ways:

- its first round covers a greater number of countries (24, two thirds of which are European Union (EU) members) – though probably all could be called 'advanced industrial societies'
- it focuses on three domains or 'competencies' Literacy, Numeracy, and now Problem-solving in technologically rich environments (PSTRE)
- it uses computer administration, which, amongst other things, allows 'adaptive routing', aiming to assess the broad 'skill level' of the respondent from a few initial responses, and then to administer more appropriate items (in terms of difficulty) throughout the interview
- it implements a number of methodological and fieldwork improvements, for example, specification and regulation of sampling and fieldwork standards, and
- it has made its data available more quickly and more conveniently.

In addition, PIAAC is designed to be repeated, in order to build up time series data for participating countries. This 'longitudinal' feature would aim to increase the possibility of evaluating competing causal explanations using the study over time of correlations of the outcomes with relevant social or attitudinal variables.

In this chapter, I focus on how to understand these studies, by considering conceptual issues, methodological aspects (research design and execution), and presentation of results. I also discuss the types of results from Australia made available in October 2013, as well as preliminary results released by the Australian Bureau of Statistics (ABS) earlier in that year (ABS, 2013a, 2013b). The chapter aims to air questions concerning the relevance of these survey results to literacy and numeracy researchers and practitioners, and the types of further research possibly needed, in different national and local contexts.

POLICY CONTEXT

Educational policy is currently being developed on a world-wide scale, with supranational organisations being key agencies for change (Rizvi & Lingard, 2010). In this context, the idea of Lifelong Learning (LLL) is central to the conceptualisation and development of adult literacy and adult numeracy. In international policy debates, LLL has been much contested, e.g. between 'humanistic' and 'economistic' approaches (Evans, Wedege, & Yasukawa, 2013). In this connection, it is important to consider work done both within the UNESCO programmes (e.g. Guadalupe, 2015), and by the OECD.

Here I focus on the OECD, the sponsor of PIAAC. OECD's view of LLL aims to promote several objectives:

- development of knowledge and competencies enabling each citizen to actively participate in various spheres of globalised social and economic life
- a broad view of learning, to include more than just the acquisition of technical skills for the economy (OECD, 2007, pp. 9–10)
- emphasis on the citizen's need to acquire *and update* a range of abilities, attitudes, knowledge and qualifications over the life-course, and hence the individual learner's responsibility for their own education (e.g. Walker, 2009)
- change in the focus of learning 'from what people know' to 'what they can do' (Moore & Jones, 2007), and
- weakening of the distinction between formal and informal education (Young, 2010).

Some of the consequences of these positions will be discussed below (see also Tsatsaroni & Evans, 2013).

The European Union (EU) is working closely with the OECD on PIAAC. Increasing globalisation and competitive economic environments are leading national governments to seek competitive advantage, "frequently defined in terms of the quality of national education and training systems judged according to international standards" (Brown, Halsey, Lauder, & Wells, 1997, pp. 7–8). Results from surveys like PIAAC (and PISA) may provide relevant international yardsticks.

For supra-national institutions like the EU, the area of LLL provides a domain where they can make a legitimate policy intervention, since, in a 'globalised' world,

a focus on labour mobility makes LLL a supra-national concern. This provides a basis for OECD's and EU's actions, leading to the promotion of the 'skills and competencies agenda', in all sectors of education and training (Grek, 2010). More generally, the OECD and the EU are disseminating ideas and practices that strongly influence national policy making around the world. These include:

- the promotion of expertise in creating comparable datasets, so that countries
 can measure the *relative* success of their education systems and shift policy
 orientations accordingly
- new forms of 'soft governance' of national educational systems, encompassing
 the production and dissemination of knowledge, and of comparative data such
 as educational and social indicators, and peer reviews involving country and
 thematic reviews so that these supra-national organisations are 'governing by
 data' (Ozga, 2009).

Thus, one of the effects of international studies like PISA and PIAAC is to contribute to a 'comparative turn' in educational policy-making and to a "scientific approach" to political decision-making (Grek, 2010, p. 398).

THE PIAAC SURVEY

PIAAC's wider objectives were presented by Andreas Schleicher (2008) of the Education Directorate at OECD – as helping the participating countries to:

- Identify and measure differences between individuals and across countries in key "competencies"
- Relate measures of skills based on these competencies to a range of economic and social outcomes relevant to participating countries, including individual outcomes such as labour market participation and earnings, or participation in further learning and education, and aggregate outcomes such as economic growth, or increasing social equity in the labour market
- Assess the performance of education and training systems, and clarify which
 policy measures might lead to enhancing competencies through the formal
 educational system or in the work-place, through incentives addressed at the
 general population, etc. and
- Clarify relevant "policy levers" (pp. 2–3, emphasis added).

The PIAAC objectives thus appear to comprise a 'human capital' approach, linked with social concerns (Evans et al., 2013).

In the framework used by OECD, Literacy, Numeracy and Problem-solving in technology-rich environments² are the three 'competencies' which PIAAC aims to measure. In the OECD's approach, *competencies* are:

internal mental structures, i.e. abilities, capacities or dispositions embedded in the individual [...] Although cognitive skills and the knowledge base are

critical elements, it is important not to restrict attention to these components of a competence, but to include other aspects such as motivation and value orientation. (PIAAC Numeracy Expert Group, 2009, p. 10)³

Literacy is defined in PIAAC as:

understanding, evaluating, using and engaging with written texts to participate in society, to achieve one's goals, and to develop one's knowledge and potential. (OECD, 2013b, p. 21)

Numeracy is defined for the purposes of designing the items for PIAAC as:

the ability to access, use, interpret, and communicate mathematical information and ideas, in order to engage in and manage the mathematical demands of a range of situations in adult life. (OECD, 2013b, p. 26)

This is put forward as a basis for conceptualising mathematical thinking in context. However, in order to *operationalise* numeracy, the idea of *numerate behaviour* is developed, that is:

the way a person's numeracy is manifested in the face of situations or contexts which have mathematical elements or carry information of a quantitative nature. [...] inferences about a person's numeracy are possible through analysis of performance on assessment tasks designed to elicit numerate behaviour. (PIAAC Numeracy Expert Group, 2009, p. 10)

This led to specifying the following dimensions of "numerate behaviour" (or 'task characteristics') that can be used to guide the construction of assessment tasks:

- context (four types): personal, work-related, society and community, education and training
- cognitive strategy or response (three main types): identify/locate/access (information); act on/use; interpret/evaluate
- *mathematical content* (four main types): quantity and number, dimension and shape, pattern and relationships, data and chance, and
- representations (of mathematical/statistical information): e.g. text, tables, graphs.⁴

Each Numeracy item can be categorised on these four dimensions, along with its estimated difficulty ('ability level'); see (OECD, 2013a, pp. 26–28).

PIAAC also aims to produce affective and other contextual data that can be related to the respondent's performance. This includes demographic and attitudinal information in a Background Questionnaire (BQ), and self-report indicators on the respondent's use of, and need for, job-related skills at work.⁵

Each country has interviewed at least 5,000 adults, normally 16–65 years of age. PIAAC's default method of survey administration is by laptop computer,⁶ although paper-based testing was used in IALS/ALL (and PISA up to now). As indicated above, this facilitates the use of *adaptive routing*.

Understanding PIAAC's Conceptual Framework and Methodology

In seeking to understand PIAAC and other adult skills surveys and their results, I consider how the interpretation of such studies needs to be related to their conceptual bases and methodological choices, as well as to arguments and decisions about presenting, reporting and reconceptualising them (e.g. Hamilton & Barton, 2000; Radical Statistics Education Group, 1982; Tsatsaroni & Evans, 2013).

Generally, surveys rely on aspects of the research design, responding to reasonably well-understood criteria of validity, to enhance and to monitor the measurement and sampling procedures. It is important for literacy and numeracy researchers, teachers and policy makers to be able to consider these when the results of a survey are presented and discussed. Here I consider the following likely effects of certain design features of the survey, and their realisation in the field:

- the *content validity* of the definitions of literacy, or of numeracy and numerate behaviour ('types' or categories of items, as above)
- the *measurement validity* of the items presented, including the administration and scoring procedures ('qualities' of items)
- the *reliability* of the measurement procedures, and
- the *external validity*, or representativeness, for the national population of interest, of the results produced from the sample (see Evans, 1983, for a fuller discussion).

In my discussion below, I will be referring to PIAAC Numeracy to explain these issues, but the same principles apply for Literacy.

Content Validity

Content validity refers to the extent to which a measure represents all aspects of a given concept. The definition of numeracy used by PIAAC (and, earlier, ALL) is based on the four dimensions of numerate behaviour stipulated above: *context, content, response, representation*. Each item can be categorised on these four dimensions, and the proportion of items falling into each category can be controlled over the whole set of items, so as to make the operational definition of numerate behaviour more explicit, and the content validity of the overall set of items more open to scrutiny. In PIAAC Numeracy, the proportion of items falling into each category of mathematical content, context, and response is controlled (OECD, 2013b, p. 28). This allows test designers to stipulate the proportions of the items that are from each type of each key dimension, and from different levels of difficulty⁷ – for example, the proportion of 'data and chance' items of moderate difficulty.

Nevertheless, in an international survey, this provides a transnational definition, and one needs to question how well it 'fits' the lives of adults in any particular country. Indeed, the four types of *context* (Personal, Work-related, Society and community, Education and training) are *under-specified*: they are rather too general

to refer to any actual specific social practice or social context in which *any particular respondent* might engage, in everyday life.

Measurement Validity

What I call here 'measurement validity' refers to the extent to which the responses to the set of items administered to a respondent actually capture what the conceptualisation of numeracy specifies; this will depend on the *actual range of items used*. As with most large-scale educational assessments, the full set of the items used is not made public while the survey is on-going.⁸

Nevertheless, careful reading of the OECD publications allows us some insights into the Numeracy items used. All 56 actual numeracy items are categorised as to Content, Cognitive strategy and Context in the Numeracy Item Map (OECD 2013b, p. 66, Table 4.3). Five of these items, one from each of the levels from 'below level 1' to level 4, are described in more detail (OECD 2013a, pp. 77–78). And three numeracy 'sample items', not used in PIAAC but similar to items actually used, are published in OECD (2013b, pp. 28–30).

The latter sample of three 'PIAAC-like' items was published to represent the more than 50 that might potentially be presented to any PIAAC respondent. Like any sample, of course, these three items cannot represent the full range of combinations of Content, Context, Cognitive strategy, and Difficulty levels. Nevertheless, it may be useful to consider them briefly here, since they give some specificity to the more general characterisation of numeracy in the survey discussed above. For one of the items, the mathematical content is framed by Personal or Work-related contexts; for the other two, Society and community contexts⁹. They combine realistic images of the problem at hand and school-like test rubrics, providing the questions that need to be answered, presumably by applying the correct mathematical procedures; see OECD (2013b, pp. 28–30).

In any particular country, we can ask how well these sorts of tasks – such as making precise readings from the appropriate temperature scale (as in item 2), or detecting changes in a time series graph of live births (as in item 1) – might represent adults' social practices and everyday lives in that country. We should also ask whether tasks such as these would tap or encourage what we would consider as mathematical thinking about potentially challenging tasks. Sample item 3, which asks for a calculation of the number of wind turbines needed to replace the output of one decommissioned nuclear power station in Sweden certainly appears to represent a more challenging task for most adults in many of the countries surveyed by PIAAC in the current round.

Measurement validity also requires procedures designed for the administration of the survey to be standardised in advance across all countries, e.g. design specifications of the laptops and software to be used, and rules for access to calculators and other aids¹⁰. As with any survey, full appreciation of the validity of procedures requires

assurance of how these procedures are followed in the field. This is even more crucial when results are compared across countries using different fieldwork teams.

External Validity

External validity includes the question of the representativeness of the sample for the population of interest; thus, the 5,000 or more adults (usually aged 16–65) selected for the sample in each country need to represent the population of that country. We can scrutinise, for any participating country, the sample design and other key aspects, such as the incentives offered to those selected for the sample to encourage their participation in the survey. Again, judgments about the effectiveness of these procedures depend partly on knowledge of the actual field practices.

However, it is important to realise that any result from such a sample, whether the mean score for a country, or a difference (e.g. by gender) in the percentages of items correct, is only an *estimate for the corresponding population value* (of the mean or the size of the difference in percentages). The population value for the whole country is what we would really like to know about – but this is not possible with certainty, since we only 'know' about the (hopefully 'representative') sample that our methods have chosen. Other samples, chosen in an equally 'correct' way, would (almost certainly) give different results. So virtually every numerical result that we produce with a sample survey cannot be considered *exact*, but should have a 'tolerance', *a margin of error*, on either side of the sample-based estimate. In this way we can be reasonably 'confident' that the population value (though its exact value is unknown) will be within a specified interval.¹¹

Thus, if we consider Australia's average score in Numeracy, it is estimated as 268 points (267.6 to one decimal place), based on results (OECD, 2013a, p. 263, Table 2.6a) from a sample of 7,428 adults (OECD 2013b, p. 54). But this estimate of the average score of the entire population of adults 15–74 (about 16 million – see next section) cannot be exact (see above). Thus, a 95 percent confidence interval for the population average for Numeracy in Australia will be between 266 and 270 points.¹²

Sometimes, this use of confidence intervals leads to 'surprises'! For example, in the ranking by average Numeracy score, the first four countries are (to one decimal place):

Japan 288.2 Finland 282.2 Belgium 280.4 Netherlands 280.3

This appears to be a very neat ranking, except that Belgium and Netherlands are just about equal. However, if we produce 95 percent confidence intervals for each country's score, in order to be reasonably confident that we have allowed for sampling variation, we get the following intervals for each score (rounded to nearest scale-point):

Japan 287 to 290 Finland 281 to 284 Belgium and Netherlands 279 to 282

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Thus we can see that while Japan is still clearly 'ahead', the estimates for Finland, Belgium and Netherlands cannot be clearly separated, since their confidence intervals overlap: our neat ranking of countries looks much less clear-cut when we allow for sampling variation! Therefore, the OECD publishes analyses that allow for sampling variation.¹³

Reliability

The comparability of test administration across countries and across interviewers, and especially assuring the use of the same standards and practices in marking, has been a problem with past international surveys. Computer presentation and marking of test items will help greatly with *reliability*, the assurance that the survey will produce the same or very close results, if it were to be repeated, using the same procedures. But it may tend to undermine *content validity*, if it reduces the range of types of question that can be asked; for example, it is difficult to produce an item that asks a respondent to *give reasons for his/her answer*, if the item is to be presented and marked by computer. This trade-off between content/measurement validity and reliability is a well-known dilemma in research design.

Further, the strengthening of reliability may lead to concerns about loss of another aspect of *external validity*, namely *ecological validity*, i.e. whether the setting of the research is representative of those to which one wishes to generalise the results. For example, the on-screen presentation of tasks may not be representative of the settings in which respondents normally carry out tasks involving numeracy, and so may not facilitate their 'typical' thinking and behaviour responses. Again, similar dilemmas arise for much educational assessment – but must be considered afresh in understanding PIAAC results.

Beyond Methodology

This discussion of issues related to various aspects of the validity of the survey shows the importance of sound research design – and also of the way field work is accomplished. However, a number of key issues in interpreting the uses and effects of the survey go beyond the technical issues around methodological validity (e.g. Radical Statistics Education Group, 1982). They include the way that the survey's measured scores are *interpreted/reconceptualised* in presentations and reports of various interested parties. This aspect is of course not under the complete control of the survey's sponsors: for example, the media and certain national interests have often offered conflicting interpretations ('spin') of results of international surveys. Understanding these processes requires an appreciation of the policy context and the ideological debates that surround the reception of results in a particular country, as well as of the global education policy discourse.

Several examples can be given of the need for care and scepticism about the reporting and interpretation of these results; see e.g. European Educational Research

Journal (2012), on the way that PISA results are reported and used, and in particular, Carvalho on the "plasticity of knowledge" (2012, pp. 180–183). One problem is that an adult's performance on one of the subtests such as Numeracy cannot simply be expressed as the 'proportion correct' – since adaptive routing means that some respondents were presented with 'harder' items, and some 'easier'. So Item Response Modelling is used to ('psychometrically') estimate a standardised score – for PIAAC, scores are estimated in the range zero to 500, with standard deviation 50. Then, the numerical score is commonly related to one of five general 'levels' of Literacy or Numeracy to make it meaningful.

Now, this may well be more informative than simply reporting the percentage of adults in a country that are categorised as 'literate' or not, as was the case before OECD (and other) international or national surveys. But as in all such surveys, there is debate about use of a simple and *one-dimensional* characterisation of an adult's Numeracy or Literacy. For example, Gillespie (2004) referring to the first UK Skills for Life survey (done using a similar methodology to PIAAC) notes: "The findings confirm that for many, being 'at a given level' is not meaningful for the individual, as levels embody predetermined assumptions about progression and relative difficulty" (p. 1). Part of this scepticism flows from the finding that many adults have different 'spiky profiles', due to distinctive life experiences (Gillespie, 2004, pp. 4–6). Thus, some adults may find items of type A Content (say, 'data and chance') more difficult than type B items (e.g. 'dimension and shape') – and others find the opposite.

Similarly, some policy-makers may attempt to stipulate 'the minimum level of numeracy (or literacy) needed to cope with the demands of adult life' in their particular country – but this notion too is questionable; see Black and Yasukawa's (2014) discussion of current debates in Australia. Such generalising claims group together adults with different work, family and social situations, and different literacy or numeracy 'demands' on them.

These sorts of concerns about validity and interpretation are shared by users of all surveys including assessments, especially those that aim to make comparisons across countries, or over time. Nevertheless, such questions must be assessed for any survey, where results aim to inform policy or practice.

SOME FURTHER RESULTS FOR PIAAC FROM AUSTRALIA

A preliminary summary of the methodology and results from Australia was made available in February 2013, by the contractor, the Australian Bureau of Statistics (ABS, 2013a). This provided an indication of the sorts of results that became available in each of the participating countries from October 2013. Here I give three examples.

Figure 1 shows the proportions of Australian adults at different skills levels. Approximately 7.3 million (44 percent) Australians aged 15 to 74 years had Literacy skills at Levels 1¹⁴ and 2, a further 6.4 million (39 percent) at Level 3 and 2.7 million (17 percent) at Levels 4/5. For the Numeracy scale, approximately 8.9 million

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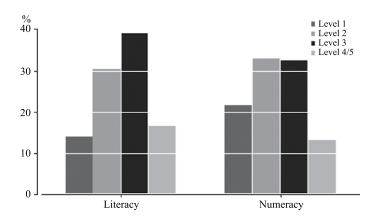


Figure 1. Overall results from PIAAC for Literacy and Numeracy: Australia, 2013. Source: Australian Bureau of Statistics (2013a)

(55 percent) Australians were assessed at Levels 1 and 2, 5.3 million (32 percent) at Level 3 and 2.1 million (13 percent) at Level 4/5. One could also compare Literacy and Numeracy levels for subgroups, e.g. residents of different Australian states. Thus, for Numeracy, Australian Capital Territory recorded the highest proportion of adults at Level 4/5 (23 percent). One can also ask about gender differences, frequently of interest in research like this; see Figures 2a and 2b.

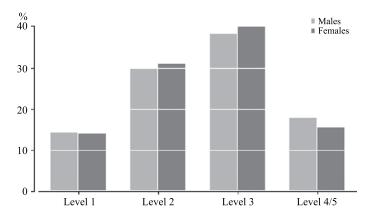


Figure 2a. Proportion at each PIAAC Literacy level, by sex: Australia 2013. Source: ABS (2013a)

In Figure 2a, there appears to be little difference in the proportion of males and females at each level of the Literacy scale. However, when we consider Numeracy results in Figure 2b we see that a higher proportion of males (17 percent) attained

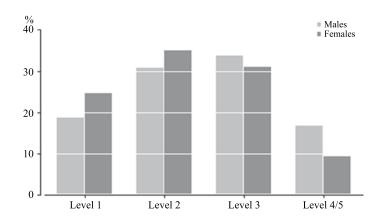


Figure 2b. Proportion at each PIAAC Numeracy level, by sex: Australia 2013. Source: ABS (2013a)

scores at Levels 4/5 compared with females (9 percent); the difference in those attaining Level 3 or above, about 50 percent of males compared with 42 percent of women, appears less striking, but still noteworthy.

One of the concerns of policy-makers is that younger generations should exhibit a higher level of skills than older people; otherwise there are anxieties about a national 'decline in skills', and loss of competitiveness over time. Hence, there has been much interest in the PIAAC countries in performance variations across the age range. Such differences afford some insight into the policy problem – though it is limited (see end of this section). We can consider Figures 3a and 3b, which show results from Australia where the age group surveyed was 15–74 (wider than the 16–65 range studied in most other countries).

In Figures 3a and 3b, we can see that Literacy and Numeracy scores show an increase in assessed scores from the youngest age group, reaching a peak in the middle years (late 20s to early 40s), and then declining from the late 40s. For example, the percentage of people (males and females) with Literacy skills at Level 3 or above was 54 percent for people aged 15 to 19 years, 63 percent for people aged 25 to 34 years, 54 percent for people aged 45 to 54 years and 28 percent for people aged 65 to 74 years (ABS, 2013b). The percentage of people with Numeracy skills at Level 3 or above was 42 percent for people aged 15 to 19 years, 51 percent for people aged 25 to 34 years, 45 percent for people aged 45 to 54 years and 24 percent for people aged 65 to 74 years (*ibid*.).

In Literacy younger women outscored younger men, though "there was no [statistically] significant difference", while "(f)ewer older women had literacy skills at Level 3 or above, than their male counterparts" (ABS, 2013b). For Numeracy "more men were assessed at Level 3 or above than women at all ages, but the difference, which was ten percentage points or higher for older ages, was lower for

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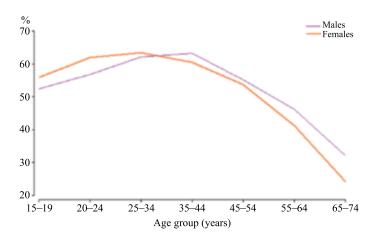


Figure 3a. Proportion at Literacy level 3 or above, by sex and age group, Australia, 2013.

Source: ABS (2013b)

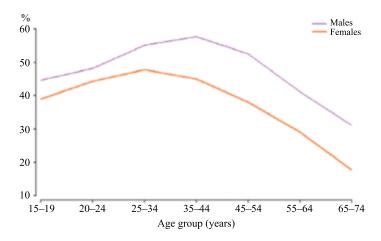


Figure 3b. Proportion at Numeracy level 3 or above, by sex and age group, Australia, 2013.

Source: ABS (2013b)

younger ages." Overall, one could say that younger women had *relatively higher* scores in both Literacy and Numeracy (compared to men) than older women did (ABS, 2013b).

These debates about differences in performance by age (and gender) which were evident around previous international (and national) performance studies show no signs of diminishing (e.g. Reder, 2009). The evidence from PIAAC is limited as it is, so far, a *cross-sectional* (one-off comparative), and not a *longitudinal*,

survey.¹⁵ The latter design responds to the need, in these discussions, to separate *age factors, cohort factors* and *historical-contextual* ones. For example, an individual's skills may increase or decrease as they age – or they may not. And later cohorts in most countries normally have had on average more years of formal education. And, at the same time, some groups of adults in particular enterprises in particular countries may have more or fewer opportunities to develop their skills at work.

DISCUSSION: POSSIBLE EFFECTS OF INTERNATIONAL SURVEYS AND 'COUNTERVAILING FORCES'

In considering the possible effects of international surveys on the teaching and learning of adult literacy and numeracy, we can draw on Basil Bernstein's analysis (2000) of the structuring of pedagogic institutions and discourses. This analysis and his focus on changing forms of educational knowledge and practices can illuminate shifts in the mode of governance of educational policy, in which international surveys play a role (Tsatsaroni & Evans, 2013). This framework can also be used to critique a globally promoted type of pedagogic discourse, which asserts adults' need for certain rather generic skills, and countries' need to assess these in a comparative way.

The international adult studies, like IALS, ALL and PIAAC, have no systematically thought out curriculum associated with them (unlike TIMSS and PISA). Yet the existence of such a 'curriculum' is arguably implied in the definitions of literacy and numeracy¹⁶, the descriptions of 'levels' of performance, and the use (for numeracy) of existing classifications of mathematical content. Tsatsaroni and Evans (2013) earlier thought there was "a strong possibility that PIAAC could reinforce this type of pedagogic discourse, and the surveys could tend to work as an exemplary curriculum type which indirectly would prescribe what knowledge the adult populations in all societies should value, strive to acquire, and demonstrate" (Tsatsaroni & Evans, 2013, p. 178, emphasis added). Indeed, Christine Pinsent-Johnson's more recent paper (2015) shows that this "possibility" has already materialised. She demonstrates how texts and textual devices, including international assessment test tasks and descriptions of performance 'levels', developed in the context of an international skills assessment initiative like PIAAC (or IALS), are "transposed" into the context of adult literacy education, as part of the Essential Skills in Canada, a "competencybased occupational standards framework". She describes how "once the texts enter into local programmes via the Essential Skills, [...] they mediate how literacy is conceptualised, taught and valued" (Pinsent-Johnson, 2015, pp. 201-202). She concludes that her textual analysis reveals, inter alia, the following consequences for teaching and learning: "the paucity of mechanisms in the test task methodology that can be used to inform educators about actual literacy uses in people's daily lives, and its developmental trajectory", and "the displacement and disestablishment of literacy learning expertise" (p. 202).

There are a number of other possible effects of such performance surveys, which may come to represent 'high stakes' for adults and the countries involved. An obvious negative effect is the pathologising of countries which do not 'perform' to standards – not necessarily by the survey's sponsors, but by sections of the media, political parties, and new educational agencies, such as national assessment bodies. (cf. "PISA shock", discussed in *European Educational Research Journal*, 2012).

The emerging discourse supported by international surveys may also have effects on teachers', learners', researchers' and citizens' ways of understanding adult literacy and numeracy.¹⁷ Knowledge comes to be seen as generic skills, flowing from a *decontextualised imagining* of the adult's everyday practices (Hamilton, 2012). This may result in differential access, across social groupings and of countries, to the principles of thinking that disciplinary or professional forms of knowledge can provide (Tsatsaroni & Evans, 2013).

Now, disciplinary knowledge, say in mathematics, can also be understood as 'powerful knowledge' (Young, 2010) – or as 'big ideas' in mathematics education (Lerman, Murphy, & Winbourne, 2013) – that is, as ideas that have rich applicability in a range of fields. One example is the idea of conditional probability. This idea occurs under many guises: as 'having the right denominator for your proportions'; or in reporting research results (e.g. percentage of items correct) for the appropriate population; or in appreciating the difference between the probability of testing positive for x, given that you have disease x – and the probability of having disease x, given that you test positive for x, which is vital in understanding medical test results (Gigerenzer, 2003; O'Hagan, 2012.)

At the same time, it is worth investigating whether international surveys might afford opportunities for further research. Though results are anonymous at individual level, there is potential for relating performances of *categories of respondents* – to demographic and attitudinal data from the Background Questionnaire, and/or further information available on numeracy related practices and 'use of skills' at work. These studies may provide additional ways to study established topics, such as affect (attitudes) among adult learners (Evans, 2000). They may also provide a context for certain types of national studies, or local qualitative studies, to supplement or to probe Background Questionnaire results; for example to investigate why residents of the Australian Capital Territory might have recorded the highest proportion of adults at Level 4/5 for numeracy (23 percent; see above). There are also some examples of use of results from earlier international surveys, e.g. PISA and TIMSS, to study wider educational and social questions (see e.g. Kanes, Morgan, & Tsatsaroni, 2014; Meyer & Benavot, 2013).

In addition, OECD policy is to make available, on their website, datasets from PIAAC – and software for data analysis – for research purposes. This was done at the same time as the release of the results in October 2013. Thus, resources for researching interesting questions suggested by the preliminary results are now more accessible than before.

We can also look to alternative research programmes to produce critical resources to help with asserting the value of alternative conceptions of educational knowledge, and with appreciating developments in adult educational policy issues, including literacy and numeracy. From within adult numeracy, we can illustrate ways to challenge the currently dominant ideas of numeracy and adult skills. For example, Coben and her colleagues have challenged the conventional 'deficit' characterisation of practising nurses' numeracy, and argued that often the high-stakes testing programmes used for this deployed instruments which lacked reliability, validity, and authenticity (e.g. Coben, 2010). Hoyles, Noss, Kent and Bakker (2010) go beyond a narrow definition of numeracy to develop a richer conception of 'Techno-mathematical Literacies' (TmLs), informed by the affordances, flexibilities and demands of information technologies, and document its use by middle ranking UK professionals, in decision-making in specific workplaces. Mullen and Evans (2010) describe demands on citizens' numerate thinking and learning, emphasising the social supports made available by government and other institutions, in coping with the 2009 euro conversion in the Slovak Republic. Gelsa Knijnik and her colleagues describe work with the Landless Movement in Brazil, facilitating their learning to recognise, to compare, and to choose appropriately from academic and/or 'local' knowledges, in carrying out their everyday practices (e.g. Knijnik, 2007).

Powerful knowledges of all these kinds can empower on a broader social basis, through knowledge located in the disciplines, professional practice, or other established practices of adults' 'lived experience'. The aim of educational researchers must be to support the development of potentially powerful knowledge (Young, 2010), like numeracy and literacy, and to prevent their being reduced to narrow competencies.

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I thank Anna Tsatsaroni, Tine Wedege and Keiko Yasukawa for useful discussions supporting the arguments in this chapter. I also thank members of the PIAAC Numeracy Expert Group, and colleagues in Adults Learning Mathematics – a Research Forum, for stimulating exchanges on adults' mathematics education and numeracy, over many years. Appreciation is due also to colleagues in the Radical Statistics Group for valuable discussions on methodology in education and the social sciences, over the last 40 years.

NOTES

- The Programme for International Student Assessment (PISA) is sponsored by OECD, while the Trends in International Mathematics and Science Study (TIMSS) is sponsored by the International Association for the Evaluation of Educational Achievement (IEA).
- In this chapter, I use upper case for proficiencies, as measured in the PIAAC survey (e.g. 'Literacy'); and lower case for the concept, as used by researchers or the general public (e.g. 'literacy').

- The reader should refer to this 2009 document for more detailed discussion on the numeracy assessment framework, and to OECD (2013a), concerning all three competencies in PIAAC.
- Literacy items are characterised by a similar, but not identical, set of dimensions (OECD, 2013a, pp. 21–22).
- See OECD (2013b, pp. 27–46 and 114, Table B1) for the BQ's conceptual framework and Central Statistical Office, Ireland (2013) for a copy of the BQ.
- ⁶ Respondents are presented with initial computer-based tasks; anyone uncomfortable with these takes an alternative pencil-and-paper version.
- ⁷ These levels of difficulty are estimated by the Item Response Modelling procedures; see below.
- Round 2, including a further nine countries (e.g. New Zealand, Singapore and Indonesia), is completing fieldwork in 2014–15, and reporting in 2016.
- The OECD Framework document indicates that the overall distribution of Numeracy items included by contexts was: Personal – 45 percent; Work-related – 23 percent; Society and community – 25 percent: Education and training – seven percent (OECD, 2013b, p. 28).
- Respondents in the first round of PIAAC, completed in 2011–12, were supplied with hand held calculators and rulers with metric and imperial scales, for use during the interview.
- In this chapter I use an intuitive notion of 'confidence', ranging between zero percent and 100 percent. The margin of error depends on the degree of 'confidence' desired in the estimate, but is normally two standard errors for a 95 percent confidence interval.
- For the means and standard errors (SEs) used for calculations here, see Table 2.6a in OECD (2013a, p. 263).
- For example, Figure 2.6a in OECD (2013a, p. 80) shows that, even if country A appears two or three 'positions above' country B in the rankings, their results may nonetheless be effectively indistinguishable ('not statistically significantly different'), once we allow for sampling variation. We can see this in the fact that the 'superiority' of, say, Finland, over the Netherlands in terms of average Numeracy score is only apparent.
- Later analyses distinguished those at Level 1 from those 'below Level 1' (e.g. OECD, 2013c).
- However, as indicated in the Introduction, there are aspirations to repeat PIAAC in at least some countries over time, and some longitudinal insights can be gained by linking PIAAC results to those from IALS and ALL in certain countries.
- The definition of numeracy outlined earlier pointed to the abilities and competencies required "in order to engage in and manage the mathematical demands of a range of situations in adult life" (PIAAC Numeracy Expert Group, 2009, pp. 20ff).
- ¹⁷ And lifelong learning more generally (Evans, Wedege, & Yasukawa, 2013).

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PART 2 RESISTANCE AND AGENCY IN LOCAL LITERACIES AND NUMERACIES

INGE KRAL

4. FROM THE LOCAL TO THE GLOBAL

Socialisation into Adult Literacy Practice in the Remote Indigenous

Australian Context

INTRODUCTION

The discourse associated with adult literacy provision in remote Aboriginal Australia is now intertwined with the notion of training for employment outcomes. The all too common provision of *ad hoc*, short-term vocational training courses coupled with a 'bolted-on' (Bradley, Parker, Perisce, & Thatcher, 2000) approach to literacy reflects the shifting policy environment that typically underpins funding in the remote sector. While it is understood that certain vocational skills can be attained in a short time-frame, the acquisition of literacy is by contrast a process that is lifelong, life-wide and life-deep (Banks et al., 2007). Rarely do discussions around adult literacy in the remote context address the language socialisation processes that lead to adult literacy practice nor do they take account of the resources – social, cultural, material, textual and technological – that enable literacy to flourish beyond instructional, institutional settings. In this chapter I consider the socially, culturally and historically contingent nature of literacy practice in the Central and Western Deserts regions of remote Australia.

By drawing on two case studies I explore how language and literacy socialisation builds on "different, overlapping and intersecting layers of experience" (Duff, 2008, p. xv) and frames young people's way of being in the social worlds in which they will live (Heath, 2008). This consideration of literacy from a language socialisation perspective shifts the focus away from literacy pedagogy by drawing attention to the sociocultural aspects of literacy acquisition and practice in non-formal settings. By taking an ethnographic perspective that views language and literacy socialisation as a lifelong process I also explore how Indigenous youth today are emerging as agents of change and innovation in the transformation of communication forms and modes, including literacy, in response to digital technologies. By drawing attention to the changing shape of literacy in the globalised world (Hull, 2003; Kress, 2003; Livingstone, 2008; Thurlow & Mroczek, 2011), I argue that it is not possible to consider adult literacy in the remote context without also considering the multimodal complex of spoken, written, signed, and additional linguistic and semiotic systems that people use to convey meanings (Duff, 2008).

LANGUAGE AND LITERACY SOCIALISATION

Participating in society and using language are intertwined activities (Ochs, 1996) as the acquisition of socio-cultural competence is gained through the acquisition of language as well as other relevant meaning systems and symbolic structuring, including literacy. Language socialisation, according to Schieffelin and Ochs (1986), is the process by which cultural practices and understandings shape the way that people acquire language within the local culture. Being literate, states Heath (1991, p. 3), involves more than having individual technical literacy skills, it also depends upon "an essential harmony of core language behaviours and certain critical supporting social relations and cultural practices". As each local culture has its own norms, preferences and expectations associated with language and literacy practices, resources and ideologies, these factors influence the ways of communicating and participating specific to the local speech community. In this respect everyday language activities, as socialising activities, form the basis for the transmission and reproduction of culture that are linked to the social practices and symbolic forms of that community (Ochs, 1993; Schieffelin & Ochs, 1986).

But what happens in small Indigenous societies when the process of language socialisation that made sense in the not so distant past has been challenged by profound sociocultural transformation, and new modes of communication and social interaction have been internalised? To answer these questions I focus on two case study contexts: the 'Ngaanyatjarra Lands' region in the Western Desert (Western Australia) and the 'Utopia Homelands' in the Central Desert (Northern Territory). I situate these two case studies historically, and subsequently address the broader language and literacy policy context. I then propose, as do others, that we need "to widen our definitions of literacy to include digital multimodality and connectivity" (Stornaiuolo, Hull, & Nelson, 2009, p. 384) in accordance with changing social practice.

WESTERN DESERT

The 'Ngaanyatjarra Lands' in the east of Western Australia comprises approximately three percent of mainland Australia, fanning out from the tri-state border with South Australia and the Northern Territory (Figure 1). With a population of some 2500 people, this desert region operates as a cohesive set of eleven communities. Residents of the 'Lands' are predominantly Ngaanyatjarra speakers, but the speech community also comprises speakers of other mutually intelligible Western Desert dialects (including Ngaatjatjarra and Pitjantjatjara) and many adults have multilectal competence in more than one dialect as well as English. Despite being "critically endangered" (Australian Institute for Aboriginal and Torres Strait Islander Studies [AIATSIS], 2005, p. 193), language remains a salient symbol of Ngaanyatjarra social identity and cultural heritage.

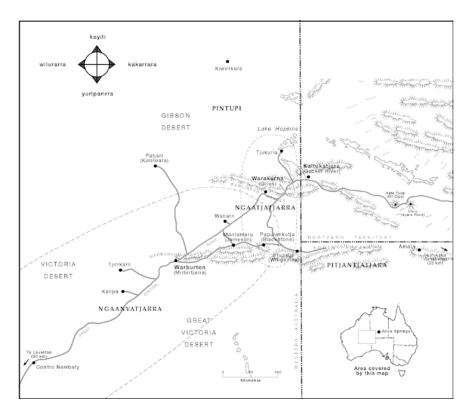


Figure 1. The Western Desert region.

Map by Brenda Thornley. © The Institute for Aboriginal Development.

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The establishment of Warburton Ranges Mission by English-speaking missionaries in the mid-1930s introduced not only a whole new verbal code, but also a corresponding world of European practices, including the new technology of writing, in English, coupled with new ways of being and learning in the mission school and dormitory. It was only in 1957 that the first grammatical analysis of Ngaanyatjarra commenced and a Roman alphabet orthography was devised leading to the production of vernacular primers and Christian reading materials for adult literacy learners (Glass, 2000). Ngaanyatjarra people associated with the Mission thus began to see, then use, their mother tongue – a language previously only heard and spoken – signified in an alphabetic code; leading to the realisation that meaning could be exchanged through written, as well as spoken, communication. Except for a short-lived bilingual education program from 1974–1980 and a Languages other than English (LOTE) program in some schools from the 1990s, schooling in

this region has been English-only. From the 1960s a number of adolescents were sent away to urban centres for secondary schooling and vocational training. By the mid-1980s the Education Department of Western Australia had implemented a 'secondary-tops' post-primary program in the Ngaanyatjarra Lands schools. Adults have been participating in health and education 'vocational' training only since the mid-1980s. In 1996 Ngaanyatjarra Community College opened in Warburton as a registered training organisation and closed a decade later. In summary, compared with many other remote Indigenous regions the overall level of exposure to literacy is comparatively high (Kral, 2012).

The era of Aboriginal self-determination introduced by the Whitlam federal Labor government from 1972 ushered in profound changes across the Indigenous sector. In 1973 Warburton Ranges Mission closed and Ngaanyatjarra people began moving back to their traditional country establishing the permanent communities we see today. Increased access to motor cars meant that people started travelling beyond their local community. In turn they were returning with the new artefacts of communications technology: cassette players, TVs and video players. Over time Aboriginal media organisations such as Central Australian Aboriginal Media Association (CAAMA) in Alice Springs and Ngaanyatjarra Media (the local remote Indigenous media organisation) provided access to media in English and local languages via radio and TV.

Over the last decade the communications landscape has once again been transformed as digital technology has slowly rolled out to remote regions in a quest to bridge the digital divide and provide improved broadband access. For a remote region the Ngaanyatjarra Lands has had a relatively high level of access to the new online services through 'telecentres' as well as media training through Ngaanyatjarra Media. A mobile telecommunication tower was erected at Warburton in 2008 and in 2013, towers were erected in a further five Ngaanyatjarra communities. Mobile phones and internet connectivity are now ubiquitous in most Ngaanyatjarra communities. Among youth cohorts the "always on" (Baron, 2008) aspect is facilitating intensive Facebook communication on mobile phones and iPads or tablets.

CENTRAL DESERT

By comparison, in the Sandover River region in the Central Desert of the Northern Territory (NT) pastoralists occupied Aboriginal land from the 1920s. Anymatyerr and Alyawarr-speaking people remained on their land and some were employed on local stations, including Utopia Station, as stockmen and domestics. They reclaimed Utopia Station under the Aboriginal Land Rights (NT) Act in 1978 and by the early 1980s new outstations were established around 350 km north east of Alice Springs. Today the population of roughly 1,200 is spread over some 16 decentralised homelands or outstations comprising the 'Utopia Homelands'.

Education provision in this region has always been poor. Although a government Native Welfare Branch school had opened at Utopia Station in 1969, it was only in

the mid-1980s that Homeland Learning Centres were established in some but not all outstations (Richardson, 2001). Thus, many children did not have access to any form of schooling until the mid to late 1980s, with the final homeland school built in 2003. No secondary schooling facility existed in the region until very recently, although some secondary-aged students have been sent away to boarding school (Richardson, 2001, p. 221). Only now is there tangible evidence of adolescents coming through high school. Since the 1970s, some informal adult education has taken place in the region including arts-based activities. Adult literacy training for Indigenous evangelists and pastors has also been provided by linguists from the Finke River Mission. Nevertheless, most adult education provision has been short-term and *ad hoc* and provided by various agencies such as health and education. This short history of formal education in the region has resulted in a widespread lack of literacy among adults who have spent the majority of their time in the area (Kral & Falk, 2004).

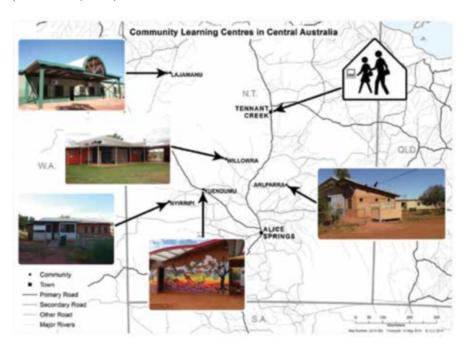


Figure 2. Learning Community Centres in Central Australia.
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Unlike the Ngaanyatjarra, (or even the neighbouring Warlpiri region), the Utopia Homelands have had limited access to communication technologies. The erection of a Study Centre building at Arlparra Homeland in 2004 created a site for occasional

ad hoc provision of Batchelor Institute arts, media and language and literacy courses/projects, primarily for older speakers of the Arandic dialects Anymatyerr and Alyawarr.² In 2011, with the arrival of a new co-ordinator auspiced by Batchelor Institute 'Learning Community Centres' (Figure 2), the homeland communities have had access to accredited and non-accredited vocational training as well as informal computer, internet and digital media activity including GarageBand music recording and Facebook. With most outstations some 30 kilometres apart, mobility and access to communication services have been hindered. However the rollout of the mobile phone network from August 2013 has altered the communication landscape (Rodney Mitchell, personal communication, February 20, 2015) enabling individual phone and internet access with mobile devices.

I will return to the impact of digital media and internet and mobile phone connectivity later. Before this it is necessary to situate adult literacy provision in the remote sector and the broader Australian policy environment.

LANGUAGE AND LITERACY EDUCATION POLICY

Other than a few mission schools and some Christian adult literacy initiatives literacy education in remote Australia was unavailable for most remote Indigenous people until the 'assimilation era'. Vocationally-oriented secondary schooling and adult education then became a key element of the assimilation policy rolled out across Indigenous Australia from the late 1950s (Kral, 2000, 2012).

Schools

By the 1970s under the reforming agenda of the Whitlam Labor government a policy turn emerged that took account of Australia's linguistic diversity. In fact, during the 1980s Australia was celebrated as the first country in the world to have a multilingual languages policy (Lo Bianco & Wickert, 2001, p. 29). As noted above, in Indigenous Australia the onset of a policy of self-determination from the 1970s saw the establishment of outstations and communities in remote regions. Soon bilingual education initiatives also emerged in government and non-government schools in Western Australia, South Australia and the Northern Territory (Simpson, Caffery, & McConvell, 2009). By the 1990s however, the focus in Indigenous education was shifting to English literacy and the competencies required to function in mainstream society without disadvantage. The earlier language rights approach to education in Indigenous regions was being marginalised and replaced by a discourse of crisis around the literacy 'problem' and unemployment and welfare dependency due to poor education and lack of English. The National Literacy and Numeracy Plan (Department of Employment, Education, Training & Youth Affairs [DEETYA], 1998) ushered in the era of external benchmarking testing and a back to basics approach to literacy pedagogy, as well as the subsuming of English as a Second Language teaching under literacy. The commencement of the National Assessment

Program – Literacy and Numeracy (NAPLAN) in Australian schools in 2008 led to Indigenous students being assessed in accordance with the same developmental pathway for literacy achievement set by English as first language students (McKay, 2001). As education delivery in most remote Indigenous schools takes place in linguistically complex contexts, NAPLAN is considered an inappropriate instrument for testing literacy competence. Wigglesworth, Simpson and Loakes (2011) assert for example, that the NAPLAN test, while being suitable for most groups of Standard Australian English speakers, linguistically and culturally unsuitable for Indigenous children, especially those living in remote communities. Moreover NAPLAN is indicative of the narrow measures of primarily alphabetic literacy that count as literacy in school-based assessments where such measures of learning are based on what Street (1984) terms the autonomous conception of literacy as a set of neutral basic skills. As others emphasise:

Traditional assessments of reading and writing, while widely understood to be neutral measures of children's skills, continue to reward those children who share the linguistic and cultural backgrounds of the test-makers. (Stornaiuolo et al., 2009, p. 385)

It is further argued (Street, Pahl, & Rowsell, 2009, p. 195) that the focus on 'print literacies' in schools around the globe is rapidly being superseded by the reality of contemporary communication, embedded as it is now within 'screen-based technologies'. I return to this perspective later.

Adult Education

In the 1970s, community education also became available for Indigenous adults in the Northern Territory through providers such as the Institute for Aboriginal Development and Batchelor College (later Batchelor Institute), with some Technical and Further Education colleges and Open College training initiatives in communities. These initiatives enabled the delivery of basic literacy and numeracy underpinned by an orientation to community development needs. By the late 1980s however, in response to global changes, Australia introduced the National Training Reform Agenda (NTRA). In the remote context under the NTRA it was insisted that workers should now meet nationally accredited Vocational Education and Training (VET) requirements. Paralleling these changes, by the 1990s a national shift away from multilingualism and multiculturalism to a focus on economy became evident which saw the linking of English literacy provision to VET outcomes (Lo Bianco & Wickert, 2001, p. 28). Since the 1990s there has been a movement away from diversity and choice as a means for self-determination, and instead a focus on instilling a sense of responsibility and reciprocity in Indigenous populations has emerged (see Pearson, 2000). What has followed has been a raft of interventions focused on realising individual responsibility through welfare reform strategies such as the use of conditionalities on welfare payments and strategies to get Indigenous

people into training and productive employment. Such changes are evident in the emphasis on 'learn or earn' and the linking of the receipt of unemployment benefits to English literacy and vocational training for future employment outcomes. Currently, if language, literacy or numeracy (LLN) is determined to be a 'barrier' to accredited training, Indigenous learners are referred to the Skills for Education and Employment (SEE) program – a federal government program initiated in mid-2014. The federal government Remote Jobs and Communities Program (RJCP) now manages the participation of jobseekers in training and employment through Job Network Providers who win three year contracts to serve in the RJCP Service Delivery Areas (Altman, 2015). The RJCP can refer 'jobseekers' on unemployment benefits into the tightly structured SEE program, monitoring engagement and achieving outcomes against the Australian Core Skills Framework. Worryingly, participants who fail to meet the stipulated training hours may be breached (oftentimes a process initiated by the training provider) and lose their unemployment benefits.

This mindset, one that links literacy with short-term vocational training and employment outcomes, seems unlikely to change in the near future. As exemplified with the Australian federal government's new Indigenous Advancement Strategy, the emphasis in the arena of education is on children and school attendance, and on the provision of vocational training for young people and adults leading to employment, irrespective of the availability of employment in remote regions. Furthermore, as I discuss below, this approach pays scant attention to multimodal literacies in the new media age.

FROM THE LOCAL TO THE GLOBAL

Indigenous Australian youth are living in a multilingual 'linguistic landscape' (Shohamy & Gorter, 2009). A heritage language or Kriol may be the everyday spoken language in families and communities, but this is set against the visual and oral-aural backdrop of English in the school, workplace, office, clinic, as well as on TV and through the internet and social media. Like Indigenous minorities around the world Indigenous Australian youth are using social media to communicate, and digitally mediated everyday communication is increasingly taking place in the Indigenous mother tongue. Furthermore, in remote Australia, via engagement with social media and digital communication technologies, we are seeing the agentive participation of youth in new forms of cultural practice and production. While inequities in community and/or household-based access and participation are evident, collective models of 'public access' (Rennie, Crouch, Thomas, & Taylor, 2010) have been developed in accordance with broadband, satellite or WiFi availability (Indigenous Remote Communications Association [IRCA], 2010, p. 67). Even where there is limited access to broadband technology, mobile phones, tablets and other devices are widely used to create, share and store diverse media and information. The recent explosion in digital media practice among remote Indigenous youth can be attributed not only to the increased personal ownership of affordable, small, mobile digital

media technologies such as iPads and mobile phones, but also to the emergence of youth-oriented programs that incorporate digital media activities. Access to informal community-based 'learning spaces' has catalysed digitally-mediated multimodal literacy practices (Kral & Schwab, 2012). I return now to the two case study sites as exemplars of these changes.

In the Ngaanyatjarra region through organisations such as 'Wilurarra Creative Youth Arts Project' and 'Ngaanyatjarra Media' young people access informal learning environments where they are socialised into a world full of technology-mediated activity – downloading music, watching YouTube, playing computer games, looking at and labelling photos and so forth.⁵ More sophisticated multimodal practices may also be acquired through film-making and music workshops. Here youth are introduced to the multimedia iLife suite (including iPhoto, iMovie and GarageBand) available on Macintosh computers. In some locations young people have proceeded onto independent video-making, using complex computer editing programs such as Final Cut, leading to DVD production. In other sites they are recording songs on GarageBand and Pro Tools music recording software and producing their own CDs (Kral & Schwab, 2012). Significantly, such access to resources is rapidly enhancing the digital literacy skills of adolescents and young adults in a manner comparable to their peers nationwide and globally. Such activities now form an important aspect of contemporary youth cultural practice in remote settings.

Similarly in the Utopia Homelands the Study Centre or Learning Community Centre at Arlparra blends formal and informal approaches to adult learning with a focus on digital media activity.⁶ In addition to the provision of accredited training and Skills for Education and Employment training (inclusive of literacy), an 'open door policy' has enabled an informal approach to learning where anyone can wander in and do a bit of GarageBand or use the internet without being enrolled in an accredited training course (Kral & Schwab, in preparation).⁷ This process of observational and peer-to-peer learning socialises young people into the norms around learning as a group as well as the development of individual voluntary specialisation (Kral & Heath, 2013). This has led to the development of computer-based multimodal literacy skills.

In remote Indigenous Australia with acknowledged low school attendance and poor retention rates – especially in the secondary years – and a short and sporadic history of adult education provision, the reality is that the percentage of time spent in formal instructional settings is minimal. While we certainly need to reconsider the 'schooling' of Indigenous youth, there is also a dire need to pay more attention to the process of ongoing and adaptive learning across the lifespan that goes on beyond and outside school. Especially as other scholars attest, schools can never provide all that is required for life. Where even under the best of circumstances school age children and adolescents – even those who attend school regularly – may only spend about 18.5 percent of their waking hours in formal education (Banks et al., 2007, p. 9). In recent years new insights into learning have been gathered from scholars from a range of disciplines who have investigated various alternative

learning spaces (Hill, 2008; Ito et al., 2010) and approaches (Barron, 2006; Hull & Schultz, 2002). Others have addressed learning from a 'public pedagogy' perspective (Sandlin, Wright, & Clark, 2011) or with a focus on participatory learning (Jenkins, with Clinton, Purushotma, Robison, & Weigel, 2006). Such approaches draw our attention to similar innovative research around the globe, allowing us to also pay closer attention to language and literacy socialisation and the changing nature of literacy in the new media age.

ALTERED LANGUAGE SOCIALISATION FRAMEWORK

As noted earlier, children, adolescents and other novices become culturally competent members of their own social and cultural group through socialisation into the cultural processes of that group and they acquire the linguistic and cognitive orientations of previous generations. Cultural practice results from the acquisition and transmission of the cultural tools – the habits, routines, dispositions and attitudes – of a cultural group, over successive generations.

Indigenous youth in remote settings are now experiencing far broader socialisation experiences than their forebears. Despite variable experiences of schooling and adult literacy acquisition across generations and regions, in a manner not unlike young people all over the world, Indigenous youth are universally entering the flow from the local to the global. Contemporary living is giving them a vast repertoire of symbolic, textual and media resources to draw on in their communicative exchanges, whether oral, written or digital. In other words, for these young people their way of being in the world, their whole language socialisation framework, now involves acquiring more than one language, and "it may also be mediated by new information and communication technologies and may involve the development of related oral, written and multimodal, as well as cultural, practices intertwined with new intercultural or 'hybrid' identities" (Duff, 2008, p. xvi).

In the Central and Western Desert of Australia the language socialisation context has altered profoundly and now embraces alphabetic and digital literacies and an altered developmental trajectory through formal, and non-formal, education. Youth are socialised into a world that spans the enormous gulf between traditional multimodal communication modes and new communication technologies.

Prior to contact with Anglo-European society a multimodal complex of communication forms and semiotic systems were used by groups across the Central and Western Deserts to convey meaning through language, non-verbal communication and iconic representations. People utilised a rich multimodal communicative repertoire incorporating speech, song, sign language, gesture and the graphic symbols evident in sand drawing and sand story telling (Green, 2014). These relevant meaning-making systems were deployed in the manipulation of the symbols and resources of the known world within a coherent sociocultural system. Youngsters acquired the knowledge, dispositions and practices that enabled them to

participate effectively and appropriately in desert society and this was, and still is, realised to a great extent through language.

Youngsters are now growing up in families where local language practices may embrace both historical/mythical orientations and contemporary digital practices. This vast array of symbolic systems is rich in situated meaning and reveals the general schema of how desert people make sense of their world. In these regions the verbal arts remain highly valued and central to social interaction. As children acquire language they also acquire a worldview (Scheiffelin & Ochs, 1986). While alphabetic literacy is synonymous with the realm of childhood language socialisation in most literate, school-oriented Western and other mainstream families, as desert children listen to stories from the Dreaming they acquire this narrative form as normative. Narrative practices socialise children and adolescents into an understanding of the Dreaming and its enduring role over mythical and historical time in the cultural structuring of communication modes. Today young girls still learn to tell sand story narratives incorporating speech, sign language, gesture and drawing from their elders. In this practice children are acquiring cultural rules associated with ways of speaking and kinship connections, locational and spatial terms, and symbolic structuring embracing not only traditional iconography, but also in some regions, alphabetic symbols.

Indigenous youth are the markers of social change and new influences are shaping the multimodal literacy practices they engage in. In these resource-rich communicative ecologies young people are employing multiple modes of communication. They are drawing on traditional communication styles integrated with new embedded literacy traditions. Additionally they are living in an era where digital media form part of the taken for granted social and cultural fabric of learning, leisure and communication.

Nevertheless, Indigenous youth in remote Australia are living in a rapidly changing linguistic ecology. Now, more than ever before, their heritage languages are under pressure and altered language socialisation practices have impacted on cultural learning. Indigenous youth identity is thus in a state of flux balanced as it is between the influences of elders and the pressures of educational demands to learn English and achieve parity in NAPLAN, enter training leading to mainstream employment, and the effect of globalised media on youth language and cultural practice. Simultaneously, the media reinforces negative societal discourses that denigrate Indigenous languages and youth identities. Hence Indigenous youth are trying to form their own linguistic identities amidst tidal waves of sociolinguistic transformation (Harrison, 2007) and competing language ideologies. Yet through new media practices we can see that youth are actually adapting to the 'multilingual multimodal terrain' (Garcia, 2014) that is their contemporary linguistic ecology and this is leading to innovative youth language practices and hybrid identities. As is the case around the globe, "youth growing up in this mediated, digital culture, have wide-ranging opportunities to choose how to represent themselves in relationship to others" (Stornaiuolo et al., 2009, p. 383). In this setting media and communications technology is igniting cultural innovation, transmission, and interaction. With

exposure to new media and online resources the youth generation is simulataneously locally focused and globally oriented.

A NEW MULTIMODALITY

The arrival of digital technologies and the emergence of new social practices surrounding digital media and mobile devices are creating a seismic shift in the ways that 'literacy' is imagined, all over the world (Crystal, 2008; Hull & Nelson, 2005; Kress, 2010). As Jewitt describes (2009, p. 18), the multimodal facilities of digital technologies have enabled "image, sound and movement to enter the communicational landscape in new and significant ways". Hence it is hugely important, suggest Stornaiuolo et al. (2009, p. 384), "to widen our definitions of literacy to include digital multimodality and connectivity as newly available means". In fact, as Street et al. (2009, p. 195) assert, to not take account of multimodality is problematic as this would "de-privilege" learners who are already drawing on "a number of semiotic modes to make meaning".

It is by appropriating new cultural resources, such as alphabetic literacy or communication technologies, that people are socialised into communities inhabiting, and continuously developing, and transforming, symbolic universes, modes of expression and inscription, and material artefacts (Ivarsson, Linderoth, & Saljo, 2009, p. 202). Through access to new cultural resources, such as communication technologies, new practices are rapidly appropriated if relevant for social and cultural purposes, as the Facebook phenomenon illustrates.

Facebook is now one of the distinguishing features of contemporary Indigenous youth practice, especially among females who have formed their own locally-focused online community. Significantly, in a manner redolent of traditional communication styles, Facebook communication is highly multimodal. This multimodal production of cultural artefacts and texts emanating from youth engagement with digital technologies affords new possibilities for seeing how young people are employing literate modes. In the world of Facebook young people are encoding and decoding written texts for each other, primarily in English, but also the local vernaculars. Facebook allows us to see how "local values, ideologies, patterns of social organisation, and cultural preferences are inscribed in everyday discourse and social interactions, making it possible to discern and investigate the relationships between everyday linguistic and discursive practices and broader social structures and systems of meaning" (Garrett & Baquedano-Lopez, 2002, p. 341).

CONCLUSION

By examining remote Indigenous people's sociocultural and communicative practices and how they have acquired new skills and competencies from an historical perspective what becomes clear is the extent to which all forms of communication and expression – oral, written, gestural, visual, and now computermediated – are interdependent and can never be extracted from the social, cultural and historical, context from which they emerge, in which they change, and for which they exist.

Youth coming of age in remote Indigenous communities today face a complex of competing language socialisation influences. They must acquire the modes of communication and social interaction particular to their own small society. Simultaneously, they are living in a digital globalised world where they must also develop and share new understandings of what it means to participate in activities and relationships across linguistic, social and geographic time and space. The youth generation is connecting, communicating and learning through new media and imagining and constructing identities that are both tied to the past and stretch out to the future. To balance this complex of life goals and expectations young people must acquire diverse linguistic and cultural practices, technological competence and correspondingly hybrid identities. The young people described here are responding to a radically altered language socialisation framework and emerging as agents of change and innovation in the transformation of communication forms and modes, including literacy.

To conclude, I suggest that a complex web of language and literacy socialisation experiences factor strongly in determining how these young people will engage, and indeed succeed, in formal education and other institutional domains across the lifecourse. Reconfiguring approaches to adult literacy in the remote sector in a way that decouples literacy from short-term training for employment outcomes may appear unattainable in the current policy context. It remains, nonetheless, imperative that we broaden our understanding of how and where young people are acquiring the knowledge, practices and dispositions required to function as competent members of social groups and cultural communities. If remote Indigenous youth are to acquire the knowledge, skills, awareness and practices necessary to participate effectively in the mature roles in their own, and the wider, community, then attention will need to be paid not only to the provision of schooling and formal adult literacy tuition, but also to how language, literacy and technological know-how is acquired through socialisation and learning as a lifelong process in contexts beyond institutions. This will require supporting and resourcing non-formal learning settings, especially in locations where engagement with schooling and adult education is at best sporadic.

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NOTES

- Some adult literacy training in Arlparra commenced in 1996 when Olga Dubrowski established an outreach literacy program. Rodney Mitchell took over the program in 1998, followed by Kathryn Gilby from 2000. In 2000 Batchelor Institute signed off on managing the construction of the Study Centre at Arlparra Homeland. Rodney Mitchell returned as the Coordinator of the Arlparra Study Centre in 2011. Other literacy training was provided by the Urapuntja *Health* Service Aboriginal Corporation.
- Projects have included: Arrwekeleny Lyeteny 'old ways and new ways' 2008–2009. Utopia Bush Medicine Project an integrated Art and language educational project funded by Batchelor Institute and the Central Land Council. See also (Morton et al., 2013; Woods & Carew 2008).
- ³ See: http://www.australia.gov.au/topics/employment-and-workplace/employment-services-and-jobs
- 4 See: http://www.innovation.gov.au/skills/LiteracyAndNumeracy/AustralianCoreSkillsFramework/ Pages/default.aspx
- 5 See: http://wilurarra.com/; http://ngmedia.org.au/
- ⁶ By mid-2014 Learning Community Centres had been established in the Warlpiri communities of Lajamanu, Willowra, Nyirripi and Yuendumu through a partnership between WETT and Batchelor Institute. Batchelor Institute has also independently established a Learning Community Centre at Arlparra (Utopia Homelands) (Kral & Schwab, in preparation).
- GarageBand is an intuitive yet sophisticated software program for music recording and editing found on the iLife suite on Apple Mac computers.

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5. "BASICALLY, I NEED HELP"

Responding to Learner Identity in a Skills-Driven ESL Literacy Programme

INTRODUCTION

In Australia, increasing numbers of adult learners from refugee backgrounds enter literacy and numeracy programmes with restricted literacy in their first language and little or no understanding of English as a medium of instruction. Many of these learners have come to Australia under the Government's humanitarian programme, which provides settlement for refugees from war-affected countries such as Sudan, Afghanistan, Iraq and Myanmar. Australian education authorities note that, on the whole, the educational needs of learners from refugee backgrounds are significantly more pressing and complex than those of other migrants settling in the country, with many learners having experienced severely disrupted or no formal education at all (New South Wales Department of Education and Communities [NSW DEC], 2014).

As in most other parts of the world, Australian literacy policy and programming has largely been informed by cognitive and psycholinguistic perspectives. Formal literacy programmes thus frequently align with what Street (1996) terms an 'autonomous' model of literacy, which conceptualises literacy as a suite of neutral, technical skills that can be acquired independent of context. In such programmes, learners are positioned as being either literate or illiterate, and those that are illiterate are considered to be 'deficient' (Perry, 2012, p. 53).

This chapter investigates and illuminates the myriad, complex obstacles and barriers to learning faced by adult learners with limited experience of English as a Second Language (ESL) literacy. In particular, it investigates how these challenges impact upon their identity development as learners. In exploring these themes, the chapter draws upon case study research conducted within Australia's Language, Literacy and Numeracy Programme (LLNP), which is framed within an economic, functional and skills-driven model of literacy. The findings are examined through a sociocultural lens, drawing upon the research of scholars such as Heath (1983), Street (1984) and Barton and Hamilton (1998), which defines literacy in terms of what learners already do with literacy, rather than what they cannot yet do. From this perspective, literacy is viewed as a set of embodied practices carried out within a particular social and cultural context.

ESL LITERACY LEARNERS AND THE LANGUAGE, LITERACY AND NUMERACY PROGRAMME (LLNP)

In this chapter, the term 'ESL literacy learners' refers to adults, many of whom are migrants from refugee backgrounds, who are learning to read and write in English for the first time. What distinguishes them from other literacy learners is that they face the challenge of learning how to read and write in a *second* language, in this case English, with little proficiency in that language, and very limited familiarity with literacy. Van der Craats, Kurvers and Young-Scholten (2006) emphasise the complex cognitive demands made of adult ESL literacy learners, observing that, in contrast, most children develop literacy only after they have acquired much of their first language. In Australia, it is these adult learners who, after having received 510 hours of free English language learning through a government funded settlement English programme called the Adult Migrant English Programme (AMEP), find themselves registered as jobseekers who are eligible for additional literacy and numeracy training.

The Language, Literacy and Numeracy Programme, which was renamed the Skills for Education and Employment (SEE) Programme in 2013, is administered through Australia's social security programme Centrelink, and caters for the long-term unemployed. Its stated objective is to "improve clients' language, literacy and/or numeracy with the expectation that such improvements will enable them to participate more effectively in training or in the labour force and lead to greater gains for society in the longer term" (Australian Government Department of Human Services, 2014). The programme provides up to 800 hours of free accredited language, literacy and numeracy (LLN) training for eligible job seekers whose LLN skills are below the level considered necessary to obtain employment.

Perkins (2009) observes, however, that many so-called 'clients' entering the programme at beginner level are migrants with refugee backgrounds, who exhibit very little understanding of the work or training opportunities available to them. They have had little experience of formal education, and often have pressing social and family obligations that prevent them from attending class regularly. Exacerbating these challenges is the fact that the programme stipulates rigid timeframes within which learners have to exhibit progress in discrete skills, contradicting Tarone and Bigelow's (2012) research findings that, for ESL literacy learners with little formal schooling, literacy progress is often erratic, non-linear and not observable over a short time-period. There thus appears to be a marked incongruity between the LLNP's explicit aims of preparing its clients for the workforce on one hand, and its responsiveness to its clients' most pressing social and learning needs on the other.

CONTEXTUALISING THE CASE STUDY

The four learners reported on in this chapter were participants in a broader, multi-site case study doctoral research project into learner and teacher identity and pedagogies

for ESL literacy learners within the LLNP (Ollerhead, 2013). During this study, the researcher interviewed two head teachers, four teachers and 53 learners in four different classrooms located at two large vocational training colleges. In addition, the researcher observed teaching practices and learner behaviours within four classrooms on six different occasions, providing a total of approximately 48 hours of classroom observation data. During these observations, the researcher acted as a participant observer, assisting the teacher during classroom lessons by helping small groups of learners to complete reading and writing tasks. The research was conducted under the auspices of a leading Australian research university, which granted ethics approval for the study.

All of the learners reported on in this chapter attended the LLNP at a large vocational college, located in an ethnically and socially diverse suburb of a major Australian city. The area was home to a sizeable migrant population, with 30 percent of residents having been born overseas, and 23 percent coming from non-English speaking backgrounds. The learners' teachers described them as being at "marginally-post-beginner level" despite all of them having undergone 510 hours of English language learning through the AMEP.

Having sketched the setting and participants involved in the case study, the discussion will now delineate the theoretical framework within which the research was conducted.

AN ANALYTICAL FRAMEWORK FOR ADULT ESL LITERACY LEARNER IDENTITY

In the context of this study, the roles that learners play within the classroom and society more broadly are inextricably linked to their identities. In recent years, there has been a surge in research into the link between learning and identity (see Block, 2003; Norton, 2000; Pavlenko & Blackledge, 2004; Toohey, 2000). A review of the literature suggests that identity refers to the ways in which individuals understand their relationship to their social world. It is temporal and fluctuating, shaped by social context and resulting from their membership of a community.

In recent times, most discussions about identity and language learning by scholars such as Block (2008), Menard-Warwick (2006), and Zuengler and Miller (2006), draw strongly upon Bonny Norton's theorisation of identity (Norton-Peirce, 1995; Norton, 2000). Norton's conceptualisation of identity is presented within a post-structuralist framework, linked to the work of Pierre Bourdieu (1977, 1991). Within this paradigm, language is conceived of as the vehicle for social organisation, power relations and individual awareness (Pavlenko & Norton, 2007) and learners are regarded as participating in specific communities of practice, in which they negotiate different ways of belonging (Lave & Wenger, 1991; Wenger, 1998). Thus, far from being a process of merely gaining skills and knowledge, language learning is a process of 'becoming' and identity negotiation (Wenger, 1998).

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Furthermore, Norton and Pavlenko (2004) observe that learning a new language is particularly relevant to capturing learners' desires to assume broader identities. Perhaps nowhere could this observation be more relevant than in the case of language learners who also happen to be newly-arrived migrants with refugee backgrounds, settling into a highly literate country like Australia, intent on building new lives.

The multifaceted accounts that learners give of their life histories align with the assumptions underlying the theoretical construct of investment (Norton-Peirce, 1995; Norton, 2000), which considers learners as having highly variable social pasts and aspirations. Norton posits that, while a learner may be decidedly motivated to learn a language, they may nevertheless have little investment in the practices of a language classroom that they perceive to be exclusionary. Exclusionary practices would include elements of content, pedagogy or activities that were, for example, racist or sexist in nature.

These ideas of imagined communities and investment in language education research are instrumental in foregrounding the learner, whose voice has largely been absent from language education research studies, even those that are classroom-based (Rea-Dickins, Kiely, & Yu, 2007; Yoon, 2008).

AN ANALYTICAL FRAMEWORK FOR ANALYSING LEARNER IDENTITY

In examining learners' conceptualisation of their roles within the LLNP, this research builds upon an analytical framework formulated by Rea-Dickins et al. (2007) to explore how learners' sociocultural backgrounds and intrapersonal reflections upon themselves as learners contribute to their identity formation.

In this section, the theoretical bases of the three analytical components of the working model, namely sociocultural conceptualisations of self, conceptualisations as learners, and identities of becoming, will be outlined and discussed.

Component A: Learners' Sociocultural Conceptualisations of Self

The first of the analytical components focuses on the socio-historical perspectives of learners' pasts. It draws on learners' narrative accounts of their previous social, professional and cultural experiences. These narrative accounts are representations of the learners' subjective sense of self, referred to by Wenger (1998) as the 'imagination'. This aspect of the model positions each of the learners that were interviewed within a sociocultural context. Of particular salience were the ways in which the learners aligned themselves with particular cultural contexts and traditions of learning (Rea-Dickins et al., 2007).

Component B: Learners' Conceptualisations of Themselves as ESL Literacy Learners

The second component of the past included in the model, is the way in which learners position themselves internally, in terms of how they conceptualise themselves as

learners and how they perceive their learning potential. A core assumption is that this intra-personal knowledge, viewed by Davies and Harré (1990) as reflective self-positioning, will impact on how learners engage with their future learning and the processes involved in negotiating membership of a "new" learning community.

The ways in which learners view their ESL literacy proficiency and engagement with learning are part of their subjective sense of self. However, according to Wenger (1998), the ways in which learners view themselves and the ways in which they are viewed by "significant others" are inseparable. In contemporary language education research, there is a growing number of studies that suggest the way teachers position their learners is linked to the ways in which learners position themselves, and guides their participatory practices in the classroom (see Hall, Johnson, Juzwik, & Wortham, 2009; Haneda, 2008; Miller, 2011; Reeves, 2009; Yoon, 2008).

Included in component B are data about how learners used specific literacy materials in everyday life. The researcher wanted to form a clearer picture of learners' 'out of school' ways of practising literacy, in other words, how they interacted with literacy as a social practice (Street, 1984). During each interview, learners were presented with realia prompts to elicit information about their literacy uses, referred to from hereon as 'literacy prompts'. These included a supermarket flyer advertising food and clothing items, an English community newspaper, a phone bill, an electricity bill, a bus timetable, a map, a box of couscous bearing preparation instructions, and a reading book for children. The purpose of these prompts was to determine how learners' narrative accounts of their uses of literacy were borne out by their initial reaction to and actual interaction with the various materials.

Component C: Identity Formation as a Mode of "Becoming"

The final component of the model, part C, deals with identity as a process of "becoming". In this sense, it draws on Wenger's (1998) notion of learning as a process during which individuals progress from a form of non-participation or peripheral participation in a community of practice, towards a position of active participation and engagement in an ESL literacy learning community. The model also highlights Wenger's assertion that this developmental process constitutes a tension or 'duality' within the individual. This implies a conflict between individuals' willingness or desire to embrace new learning opportunities, and the idea of 'fixedness', when individuals limit their learning potential by clinging to tightly held self-beliefs, such as being too old to learn. It also examines learners' perceptions of their own agency in learning English versus the perceived agency of significant others, such as teachers, community members or first language speakers of English.

This component is also strongly linked to future, imagined identities. According to Wenger (1998), one of the chief means by which individuals negotiate the struggle implicit in moving from non-participation to active participation within a specific community, is by drawing on resources of the imagination. Clearly, teaching

practices that enable learners to draw on their imagined identities are key to learners' ability to access these resources.

METHODOLOGY

There were two main levels of data captured on learners, namely biographical background information on the whole class obtained from class records and qualitative data obtained from learners during focus group interviews.

Data were analysed using a grounded theory approach informed by the study's conceptualisation of learner identity. The conceptual framework was informed by a perspective on learning as identity development and the processes of establishing membership of a community of practice (as proficient English users within an Australian context).

Throughout the period of this study, the researcher was committed to including the learners' voices as a crucial element of the data. The motivation was not only to triangulate teacher and classroom observation data in order to provide a thick description of the observed practices, but also to record learners' thoughts in their capacity as crucial stakeholders in decisions regarding policy and practice within the LLNP. It was for this reason that interviews were conducted in learners' first languages with the aid of interpreters to facilitate their sharing of in-depth thoughts and opinions (the interpreter translated learners' L1 responses into English for the benefit of the interviewer).

Each of the learners reported on in this chapter was interviewed as part of the focus group interviewing process, which involved 16 learners from the core language groups, namely Arabic, Cantonese, French, Urdu and Vietnamese.

The core aim of this research phase was to obtain information from learners regarding their literacy needs and expectations as viewed through the lens of identity development.

LEARNER FINDINGS

The four learners reported on in this chapter are presented in Table 1. To reduce ambiguity, the data pertaining to each learner are presented and grouped under section headings relating to their respective classroom teachers, namely Paula and Lucy (all names are pseudonyms).

Paula's Class

Paula's class comprised 12 female learners and one male learner, representing six nationalities. Their median age was 39, and they had on average two years of formal schooling experience. Six of the learners had no experience of formal learning. Seven of the learners reported bilingual proficiency, and 12 different first languages were represented in this learner population (see Table 2).

Table 1. Reported learner sample (selected on the basis of nationality, linguistic background, age, gender and experience of formal schooling)

Learner information	Paula's class	Lucy's class	
Learner name	Fatimah; Hassan	Yeanor; Mariam	
Nationality	Sudanese; Sudanese	Sierra Leonean; Sudanese	
First languages	Arabic; Arabic and Fur	French, Krio and Temne; Nuba, Arabic	
Age	28; 36	41; 34	
Gender	Female; Male	Female; Female	
Years of schooling	7; 0	6; 0	

My discussion of Paula's learners is based on a Sudanese Arabic focus group interview. From the collected data, I chose to report on two learners, named Fatimah and Hassan. I wanted to find out how they aligned themselves with their past, in terms of their membership of a particular cultural context, and within a set of learning traditions. I also wanted to find out how they conceptualised themselves as learners, and how they envisaged their future roles with regard to ESL literacy learning.

Table 2. Biographical learner information for Paula's class

Nationality	First languages	Age	Gender	Years of schooling
Afghani	Dari	44	F	3
Afghani	Farsi	48	F	0
Korean	Korean	34	F	8
Pakistani	Urdu	42	F	0
Sri Lankan	Tamil/Sinhalese	49	F	0
Sudanese	Dinka/Arabic	52	F	0
Sudanese	Dinka/Arabic	46	F	0
Sudanese	Nuba/Arabic	34	F	0
Sudanese	Dinka/Arabic	34	F	4
Sudanese	Arabic	28	F	7
Sudanese	Nuer/Arabic	29	F	4
Sudanese	Fur/Arabic	36	M	0
Vietnamese	Vietnamese	42	F	4

Fatimah Fatimah, a 29-year old single mother, had markedly higher levels of formal education than most of the other members of Paula's class. She had attended

school in northern Sudan for six years, where, as well as her basic mother tongue Arabic, she was taught basic English language skills.

At the age of 13, the ongoing civil war in Sudan forced Fatimah's family to flee to Egypt, where they lived as refugees without any rights to formal employment or education. Fatimah spent seven years in Egypt with no schooling. As her parents could not work, she obtained live-in domestic work to help her family to pay for accommodation and to "survive". This she did for seven years until her family obtained refugee status in Australia. During the eighteen months that she had lived in Australia with her family, Fatimah had worked intermittently as a cleaner, in a hairdresser's and a fruit shop.

Fatimah expressed that she wanted to learn English so that she could know more about Australia and its people. She was determined to get an Australian qualification so that she could get a "better" job than those she had held previously. She envisaged a future career in aged care or nursing.

Fatimah had completed her initial 510 hour language education entitlement within the AMEP. She relates the experience as being largely unsatisfactory:

I did a test and was put in level 2. I can't read well and I can't write a story well. The teacher give us a paper, and just maybe if you can read one time, then that's it. Then answer questions. Sometimes they used to get angry if we asked a question.

In contrast, her experience within the LLNP had been largely favourable, in large part because of her positive experience of Paula's teaching.

I love here at [college] the way the teacher teaches. She lets us laugh and enjoy to learn English. To know more, to try, I'm happy with that. If we can all find teachers like Paula, then we could all be happy and like to learn English.

When questioned about her everyday uses of literacy, Fatimah reported using only the supermarket flyers to find certain food items, although she admitted experiencing difficulty with reading and understanding the prices of each item. She said she would like to read children's books to her six-year-old son, but did not have access to any at the College library.

Hassan. Hassan was a 36-year-old married father of three young children, two of whom had physical disabilities. He had lived in Australia for two years. Hassan came from the Darfur region of western Sudan, an area that was in a state of humanitarian emergency between 2003 and 2010, due to intense fighting between the Janjaweed-aided Sudanese government and the non-Arabic indigenous population resulting in considerable loss of life and population displacement. In 2004, he fled to Egypt, where, as a refugee, he was not able to access any form of education. For three years, he worked as an informal labourer in exchange for food and shelter. Hassan related

his distress at having to leave his mother and father behind in a refugee camp in Darfur, and how the tragic events of the past ten years of his life in Darfur affected his ability to concentrate on learning.

When the problems started, our village was burnt down, everything was burnt down. My brother was killed, but we managed to escape to Egypt in 2004 and then I come to Australia in 2006.

Hassan's prime motivation for learning English was so that he could meet and interact with other Australians. He hoped to achieve sufficient English proficiency to find work as a truck driver or security guard.

Hassan appeared to feel equipped with little agency as a learner, and constantly reiterated his need for "help with English". He found reading and writing particularly difficult, because of the differences in the Arabic and English alphabets. While he professed to "love" English and wanted to learn it, he explained that there was nobody at home to help him with his learning. His children were too young to attend school, so did not yet speak English, and his wife had as yet been unable to attend the AMEP as she had a four-month old baby. His inability to communicate and interact in English had left him feeling socially isolated.

When I arrive, there was nobody to talk to, nobody to help, I couldn't understand many things. Even when I do the AMEP, when I go home, everything is closed, nothing that you can understand. So it is very, very difficult. I can just hold a book, but what is there is always my problem. The alphabet ... because I've never been to school, nobody is there at home to help. These are my problems. And then there are letters always coming from different government services, to my house. They always stay there, nobody to help me.

While Hassan felt that he benefited from attending the LLNP, he acknowledged that his progress in ESL literacy learning was slow. After two years of attending classes twice a week, he was now able only able to write his name and his address. Nevertheless, he was determined to "improve to write more".

When shown the literacy prompts, Hassan identified the supermarket flyers as the texts he used most frequently. He enjoyed being able to identify bargains and his ability to relate the prices of different items supported his assertion that he was "quick with numbers". In addition to attending the LLNP, Hassan tried to improve his English by listening to cassettes and by watching *The Simpsons* (an American sitcom) on television. While he had no English-speaking friends to help him, Hassan relied on the sporadic help of a Sudanese friend with more advanced English skills to help him to fill out forms or read important documents.

While Hassan was generally happy with the way he was learning and progressing, and with the tuition he was receiving, he spoke poignantly about his desire to have one-on-one assistance.

Basically, I need help. Help in reading, writing and speaking. To read newspapers, to get work ... but basically I need assistance to understand Australia. I do not understand the country and its people and how things work.

Fatimah and Hassan shared similar experiences of civil war and displacement. They also shared the experience of being denied access to education while living as refugees in a transit country, and of having to perform menial work in order to survive. They thus had a mutual understanding of the experience of social marginalisation.

Both Fatimah and Hassan articulated a determined desire to learn more about their new country, thus highlighting their social isolation versus their desire for integration. Both learners' imagined identities revolved around getting a job, as a nurse and security guard respectively. The imagined benefits of employment signified more than financial security, however. They also implied access to broader social and cultural capital in their newly adopted country.

Significantly, however, Fatimah and Hassan's accounts reflect markedly different conceptualisations of their social and learning identities, influenced by their perceptions of their own agency. Fatimah's positive experience of Paula's teaching, following a negative learning experience within the AMEP, was echoed in her optimistic and clearly articulated imagined identity of "getting a better job" and "learning more about the country". Fatimah's expression that she loved the way "the teacher teaches", points to her positive conceptualisation of herself as a learner, suggesting that she was highly invested in Paula's teaching practices in the classroom, a place where she felt valued and respected.

Hassan's imagined identity and self-conceptualisation as a learner was framed in markedly more negative terms. He frequently expressed the need for help in order to "understand Australia", which reflected his social isolation. He clearly attributed agency to significant others with the requisite knowledge to help him. A survivor of one of the world's worst humanitarian disasters in Darfur, his experiences of loss and trauma seemed to be reflected in his sense of social isolation and helplessness as a newly-arrived migrant to Australia.

Lucy's Class

Lucy's class, like Paula's, was largely multicultural and multilingual. It comprised nine female learners, representing six nationalities. Their median age was 50, and they had on average three years of formal schooling. Three learners reported having had no experience of formal learning. Five of the learners were multilingual, reporting that they spoke two or more first languages. Thirteen different first languages were spoken by the learners in this class (see Table 3).

This discussion of Lucy's learners emanates from two separate interviews conducted with two female learners, namely Yeanor, a 41-year-old learner from Sierra Leone, and Mariam, a 34-year old learner from Sudan. The interview with Yeanor was conducted in English, although her first language was Krio. Despite

Table 3. Biographical learner information for Lucy's class

Nationality	First languages	Age	Gender	Years of schooling
Chinese	Mandarin	47	F	4
Kurdish	Kurdish	49	F	3
Liberian	Maninka/Liberian Kreyol	47	F	4
Samoan	Samoan	53	F	0
Sierra Leonean	Krio/Temne/French/Arabic	41	F	6
Sudanese	Madi/Arabic	64	F	0
Sudanese	Nuba/Arabic	34	F	0
Sudanese	Dinka/Arabic	58	F	3
Sudanese	Nuer/ Arabic	62	F	4

English being the official language of Sierra Leone, Krio is the lingua franca, spoken by 90 percent of the population. Krio and English share many common vocabulary items and grammatical structures, with additional elements from the Yoruba and Igbo languages spoken in Nigeria. Yeanor therefore spoke English fairly fluently, and opted to be interviewed in English rather than in Arabic or French. The interview with Marian was conducted in Arabic, with the assistance of an Arabic interpreter. Mariam and Yeanor's biographical backgrounds are described below.

Yeanor. Yeanor had lived in Australia for just over a year. She was a widowed mother of three daughters, aged 18, 13 and 11. The researcher's initial observations of Yeanor during classroom lessons revealed that she frequently became anxious when asked directly to perform tasks in English, such as write her name, or answer a question in front of other class members. She would visibly tremble, shake her head and express her inability to respond.

Like many learner participants in this study, Yeanor possessed a wide range of oral linguistic resources. She came from a large ethnic group called the Temne from the country's north, and thus spoke the Temne local dialect. She also spoke Sierra Leonian Krio, French and Arabic, and had a working knowledge of the Guinean languages Susu and Maningu, as a result of having lived in Guinea for over nine years.

Yeanor grew up in Makeni, the fifth largest city in Sierra Leone. She attended primary school for six years, until the age of 13, when she got married and became pregnant. Yeanor's apparent anxiety in completing writing tasks in class belied the fact that she had been taught to read and write in both Arabic and English, although most of her education had been in Arabic. Yeanor clearly conceptualised herself as a survivor of torture and trauma. She expressed a clear awareness of the impact of her traumatic past experiences on her ability to remember things learned in class. She was no longer able to read and write as she had once been able to as a child.

Yes I still write a little bit Arabic, but because of war, brain just ... when I remember what happened, when I see it in (memories) in my mind, I feel torment. I think, think about home all the time. I have lots of problems.

The war Yeanor refers to is the Sierra Leonean civil war, which raged from 1991 to 2002 and left 50,000 people dead. During this time, Yeanor suffered the torture of having her house burnt down and her husband killed in front of her. She managed to flee with her family to the ferry terminal at Freetown, and after two long boat and truck journeys, arrived at the Boureah refugee camp in Guinea. She lived there for two years, before moving to Conakry, Guinea's capital and largest city. Here she worked as a hawker of clothing to feed and support her children.

After nine years living as refugees in Guinea, Yeanor and her three daughters joined extended family in Australia once her refugee status had been approved, though many of her siblings remained in Sierra Leone.

Despite her patent sadness about her past, Yeanor expressed a clear imagined identity in the form of obtaining a formal qualification so that she could find a job. She had already completed a cleaning and childcare course through a community college, but had her heart set on being an aged care nurse. She had completed half of her aged care course, yet had failed the written component of the certificate twice. Yet it was not only an occupation and financial security that Yeanor craved. She also expressed a fervent desire to make Australian friends, not only to help her with her English, but to help her understand and join in the Australian way of life. She positioned herself as being socially marginalised, but firmly believed that once she was able to get a job, she would be able to make some Australian friends and integrate better, as witnessed in the following interview exchange:

Yeanor: I don't have any white friends to encourage me, no work. Like

... someone to take care of me. At times it's so lonely, so boring. Not have a lot of company. Like today you talk to me so I feel fine. You okay with me today, you ask me some questions, so I feel lively. But I don't have communion, at work, to discuss

together.

Interviewer: Mmmm. Do you think it will help if you find a job?

Yeanor: Any friendly job. Then any friend, with a white colour, will help

me so much. Sometimes I feel so sad. So sad at times. Even at school there are times I can come and not get happy, teacher say

what's wrong?

During the interview Yeanor twice referred to her desire to make friends with a person "of white colour". The researcher came to understand that she used this term to refer to people whom she assumed were of Australian nationality. She seemed to attribute agency to them as significant others, in the sense that they would help her to feel more integrated into Australian society.

Yeanor's chief interactions with literacy materials were related to her beliefs as a devout Muslim. She would rise at five o'clock every morning to pray and read the Quran. She reported limited use of the other literacy prompts shown to her. Although she thought that advertising pamphlets for fresh products were useful, she struggled to read the prices of each item, saying, "I used these in Africa a lot, then I come here and I get afraid".

Yeanor explained that she also received English language learning help from her daughters, who would borrow books from their school library to read with her at home. She was also forced to speak English to her niece, who lived with her, and spoke neither Krio nor Temne.

Whenever I speak she says, "Oh no, speak Aussie English, Aunty!" But at least I can speak Temne to my sister and my daughters. It is important for them for their culture to still speak Temne.

Yeanor's earnest attempts at learning English in the face of significant barriers to learning are representative of many of the learners' struggles to participate meaningfully in the classroom which represented a literacy learning community of practice. Her case also highlights the ever-present duality or tension inherent in identity negotiation through language learning (Wenger, 1998). Although Yeanor expressed an imagined identity that included a job and white, Australian friends, her memories of the past, yearning for family in Sierra Leone and her desire to maintain her Temne culture and language reflect a strong allegiance to her Temne heritage.

Mariam. Mariam was a 34-year-old married mother of four children, who had lived in Australia for two years. She came from the Nuba district of central Sudan, a remote and inaccessible region where the lifestyle was largely agricultural. Before coming to Australia, she had no experience of formal schooling. She recalled her bewilderment when arriving in a classroom for the first time:

I had never even sat at a desk before, written in a book or even held one. Then I was expected to learn my ABCs. I really struggle(d).

Mariam had undergone 510 hours of English tuition through the AMEP, before being referred to the LLNP, which she had been attending for six months. At the time of interviewing, she admitted that she still experienced significant difficulty with reading and writing in English. She cited her many family responsibilities as a major distraction from learning.

I am very busy at home with the food, the shopping and the cooking and cleaning.

The duality of the process of identity formation is thus reflected in Mariam's desire to become proficient in English and her loyalty and alignment to her traditional roles of mother and homemaker, each of which seemed to be in conflict with the other.

Mariam's expression of an imagined identity was reflected in her assertion that her prime motivation for learning English was "to get any job suitable for woman, like cleaning or childcare". She positioned herself as a struggling learner. Despite her children's (aged 12, nine, and five) efforts to teach her, she relayed that "my mind is not getting the message, maybe because of my old age". Mariam reported trying to learn English at home through listening to English cassettes borrowed from the college, but admitted that she preferred to watch television shows like *The Simpsons* to try to improve her English.

Mariam's everyday use of literacy materials was limited. While she claimed to "have the intention" of practising her reading outside of the classroom, she struggled to make sense of any written material. When shown the literacy prompts, she expressed interest in the supermarket advertising pamphlets, particularly the pictures of clothing, but said she could not understand any of the accompanying text, including the numbers. She also found the children's reader too difficult to read aloud, saying that she would not attempt to read it to her children.

Mariam's perception of her learning difficulties, coupled with her onerous household responsibilities, contributed to her perceived lack of agency in making progress with English learning.

DISCUSSION

The learners' firsthand accounts shed valuable light not only on their life histories and past experiences, but also on how they perceived their individual learning trajectories and plans for the future. Munoz (1995) asserts that:

To study identity means to explore the story of identity – the narrative of identity – the ways we tell ourselves and others who we are, where we came from, and where we are going. (p. 46)

The four learners reported on in this chapter were representative of the 16 learners interviewed as part of the original study. They shared common experiences of trauma as a result of violent conflict and civil war in their home countries. The theme of displacement was also prevalent in their narratives. Having fled their countries of origin, some learners had spent considerable periods of time in transit countries as refugees, where they were denied access to formal learning. Many had to do menial work in these countries simply in order to survive. Almost all of the learner respondents therefore had first-hand experience of social marginalisation, which some continued to experience as migrants in Australia with low levels of English literacy.

Where the commonalities between learners ceased, was in their individual perceptions of their agency to make a difference to their own life situations. Learners such as Fatima and Yeanor had clear visions of their future identities, which fuelled their investment in mastering English. Their goal was to attain English proficiency that would enable them to get a job, which in turn would help them to integrate

more fully into Australian society. Indeed, their determination to achieve these goals is reinforced by literature which states that the qualities of strength, resilience and determination are the hallmarks of many individuals with refugee backgrounds (Jacobsen & Landau, 2003; Mackenzie, McDowell, & Pittaway, 2007). For some of the other respondents, however, their agency was compromised by what they perceived and experienced as significant barriers to their ESL literacy learning. Yeanor and Hassan cited a lack of meaningful employment as a significant barrier to their learning of English. A number of the female learners in the study, such as Mariam, spoke of pressing family and household responsibilities that conflicted with their roles as language learners and distracted them from both classroom learning and practising their English skills beyond the classroom. For Yeanor and Hassan particularly, negative memories of the past, including violent conflict and loss, and yearning for absent or missing family members, distracted them from their efforts to learn.

Where the learners could clearly visualise their goals for language learning, these barriers assumed far less significance in the face of their sharply articulated and tightly-held imagined future identities. For example, Fatimah's imagined identity consisted in getting an Australian qualification and then embarking upon a career in nursing. Yeanor envisaged a future in which she would have increased access to a social network through obtaining a job that would provide her with "communion" with Australians. In these cases, learners' past experiences, far from defeating their perceived sense of agency, instead fuelled a burning desire to master English in order to assume extended identity positions in the future.

Viewed against the theoretical framework of identity formation put forward in this chapter, the learner accounts underscore Wenger's conceptualisation of identity as a process of "struggle" (1998, p. 149), requiring a process of continual negotiation through participation with significant others who help to define who we are. For these learners, this struggle involves the negotiation and renegotiation of their identities in terms of their membership of various communities, by balancing their roles as ESL literacy learners with those as immigrants, parents, homemakers, jobseekers and so on. Indeed, the complex, pressing and multilayered challenges related by each of the ESL literacy learners points to the inadequacy of skills-driven, employment-oriented programmes such as the LLNP to meet their learning and social needs.

Instead, this chapter contends that when literacy provision is viewed through a sociocultural lens, rich and meaningful literacy practices emerge that have the potential to open up effective skills and strategies that learners already use in order to inform teaching practices in the classroom. The act of 'literacy brokering' (Mazak, 2006; Perry, 2012; Prinsloo, 2005) is just one such practice, where, for example, Hassan relied upon his Sudanese neighbour to translate and explain the generic function of official letters and bills that arrived in his post box. In the same way, the consideration of "legitimate peripheral participation" (Lave & Wenger, 1991) guides teachers to scaffold their activities to allow some learners to carry out simpler,

more "low-risk" tasks until they develop the confidence to attempt more central participatory roles in the classroom.

The adoption of elements informed by a sociocultural perspective on literacy into skills-based literacy programs also has important implications for policy. Perry (2012) "suggests" that the highly prescriptive learning outcomes and assessment criteria imposed by those in positions of power, in other words, those who fund, design and deliver literacy programmes, need to be adjusted to reflect the achievements of those who enact literacy practices in different ways in their homes and communities. In the same way, a sociocultural perspective allows those involved in skills-based literacy programs to question and interrogate the overt way in which the LLNP links English literacy tuition to workplace readiness. Indeed, the link is so explicit that learners who fail to attend the requisite number of hours of the program may have their social security benefits withheld as a result. By making this link explicit, a sociocultural perspective encourages participants to engage with, and perhaps even resist, a discourse that clearly positions learners in a dependent relationship to those in power.

The importance of conducting learner identity research in literacy education is highlighted by Moje and Luke (2009), who observe that such research enables a distinct focus on the 'actor' or 'agent' in literacy practices. They contend that:

identities mediate and are mediated by texts that individuals read, write and talk about ... a theoretical focus on identity is crucial not to control the identities that students produce, construct, form or enact, but to avoid controlling identities. (p. 433)

Despite a current multicultural and political climate in which efforts are being made to maximise human and social capital, ESL literacy learners remain notably underrepresented in literacy research in Australia and elsewhere in English-speaking immigrant receiving countries (see Aird, Miller, van Megen, & Buys, 2010). This examination of learner identity in relation to four individuals facing significant barriers to literacy learning, reveals how adult ESL learners are positioned in a highly inequitable power relationship to the economically driven demands of their literacy programme, which in turn impacts upon their access to both material and social resources through employment. The argument is thus put forward that learner identity research that foregrounds the agency (or lack thereof) of the learners within similar skills-based literacy programs, is indeed timely and necessary.

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6. APPRENTICE MENTORING

A Return to Relationship in Learning

INTRODUCTION

Imagine yourself a young person about to start an apprenticeship. You have come directly from school eager to start working life. You are likely to have chosen an apprenticeship because you are a physical kind of person, good at solving practical problems or making things. Your understanding of the trades is that they value handson, practical know-how. You are not interested in continuing at school – you don't see the relevance of school-like learning to your work ambitions. Nevertheless, you know some off-site training will be required in your apprenticeship, and that there will be theory connected to the practical work. You have no formal work experience or skills to offer, but you are keen to qualify in your chosen trade, maybe start up your own business one day. You will be paid the minimum wage at the start of your apprenticeship, or maybe less, when tools and training costs are deducted. You will be the lowest on the organisational ladder. If you have family or friends in the trades you'll have some sense of what to expect in terms of formal and informal learning and qualifications as well as the norms, values and practices of the trade workplace. If you have no family or friends in your trade or perhaps if English is not your family's first language, some of these formal learning requirements, norms, values and practices may surprise you or even cause you to feel unsafe.

This chapter discusses the importance of apprentice mentoring, not only in terms of basic empathy and support for fellow workers, but also in terms of the goals of business. It discusses the vocational environment where training, recruitment, retention, progression and qualification completions continue to be major issues, and argues that without important relational elements in mentoring, apprentices/trainees will continue to struggle to stay in the workplace and to complete their apprenticeship.

PRE-20TH CENTURY APPRENTICESHIP

In New Zealand, work in the 18th and 19th century was modelled on British industrial practices. Writing about apprenticeship in the United Kingdom (UK), Peter Senker states, "... the knowledge and skills acquired by apprentices were almost exclusively tacit: heuristic, subjective and internalised, and learned through practical examples.

experience and practice" (2000, p. 30). The apprentice, usually a young man or boy, was likely to live in the community where he worked, and to already be familiar with the business itself, and the local employer. The local employer would know the families in the area. In the 19th century employers didn't have to pay their apprentices, but they were supposed to feed and clothe them, and make sure they went to church. So the relationship between the employer as tutor and the apprentice as learner would have had a strong personal element through the connection of both to the local community.

20TH CENTURY APPRENTICESHIP

The Apprenticeship Act of 1923 required apprentices to gain part of their training at technical schools, which later became polytechnics. This change was accompanied by national exams and a fixed wage structure for apprentices. At this time, New Zealand was a prosperous country, with safe international markets, full employment and social development programmes that addressed social equity. In the 1950s and 1960s more children were able to attend secondary school for longer, and a university education gradually became a possibility for greater number of young people. Into the 1960s and 1970s, education became more liberal and opportunities and aspirations rose for the working class. By the 1980s, with increased access to higher education, there was a growing stigma attached to working in the trades, and young people who were doing well scholastically were generally not attracted to them. The number of apprentices being trained declined dramatically, causing a crisis of skilled labour (Murray, 2001).

At the same time, as Nicky Murray outlines, massive downward trends in employment followed the loss of British markets, the oil crisis and inflation. Education was perceived to be unable to keep up with this "pace of change" (ibid.). The neo-liberal ideology of the second Labour government in 1987 informed political and economic restructuring, introducing a market ideology and driving educational institutions towards managerialist practices (Boshier, 2001).

Despite legislative attempts to create dynamic work-based training schemes, these lost status for a variety of reasons during the 1980s and 1990s (Higgins, 2002). In an environment where productivity was paramount, time supporting students needed to be balanced against expected outcomes.

GLOBALISED ECONOMIES AND VOCATIONAL EDUCATION

In the latter part of the 20th century, industrialised countries were shifting from national welfare states to globalised economies (Jessop, 2002). This involved a rolling back of government and the introduction of measures that would ensure higher industrial productivity. New Zealand Industry Training Organisations (ITOs) were established with the Industry Training Act of 1992, and charged with setting national industry standards, ensuring quality of training, and arranging training with

tertiary education provider institutions. In line with a global shift to education as a product, apprenticeship training became competency-based (rather than time-based) and modular. In 2002 Apprenticeship Co-ordinators were funded by the Tertiary Education Commission to reduce the dropout rate. Specifically, they were required to facilitate placement and mentor apprentices and employers (Baker, 2015). However, the co-ordinators were faced with conflicting responsibilities. Their requirement to support employers to resolve employment relationships conflicted with the need to develop apprentices' trust in them as mentors. In addition, co-ordinators often held positions as assessors – an authority role that was counter to a mentoring role.

THE LITERACY WAVE

A further educational development was complicating the industry training environment. Internationally, strategies were being developed to address perceived low levels of literacy in the workforce. In 2001, the Ministry of Education released *More than words: The New Zealand adult literacy strategy* (Ministry of Education, 2001). The Tertiary Education Commission (TEC), given responsibility for tertiary education, took over the Ministry of Education's drive to improve students' progress in functional literacy through course material development, vocational teacher training, and initial literacy assessment. Decades of research into literacy (see for instance, Gee, 1994; Hull, 1997; Gowen, 1992, 1996; Gowen & Bartlett 1997; Lankshear, 1998; Street, 1984), as well as research into international literacy assessments (Hamilton & Barton, 2000), have shown how literacy is a sociopolitical practice shaping and shaped by different contexts. Despite this and other like research, new apprentices are currently required to undertake de-contextualised literacy and numeracy tests that focus on functional deficits, through the use of the Tertiary Education Commission's Assessment Tool.

CONTEXT IN LEARNING

The current focus on the acquisition of functional skills elides other dimensions that impact on learning. For instance, status, ethnicity, and gender influence how one approaches and is able to negotiate workplace relationships, politics and hierarchies. Economic downturns resulting in low job security and low wages make these negotiations particularly difficult for apprentices to manage. In addition, learning can be affected by cultural incompatibilities between the home and the workplace. Neither the emotional toll on apprentices trying to cope with all of these matters without support, nor the impact of the emotional dimension on apprentice learning, has been discussed widely in the literature on workplace learning.

Jane Bluestein (2001) describes an emotionally safe environment for learning as one in which students can experience a sense of belonging, of being welcomed and valued, where they are treated with respect, dignity and acceptance; where they can make choices that influence their own learning, control various factors in the

process of learning; and where they can express their feelings and opinions without fear of recrimination. Andrea Needham (2004) describes how unsafe relationships in the workplace become significant barriers to progress. Michael Eraut asserts that "relationships play a critical role in workplace learning, and ... the emotional dimension of ... work is much more significant than normally recognized" (2004, p. 255). In work that draws on a psychological view of learning, Illeris (2002) discusses his three-dimensional model of learning comprising the cognitive (rational, knowledge and skills focused), the social, and the emotional. He notes how cognitive, skills focused learning has gained ascendance in the world of work, at the expense of the other dimensions. When apprentices have difficulties in the workplace or polytechnic that cannot be directly attributed to on- or off-site training modules, there is no one who has the responsibility of listening to and working with them to address their concerns.

MENTORING RESEARCH

What, then, might be done to rebalance the situation for apprentices, to support them to understand and negotiate workplace relationships and culture, to keep their jobs, to complete their qualifications and to realise their dreams of becoming qualified tradesmen or private contractors? Could mentoring be put in place, and if so, what shape should that mentoring take? And would employers see the value of mentoring?

Employers seem open to mentoring *per se* Darwin (2000) states that mentoring is presently at the forefront of strategies to improve workplace learning, and Harris Willis, Simons and Collins go further, arguing that "workplace mentoring is the most critical factor in worksite learning" (2001, p. 274). In individualistic 'western' industrialised countries influenced by neo-liberal doctrines, current workplace mentoring practice tends to be strategic – focused mainly on the instrumental competence of the new employee in relation to the employing organisation. According to this model, the mentor is a senior person in a position of authority (and power) over the mentee, and provides organisation and industry-related learning, advice and guidance to shape the performance of new recruit. Boud and Garrick (1999) note this person may be unable to mentor effectively because of the structural constraints of the role i.e. having a formal role in surveillance of staff.

In the last two decades, the idea of *apprentice* mentoring has gained the attention of researchers and theorists as an effective way of improving apprentice learning and development. Research in Australia (Billet, 2003; Billett & Somerville, 2004) has shown that properly trained mentors are a powerful support for apprentice learning. These findings seem to be confirmed in a series of case studies conducted in New Zealand between 2008–2012 (Holland & Murray, 2010; Holland, 2011, 2012). Tahau-Hodges (2010) and Holland (2012) show that groups such as Māori and Pasifika show particularly significant gains from culturally specific mentoring.

APPRENTICE MENTORING INITIATIVES

Some countries are now making headway in this area. In Australia an apprentice mentoring fund was launched in 2012 following a report by the Australian. Department of Education, Employment and Workplace Relations (2011) which stated:

Support mechanisms for ... the apprentice, trainee and the employer, such as mentoring, pastoral care and quality training provision are required. A shared investment by both government and industry is essential to build these support mechanisms into the system. Current Australian Government investment should be redirected to support the successful completion of an Australian Apprenticeship. (Department of Education, Employment and Workplace Relations, 2011, p. 10)

The Australian Apprenticeships Mentoring Programme supports targeted mentoring to Australian Apprentices. The programme focuses on industries and workplaces employing apprentices who may face barriers to participation (it identifies indigenous and rural apprentices). Mentoring projects provide support during the first year of training when apprentices are most at risk of withdrawing.

Effective Journeyperson Apprentice Mentoring On-the-job: Tips, Strategies, and Resources was released by the Canadian New Apprentice Forum (2013). It discusses how the skill and ability of the next generation of skilled trades professionals rely in large part on the mentors who teach them, and asserts that journeyperson mentors are crucial to apprenticeship success. In the province of Nova Scotia, Workplace Mentoring is now required for all apprenticeship programmes; employers must apply strategies to assist with learning and teaching skills in the workplace. To support this new initiative for apprentices, in the province of Nova Scotia, the Apprenticeship Training and Skill Development Division provides materials and activities for mentors and learners to use.

Apprentice mentoring is gaining traction in the UK public sector. The Trades Union Congress (TUC) has been training union learning representatives since 2000, as part of the UK government strategy to address perceived low levels of literacy in the workforce. The New Zealand Council of Trade Unions (NZCTU) and the Canadian Union of Postal Employees (CUPE) have both developed models based on the TUC learning representatives model, where shop-floor workers (usually union delegates or members) support co-workers with a range of issues including industrial relations and literacy. The learning representative role has always been a mentoring one, although in the past the characteristics of effective mentoring have not been stressed in learning representative training.

Lack of mentor professional development can render the mentor and the mentoring practice vulnerable in several ways. First, if insufficient time and safeguards are approved by the manager the venture may be doomed to failure and that failure is

likely to be attributed to the mentor. Secondly, the apprentice can become wary of engaging with mentoring if the mentor is struggling with the role. Thirdly, if there are no quantifiable results from mentoring, the employer will be unlikely to support any further support initiatives, and may again hold the mentor responsible. Thus professional development is vital. In New Zealand, professional development has been funded by a number of ITOs and undertaken in a range of industries including glass and joinery, fire and rescue, hairdressing, electro-technology and hospitality. There are three professional development workshops and supporting material that are customised to the industry. They take place over nine months and include phone/email support. The TUC in the UK has also recently begun to offer mentor training within its learning reps programme. The training covers active listening, questioning, building rapport, offering constructive feedback, setting target, offering support and guidance, signposting and acting as a role model.

RELATIONAL APPROACHES TO MENTORING PRACTICE

While much mentoring in western industrialised countries is traditional, strategic, and functional (focusing on knowledge, skills and literacy deficits) Ragins and Verbos (2006) believe that *relational* mentoring is the highest state of quality mentoring. They attribute to relational mentoring the ability to develop empathic, empowering processes that create personal growth, development and enrichment for both mentors and protégés. Relational mentoring approaches, based on emotional bonds between mentor and mentee, are widespread in Japan, and are also favoured by other "collectivistic" cultures such as Maori and Pacific (Ratima & Grant, 2007). Indeed, the closest Māori word for mentor "awhina" means to befriend (Williams, 2007).

Many employers regard relational mentoring as inappropriate for apprentices. Some, especially employers in male dominated workplaces, consider mentoring to be too "mollycoddling", (Small business employer, April 2009, in conversation). Other managers who have explored their own mentoring capabilities, have suggested that employer appraisals perform the same function (assessing performance, keeping an eye on progress). However, the function of mentoring is qualitatively different from the function of appraisal in that effective mentoring is dependent on the development of a trust relationship, and appraisal carries with it the possibility of dismissal. Managers find it very hard to separate these functions, recording comments in their portfolios such as: "Had to tell her off" and "Told her she will have to watch it next time, otherwise we will not use her in the future" (Mentors' record books, August 2011). For this reason mentoring is easier for all concerned if it is undertaken by men and women who do not have the responsibility for appraisal, and who are closer in status to the apprentices they wish to support, and more able therefore to act as an experienced friend.

In my research into mentoring, examples of particularly successful mentors included qualified tradespeople, final year apprentices, "one-up mentors" (where

the mentor was just a year ahead of the new recruit), administrative mentors (usually women with the ability to support literacy and distance learning) and tradespeople from the apprentice's local and/or cultural community.

The key success factor for mentoring is the trustworthiness of the mentor. The characteristics of trust, identified through mentoring development and research (Holland, 2013), are care (empathy), competence (in mentoring) and confidentiality (in terms of matters discussed between the mentor and their apprentice). Caring showing empathy, is crucial in terms of disclosures of concerns, and without these disclosures, the mentor will have little information on which to act. Competence is being able to manage sessions, keep appointments, set ground rules, listen, ask useful questions, gather information and consider issues in the wider picture of the apprentice's life. It involves working with the apprentice to set goals, track issues, solve problems, record achievements, foster independence and follow through with promises. Finally, it includes knowing and managing boundaries of support. Confidentiality is particularly important when working with people who have low status/power in the workplace, and for whom some disclosures may risk others' regard for them or even their job security. Often mentors feel anxious about maintaining confidentiality when certain disclosures could impact on the business. Discussing boundaries for disclosures, and asking for permission to share information will safeguard both the mentor and the apprentice.

Dennis and Michelle Reina (2006), warn that levels of trust are low among workers in the climate of downsizing, restructuring and mergers. Alluding to the lack of emotional safety experienced by workers in organisations today, they develop a model similar to the characteristics of trust described above. It includes the trust of character, or contractual trust; the trust of disclosure or communication trust; and the trust of capability, or competence trust. We can see that while organisations may have a different purpose for building trust among its workforce, it is nevertheless understood as vital to learning and workplace performance.

In summary, in order for trust to be built between the mentor and learner (in this case the apprentice), they need at least to be able to meet with each other, face-to-face, on a regular basis and to have no power differential such as an authority relationship between them. Using the examples of Learning Representatives and Apprenticeship Co-ordinators, we can map the difference these and other circumstances make to the building of trust. Learning representatives in the UK, New Zealand and Canada are able to build trust because they are regularly accessible, and have experience on the shop floor with new recruits. In addition, they understand the socio-political context of learning in the workplace and therefore the perils of breaking confidentiality. As union representatives, they are able to demonstrate commitment to the apprentice's welfare. As unionists, with the welfare of workers at the core of their work, it can be argued that Learning Representatives display characteristics of relational mentoring: care, competence and confidentiality. By contrast, Apprenticeship Co-ordinators, employed by ITOs, cannot meet face-to-face on a regular basis, and when they do meet, they have to split their (often short) visit time between the employer and the

apprentice, and be available to represent the employers' interests before those of the apprentice. This means that confidentiality is not required between the co-ordinator and the apprentice. Apprenticeship Co-ordinators often hold dual roles as apprentice support persons and assessors, creating a power relationship. Thus the Apprentice Co-ordinator role embodies characteristics of a strategic mentoring.

Case study research conducted in ITOs (Holland & Murray, 2010; Holland, 2011, 2012) has shown that a relational model of mentoring can be very effective in supporting apprentices, practically, educationally and emotionally. It helps apprentices to get through their first year, manage workplace relationships, keep their jobs and progress towards qualification completion. Research has yet to be conducted that compares levels of apprentice retention and achievement between mentored and non-mentored apprentices, and between trained and untrained mentors. Indications from case study research are that mentored apprentices do significantly better in terms of retention and progress than their non-mentored counterparts, and that mentor professional development is key to that success.

CONCLUSION

Imagine that within three months of your recruitment, you were assigned a mentor who worked with you throughout your first year. You didn't think you needed her at first, but the course modules were to be done by distance learning, and you had a lot of home responsibilities. You found yourself unable to complete some modules without assistance. Your mentor helped you to better understand the expectations of the course, to manage your time more efficiently, to make sense of unclear learning material and to put together your assessment portfolios. When you had trouble with your course tutor, and felt like leaving after six months, she advised you how to talk about it with him. Now you have almost completed your apprenticeship and you've put your hand up to train as a mentor once you gain your qualification. Like many of your fellow apprentices, you see this as a way of giving back, of helping another apprentice succeed, and of showing that you can be trusted to lead others.

Imagine that, despite sweeping neo-liberal, market driven demands on learning, socially driven empathic, relational support for apprentices is, and will continue to be, the approach that enables these young people to develop into skilled workers.

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7. "I CAN SEE THE RABBIT!"

Perceptions of the Imagined Identity of Foundation Study Students and Its Link to Academic Success

INTRODUCTION

In this chapter I explore how foundation students in bridging programmes in polytechnics in New Zealand are positioned in the institutional context, how this positioning impacts on their learning, and how foundation learners' imagined identities help or hinder their educational progress. Students are able to imagine a connection with others who do not form part of their social network, and this connection "might have just as much impact on [their] current identities and learning as direct involvement in communities of everyday life" (Pavlenko & Norton, 2007, p. 670). These imagined communities can represent students' dreams for the future (Carroll, Motha, & Price, 2008). Although there is much in the data from this study that indicates that students who have an 'imagined connection' with specific vocational communities, for example, nursing and engineering, have more 'investment' in their learning and are more focused and motivated, such imagined identities are not unproblematic. There is the very real risk that students may have unrealistic aspirations and suffer both emotional and financial difficulties when they cannot realise their dreams. In addition, in order to make good on these connections students need to "act purposefully and reflectively on their world" (Rogers & Wetzel, 2013, p. 63), but unless other stakeholders in the academic community, notably management and target qualification lecturers, acknowledge "their legitimacy and status" (Davies as cited in Koehne, 2005, p. 105), purposeful action will be difficult. Unfortunately the data from this study indicates that these students are often viewed as the 'poor relative' of the institutions they attend, and are marginalised in terms of resources. How this impacts on their sense of self-worth and ultimately their academic progression is explored though the eyes of those who teach them.

BACKGROUND

Adult literacy and numeracy education is a government priority in New Zealand, and significant funding has been invested in initiatives to raise levels of literacy and numeracy. The aim is to "raise the skills of the current and future workforce to meet labour demand and social need" (Ministry of Education, 2010, p. 6). In particular

it has been emphasised that the number of young people moving successfully from school into tertiary education needs to be substantially increased. This study is situated in foundation bridging programmes, which Benseman and Russ define as those designed to give learners "the requisite academic skills that will enable them to enrol in other tertiary programmes to which they would not otherwise have been able to gain entry" (2003, p. 45). Bridging programmes are offered at most universities and polytechnics in New Zealand but there appears to be little consensus as to what these bridging programmes are. The term is used very loosely to refer to the provision of literacy, numeracy and vocational programmes for those who do not have the requisite school leaving qualifications to enrol on their desired courses of study.

These bridging (or foundation studies) programmes have multiplied over the last decade mainly as a result of the International Adult Literacy Survey (Benseman & Sutton, 2008). This survey reported that over 40 percent of the New Zealand population did not have the literacy (and numeracy) skills they required to operate efficiently in a modern workforce (Organisation for Economic Co-operation and Development & Statistics Canada, 2000). Although the validity of these findings has been widely criticised (Blum, Goldstein, & Guérin-Pace, 2001; Hamilton, 2001; Hamilton & Barton, 2000) it cannot be denied that these reports have led to the provision of much needed funding for adult literacy and numeracy programmes in New Zealand.

However this funding has come at a cost, the most important of which is perhaps the cognitive approach employed to define literacy. This approach dismisses any understanding of literacy as social practice (Bartlett, 2008; Hamilton, Hillier, & Tett, 2006; Lankshear & O'Connor, 1999; Searle, 1999; Street, 2003, 2005), and the ways in which students increase their literacy by becoming socialised into a Community of Practice (Black & Yasukawa, 2011). This study attempts to examine the effect such an approach has on the students the government is seeking to empower.

THE STUDY

Universities and polytechnics around New Zealand that offer foundation studies programmes were invited to participate in a study that sought to explore the perspectives of staff teaching on these programmes. Lecturers from four universities and seven polytechnics on both the North and South Islands of the country accepted the invitation and over 100 face-to-face, semi-structured interviews were carried out with volunteers between February and December 2012. Staff were asked about their literacy and numeracy teaching practices, and were also questioned about their perceptions of their own, and their students' positioning, within their respective institutions. The interviews were recorded and the transcripts were returned to the interviewees to be checked.

At the end of 2012 New Zealand polytechnics and institutes of technology were informed that the government was cutting by a third the amount of funding

awarded for foundation level tertiary education, and was putting this money out for tender to private educational institutions (Tertiary Education Union, 2012). This is, of course, in line with trends around the world where governments move away from being "providers of education to being promoters" (Lauzon, 2013, p. 4). There was, and still is, great concern about the results of this action and it appeared an opportune moment to reflect on the views of 34 staff members at three large polytechnics.

Of the 34 staff interviewed five focused exclusively on teaching numeracy and/or maths, four taught discipline subjects such as biology, physics, sociology or health subjects, and the rest were predominantly involved in the area of academic literacy and study skills. However, all those interviewed believed that it was important that they embed literacy into their teaching.

It must be noted that at the time of the interviews the funding cuts had not been officially announced although they were widely anticipated.

FINDINGS

The key issues that emerged from the analysis of the interviews were:

- that there are a number of distinct groups, as far as ability and motivation is concerned, within the foundation studies cohort
- that academic preparedness and expertise, institutional expectations and commitments, financial concerns, family relationships and health issues all play an extremely important role in student engagement, and
- that to be effective, pathways into vocational programmes need to be clearly delineated.

Groups in Foundation Studies

It appears from the data that for these institutions at least, there are four distinct groups as far as motivation and ability is concerned:

- those who know what they want and have the ability and the motivation to reach their goals
- those who are strongly motivated and prepared to put in a great deal of hard work although they might struggle academically
- those who are still trying to decide what they want to do, and
- those who attend reluctantly and have little real engagement, at least initially.

Those who know what they want and have the ability and the motivation to reach their goals. A maths lecturer pointed out that her students represented a cohort that is not widely recognised – students who have experienced academic success but do not have the discipline credentials, often maths and/or science, to enrol in programmes of their choosing. These students, strongly motivated, and with a solid

academic background, obviously experience the fewest difficulties and are the ones most likely to be successful.

Those who are strongly motivated and prepared to put in a great deal of hard work although they might struggle academically. Quite often these students are successful despite the odds stacked against them. The key appears to be an identified goal that is clearly delineated. It was of students from a group of potential nurses that one lecturer noted:

I always say to people they are like greyhounds and they've finally got in the box and they can see the rabbit. And I'm saying to them 'You're working full time, you've got to do this and this' and they are like 'No, I can see the rabbit, I can see the rabbit'. They don't hear anything and all they want is to get out of the gate and run for the rabbit because it's the first time they've had that opportunity. And I think that's what pulls them through.

Other lecturers noted that engineering and nursing students just work like dogs because they know what they are doing.

However, there is also a sizeable proportion of strongly motivated, hardworking students who do not achieve their goals. Much of the blame for this was laid at the door of those responsible for the marketing of the organisations. One of the tutors pointed out that nursing qualifications at his institute were presented as if enrolling in foundation studies guaranteed the students entry to a nursing qualification, and that this was far from the case. There were the same concerns about qualifications in medical imaging. These programmes are very popular, and foundation studies graduates are competing with people with science and medical degrees: "We groan when these lovely students put their all into this and we know they might not be able to get there". Very few foundation students are accepted on the course, and tutors were concerned that the work these students had done to be accepted for this pathway would not prepare them for alternative options such as nursing. In the same vein, a lecturer worried about students who ended up with qualifications which did not really help them pathway onto degree and diploma programmes "and no-one really cares."

Those who are still trying to decide what they want to do. One lecturer felt that more and more "there's a group where they might want to do something but they're not quite sure what it is and they struggle to focus". Another referred to them as lost souls who have little understanding of what their chosen careers involve. Some have drifted onto pathways because somebody said "You should be a nurse, well your auntie is a nurse" or "Your uncle has a garage". Some who enrolled on the police cohort did so because it sounded exciting – "so we had a classful of students who wanted to go into the police academy but actually when it came down to it they didn't". It is a concern that students appear to feel pressurised to commit to a career pathway before they have had time to make an informed decision. One lecturer noted

that the institution at which he worked only had a certain number of career pathways and students appeared to end up "locked into convincing themselves and feeling that they need to convince me that this is what they want, rather than it's OK not to be sure". As Higgins, Nairn and Slogoi (2010) point out, current discourses in education based on the premise that with sufficient effort students can achieve any goal they aspire to, including any identity, not only ignores "wider structural constraints that may exist within institutions, neighbourhoods and labour markets" but discourages "self-discovery and careful identity work in relation to career pathways" (p. 23).

Those who attend reluctantly and have little real engagement, at least, initially. A number of the younger students are in a foundation class because of parental pressure: "They don't want to be at school but that doesn't mean they want to be here. It's just somewhere else to be". Not only are these students not enthusiastic about attending but often they are poorly equipped academically to deal with the demands of their courses, and socially to deal with life in a big institution. There was mention of students spending their days in the cafeteria or drinking in the car parks. A Ministry of Education report also spoke of students enrolling in foundation programmes because "I didn't know what to do with my life, that's all/ I was too lazy to walk to school/ I had nothing better to do" (Haggland & Earle, 2012, p. 15).

However one factor that all these groups had in common was that retention was often a real concern, although poor attendance was far more pronounced in the last two groups. Thomas (2002) examines the issues around student retention in Higher Education. Although her study involved students in higher rather than bridging education, many of Thomas's points are equally salient for this cohort. According to Thomas, factors that play a crucial role in student retention (and of necessity, student success) include academic preparedness and expertise, institutional expectations and commitments, financial concerns and family support and commitments. For this cohort I have added health issues to this list of factors affecting student retention and success.

Factors Affecting the Retention and Success of Foundation Students

Institutional expectations and commitments. One of the factors identified by Thomas (2002) as playing a crucial role in student retention is the role of the institution itself. Thomas cites Rey and others' definition of institutional habitus as "the impact of a cultural group or social class on an individual's behaviour as it is mediated through an organisation" (p. 431). She points out that if a student does not feel that he or she belongs in the organisation, that the tacit knowledge that they bring to their classes is not valued, and that their social and cultural practices are not seen as appropriate; they are more likely to withdraw. With this in mind, lecturers were asked how they felt foundation students were regarded by management and colleagues in other faculties of the institutions they attended.

The lecturers agreed that institutional attitudes towards the students Management. were very important. One noted how empowering it was for her students when they were acknowledged by senior management: "you're an honest to goodness student you're not just doing foundation studies". A few of the lecturers felt that their students were valued by management, or that management attitudes towards the students were improving, but the majority felt management was dismissive, indifferent or only interested in the financial aspects of the foundation studies programmes. They felt that management viewed their students as "dummies, slightly childlike entities, needing babysitting, a necessary evil demanded by the TEC, production units, commodities, cash cows, not a good return on investment". A number of those interviewed pointed out that actions spoke louder than words and the fact that foundation studies did not feature prominently in the advertising material of the institute, that lecturers had to continually battle for resources and that they were invariably housed in the "bottom end of the real estate in rubbishy prefabs that are freezing cold" was a reflection of the value placed on both foundation lecturers and their students.

Lecturers argued that there was little real understanding or sympathy for the challenges their students faced: "there's lots of rhetoric around preparing students but they don't walk the talk". Foundation staff pointed out that the attendance and success rate of their students was expected to be no lower than the rest of the polytechnic students, despite the fact that many of their programmes were open entry. They felt that this lack of understanding was demonstrated by the fact that teaching time in many programmes was being cut. Some were having their teaching hours cut by more than fifty per cent. This was a source of enormous frustration as the overwhelming feeling of interviewees was that one of their greatest challenges was the very limited amount of time they had with their students. Most courses are 16–17 weeks in length and it was argued that students need longer than this "to re-evaluate their relationships with learning and their relationships with text, and develop a relationship with the educators".

One of the ways to cut face-to-face teaching time is by offering online programmes. At one polytechnic, foundation students who wished to enrol for nursing qualifications were required to do a large part of their study online. Management's reasoning was that the nursing qualification itself required online study so this was a good opportunity for students to become accustomed to the environment. Staff who taught on the programme disputed the wisdom of the reasoning, pointing out that online study demanded that students be very independent and self-directed, a big ask for students at the pre-undergraduate level. It was, one noted, "like giving some of them a licence not to do anything at all apart from come to a two hour class once a week". She pointed out that because they were not required to attend class "they procrastinate because they think they have so much time". Their concerns are borne out by the literature. Dawson, Charman and Kilpatrick (2013) point out that online study is not suitable for students who are not academically well prepared or who come from families who are not familiar with the demands of higher education.

Power and Gould-Morven (2011) argue that students engaged in online studies often feel isolated and this leads to "unsustainably high rates of withdrawal and drop out" (p. 21). After the initial introduction of the online programme staff managed to negotiate more face-to-face teaching with the foundation students but there is still a fair amount of online tuition, a situation staff feel, is still far from ideal.

Faculties. The relationship with destination faculties, that is the faculties that offer programmes foundation students wished to pathway into, appears to be complex. There were a number of reports of healthy, productive relationships particularly with nursing, where discipline tutors valued students coming from foundation studies. The tutors found them better prepared to deal with the academic demands of their programmes than some school leavers. Unfortunately this does not appear to be the experience of most foundation lecturers. In a number of cases these destination faculties were described as "silos". One lecturer felt that foundation staff had a strong operational relationship with nursing because a large number of foundation studies students pathwayed into nursing but she felt that it was not a "strong" relationship. She found nursing staff dismissive of foundation lecturers and suspicious of their students.

Foundation staff were "fobbed off by their discipline colleagues, and their requests for greater and closer interaction were ignored. Foundation staff expressed a desire for a list "of what they (the disciplines) would like their ideal students to enter with", but reported that these requests fell on deaf ears. There was frustration that other faculties did not appear to acknowledge that they too had a role in helping these students become comfortable and successful in the wider institution. Foundation staff felt that they were blamed for any shortcomings in their students' academic preparation:

It's everybody's responsibility to do whatever we can to facilitate students succeeding, and there's only so much that can be done at each step along the way. If you're always looking over your shoulder and blaming the people before you it doesn't get you anywhere.

Academic preparedness and expertise. Thomas (2002) argues that a good relationship between students and their lecturers is vital if students are to succeed in coping with the academic demands placed upon them, and in this regard, at least, many foundation students appear to be very fortunate. Interestingly she notes that in the United Kingdom (UK), former polytechnics have a very good record in recruiting and retaining underrepresented groups, but that this record is being challenged by the requirement that academics become more research active. Glogowska, Young and Lockyer (2007, p. 74) described the importance students attached to the "right word at the right time" from lecturers, noting that it often made the difference as to whether students abandoned their students was very clear. Their attitude is neatly

summarised by a lecturer in health studies who said, "I see these second chance learners coming in, and for me personally my job satisfaction isn't teaching human biology, it's not rocket science. It's seeing this person become what they can be".

However, these strong relationships were not enough to overcome many of the obstacles students and staff encountered. As indicated above, lecturers felt that they did not have enough time to prepare students adequately for further studies. This created unwanted tension:

So you have foundation studies where you want to cosset and promote and nurture but what is waiting for them if they don't have the necessary academic skills is a lot of hurt ... so as a tutor I must be constantly trying to push my students but this is against the spirit of shared dialogue. You feel like you are complicit in some kind of sausage machine process because foundation studies, to my mind, should be nurturing and supportive.

There was much talk of the "paranoia and fears" that led the students to require programmes like foundation studies in the first place. These past negative experiences of education often led to a lack of self-belief which robbed them of any sense of agency "so they ask 'Can I do this? Am I allowed to do that?' They require a lot of handholding and direction". One lecturer argued that students were their own worst enemy, "their preconceived ideas that they can't actually pass, they are failures in their own eyes". Because of these fears, lecturers were well aware that if they moved at a speed that would allow them to cover the required content the students "panic and you lose them".

There was also general consensus that pastoral care had an integral place in foundation studies, and there was widespread concern that funding cuts had curtailed a great deal of the services formerly available. This placed a greater burden on lecturers who felt they had to provide the needed support. As Hyland notes (2012, p. 216) there needs to be a focus on the affective domain of learning for students who "associate learning with anxiety, grief and failure". There was also an awareness that in the short space of time available it was often difficult to wean students off their dependency. One Māori lecturer noted that:

They see us as aunties and uncles and sometimes mothers. I don't really like it but that is a result of the connections that we try to make. They do struggle with moving away from us and that's not what I want.

Building confidence and resilience takes time and a great deal of effort. As one lecturer noted wryly, "the irony is that we wouldn't be in existence if everything had worked perfectly in those early years".

Family relationships. Childcare loomed as an issue both for students who were parents and older siblings. Particularly in Māori and Pacific communities, the concept of 'family first' was very strong. One lecturer noted that students from families in these communities get a great deal of "direction" from home regardless of their age

and "when they come here it's a bit difficult for them to try and place themselves above the needs and wants of their families". Often church-related activities impacted on Pacific students' attendance. Lecturers reported that there were a number of students who came from abusive homes where drugs, alcohol and violence were constant challenges. As indicated earlier, students who come from homes not familiar with the use of computers are at a distinct disadvantage but this disadvantage is not limited to technical expertise. James (2007, p. 2) notes that the "most widespread and persistent source of disadvantage" in accessing higher education is low socio-economic status but he warns against interpreting this narrowly as an economic issue, noting that it has far more to do with the "absence of Bourdieu's broader concept of social and cultural capital". Burke echoes this sentiment (2013, pp. 110–111) pointing out that some groups have the "cultural and material resources necessary to 'play the game' and demonstrate particular forms of achievement and 'success' that are recognised and legitimised in educational institutions". Few of the foundation studies students appear to be drawn from these groups.

Financial concerns. Money problems meant that students had to drop out of programmes to get jobs to support their families. Students often missed weeks of class because they simply could not afford the bus fare. There were other less obvious results of financial hardship. Those students who wished to enter the police academy could not afford to take their learner's licence or be taught how to swim, both pre-entry requirements. The worst case scenario was where students' financial problems were exacerbated by taking out student loans in order to enrol in foundation programmes to prepare themselves for entry to degrees "for which they are patently not ready or capable of going into ... they may find themselves in a place where they have a large debt over their heads and still don't have a suitable qualification to make themselves attractive to an employer". This concern of the lecturers is echoed by Higgins et al. (2010) who warn that the costs are not simply financial. Poor choices might well have a negative impact on students' sense of identity.

Health issues. Students had both physical and mental health challenges. A number were involved in abusive relationships. Unplanned pregnancies often made it difficult for students to continue their studies, and lecturers noted that many of their students were often physically unwell. However mental illness, particularly depression, seemed to be an even more problematic issue: "They just don't want to get out of bed". One staff member summed it up simply, "life gets in the way for an awful lot of them".

Pathways need to be clearly delineated. If foundation students are to succeed, often against the odds, lecturers were adamant that pathways needed to be clearly delineated: "Pathways to destinations need to be firmer and clearer and we need tighter relationships with all the places our students will go". The close physical proximity of their desired destination faculty appeared to be a strong motivating

factor for students. This link was strengthened when foundation lectures were delivered in these destination faculties. A tutor preparing students for entry into a business qualification noted that when their classes were offered in the Business block the students "associate themselves with Business and the idea has become more serious. We notice there isn't so much chatter – it's more quiet and businesslike. It's as if they have taken on that persona themselves". Another lecturer applauded an initiative where students were invited to spend a day on the programmes they were aiming to attend. Very much part of this appears to be the ability to identify with their chosen career. One lecturer noted that the nursing student in her cohort did not appear to distinguish between being a foundation student and a nursing student: "They say 'I'm studying to be a nurse'".

In contrast, students on a course purporting to prepare them for the police force were not that fortunate. There was no clear cut pathway at this polytechnic to the police academy, no role models on the campus and students were advised, after they had completed their foundation studies courses, to enrol at another institution – "they'll be on their own when they leave here, there's no guidance for them after that – it's like good luck, boys and girls".

DISCUSSION

Much of what the lecturers say appears to support Pavlenko and Norton's (2007) view that student attitudes towards imagined communities might have as much of an impact on their current identities as their everyday educational experiences. The first two groups, those who know what they want and have the ability and the motivation to reach their goals and those who are strongly motivated and prepared to put in a great deal of hard work, embodied this strong identification, and were on the whole, more academically successful than their peers in the other two groups. However, what also emerged from the interviews is that the concept of success is one that merits further discussion. The lecturers interviewed have a very different view of success to government agencies and management of polytechnics.

The authors of the report *Lifting our Game* (Ako Aotearoa, 2012) do not share foundation lecturers' belief that what constitutes success is a nuanced and complex question. They state simply "the most basic indicator of educational success is completion rates" (p. 16). Lecturers argued that this attitude betrayed a very simplistic approach. For the majority of foundation studies students, their earlier educational experiences have not been happy. Many of them, it was noted, "have left school at 15 with an idea imprinted that they can't learn, or they are dumb, or they are never going to amount to much and that's very strong ... and we've got to unlearn all that stuff before we can work together to build learning". Lecturers felt strongly that the criteria such as the one above were far too narrow and did not take into account the enormous obstacles many students needed to overcome, nor the relatively short period of time allocated for students to make academic gains. There was a strong sense that for many students simply attending class regularly was a

great achievement: "You can't tell me that somebody who has been locked away or been damaging themselves, who can come everyday and work on assignments, you can't say that is not success".

It was, they pointed out, the process and not the product that was important:

They have to learn to create a patch to sow the seeds of learning and in fact by the time they get to the end of their courses they are ready for the most part to tackle anything, and it doesn't matter that they haven't actually produced the essay. If they have produced a draft that shows they can write, and if they have produced a research trail that shows they can research, they can manage when it hits them in the next programme.

Another spoke of the young people in her class:

I have kids who have left school, they've been sitting on the couch for a while, they've been on the hooch and decided that's what they don't want to do. Mum and dad have said 'Right, enough!' So they've slouched into class. And I have to get them out of that before they are teachable because they are not teachable like that. And for me a good result is that a young man can walk out of here, he can converse with any adult who comes into the classroom. He is respectful of others. He's teachable – he'll struggle with content but I know he's got it and he's going to be fierce in his struggle, he's going to rise to it. Because we have open entry at levels two and three I am happy to have him in level three but because it's too much to do in 17 weeks that goes to the TEC as a fail.

However there is little doubt that the opinion expressed in the Ako Aotearoa report will carry far more weight. An online report in July 2013 with the by-line "Tertiary providers are failing those who need it most" (Duff, 2012) quoted with obvious approval the chair's opinion that "providers whose programmes are not meeting the needs of priority learners need to be challenged to improve their performance, and if they cannot, then they should not be offering those programmes".

These simplistic notions of success have implications for all foundation studies students but for those who feel no real link to their chosen vocations, or those who have no idea of what they want to do with their lives, the implications are the most serious. It is difficult, if not impossible, to quantify how many of the students enrolled on foundation programmes across New Zealand fit into these last two categories but indications from their lecturers are that they form a sizeable cohort.

CONCLUSION

Lecturers were clear as to what they felt their students needed. Firstly they argued that there needed to be a greater acknowledgement of their identity as 'honest to goodness' students worthy of the respect of their institutions. This acknowledgement needed to take material form. In other words students (and staff) should not be fobbed off with the poorest facilities in the organisation and denied their fair share of

resources. In addition destination faculties should display greater willingness to cooperate with foundation lecturers to devise foundation programmes that would best prepare students for their chosen courses. Discipline lecturers should also take an active interest in foundation students and accept their identity as potential members of their discipline.

There needs to be a much better understanding of the challenges foundation students face and a recognition that to overcome these challenges requires a greater commitment by the institutions they attend. All foundation students are not the same, and some will need more time to adjust to the academic environment and find a field of study that appeals to them. There needs to be a willingness on the part of the institutions "to embrace and value diversity, and thus respond positively to the differing needs of student groups" (Thomas, 2002, p. 439). This might well mean an institution accepting that face-to-face teaching is essential for these students, and that they do not respond well to fewer teaching hours. A lecturer pointed out the lack of logic in a management attitude that expresses its dissatisfaction with current pass rates but cuts teaching hours — "how can we possibly do better in half the time?" Pastoral care needs to be acknowledged as an essential element in foundation students' socialisation into academic life.

Finally, and perhaps most importantly, we need to recognise that at present, while the intention of these foundation courses is laudable, the invitation they offer "is Janus-faced... it welcomes them and also marginalises them" (Seligmann & Gravett, 2010, p. 108). Hamilton (2012) speaks of the prevailing discourse that focuses on what is wrong with the learners rather than "being based on a relational understanding of unmet literacy needs" (p. 9). This is well illustrated in the *Lifting our Game* report (Ako Aotearoa, 2012) where the authors use the term priority learners to refer to "non-traditional, under-served and foundation learners" (p. 10). The authors claim that these students, who make up the biggest group of learners in New Zealand's tertiary system, "possess little cultural capital" (p. 15). It is disappointing, but not unexpected, that such an influential organisation chooses to negate completely the cultural capital these students bring to our educational institutions. Hamilton speaking of the UK *Skills for Life* says that this strategy targets particular groups of adults as a "priority", but that all these groups are "characterised by negative attributes" (2012, p. 175).

However, what is equally clear from the literature is that if we wish these learners to succeed we must respect who they are and what they bring to tertiary study. We need to demonstrate our understanding of the obstacles they face. No matter how strongly motivated and hard-working they are, they cannot achieve their goals without wider institutional, government and societal support. As Black and Yasukawa (2010) remind us, the skills the students acquire have little value unless they can be put to good use, and social processes are required to make this happen. For students to be successful academically there needs to be a match between their sense of identity and "their perception of the successful student...in their institutions" (Johnson & Watson, 2004, p. 474). We need to provide them not only with opportunities to

realise their imagined futures but also with time and space to decide what these futures should be. We need to back them when they are finding and chasing their rabbits.

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8. BEYOND COMPLIANCE

Developing a Whole Organisation Approach to Embedding Literacy and Numeracy

INTRODUCTION

As researchers and professional developers we support educators to turn their commitment to improving literacy and numeracy outcomes for adult learners into effective action in a context in which compliance with certain directives is mandated. We build critical capability and seek to ensure that literacy and numeracy are not marginalised within tertiary educational organisations. In Aotearoa New Zealand¹ most such organisations are required to show that literacy and numeracy are embedded in Foundation Level programmes in line with the national adult literacy and numeracy infrastructure. Organisations are increasingly required to gather, analyse and report data on such factors as course completion rates and qualifications gained in policy regimes designed to increase learners' employability and equip them for further study. This chapter describes a model comprising an embedded literacy and numeracy whole organisation framework which supports data-driven decisionmaking by organisations wishing to gauge their progress in embedding literacy and numeracy against defined benchmarks. We consider how this approach may support educators to move beyond compliance within a regulatory framework to a deeper critical professional engagement.

ADULT LITERACY AND NUMERACY EDUCATION IN AOTEAROA NEW ZEALAND

We begin with a brief sketch of the adult literacy and numeracy education context in Aotearoa New Zealand.

Since the launch of the *Adult Literacy Strategy* in 2001 (Walker et al., 2001), Aotearoa New Zealand has developed a system of adult literacy and numeracy education with an infrastructure to support learning and teaching. The Tertiary Education Commission (TEC) is tasked with implementing government policy in line with the government's Tertiary Education Strategy (TES) (Ministry of Education & Ministry of Business Innovation and Employment, 2014). Māori, Pasifika and Youth are TES priority learner groups and literacy and numeracy are TES priority areas. Literacy and numeracy are defined as follows:

Literacy is the written and oral language people use in everyday life and work. A person's literacy refers to the extent of their oral and written language skills and knowledge and their ability to apply these to meet the varied demands of their personal, study and work lives.

and

Numeracy is the bridge between mathematics and real life. A person's numeracy refers to their knowledge and understanding of mathematical concepts and their ability to use their mathematical knowledge to meet the varied demands of their personal, study and work lives. (TEC, 2009d, p. 41)

These definitions are based in the English language, the most widely-spoken of Aotearoa New Zealand's three official languages (English, Te Reo Māori and New Zealand Sign Language). Language as a domain of learning is currently not specified in the infrastructure, although a version of the Literacy and Numeracy for Adults Assessment Tool (the Assessment Tool) for speakers of English as an additional language was launched in July 2015.

Use of the adult literacy and numeracy infrastructure is mandated for most tertiary education providers receiving government funding. The infrastructure consists of: quality assurance; teaching and learning resources (including Adult Literacy and Numeracy Learning Progressions, and Pathways Awarua, an online teaching and learning programme); assessment tools; funding systems²; and qualifications and professional development opportunities for educators. Professional development is built around the "three knowings": "knowing the learner"; "knowing the demands" and "knowing what to do" (TEC, 2008). These support a process which may be outlined as follows:

- Knowing the demands of the situations that learners want or need to manage
- Knowing the learner knowing what the learner can do already, in order to determine the next learning steps³
- Knowing what to do to help learners move on to the next steps.

There is a strong emphasis on embedding literacy and numeracy at Foundation Level in tertiary vocational education, based on a definition of 'embedding' developed in England's Skills for Life strategy: "Where literacy, language and numeracy provision is central to the whole organisation at all levels, ranging from strategic leadership and management to delivery of practice" (Skills for Life Strategy Unit, 2004, quoted in QIA, 2008, p. 6).

The Aotearoa New Zealand model of embedding is outlined as follows in the TEC's 2009 report, *Strengthening Literacy and Numeracy: Theoretical framework*:

 Successful approaches to embedding literacy and numeracy clearly link the literacy, numeracy and vocational components of the course.

- Where tutors work as a team, learners are more likely to stay in training and complete literacy and/or numeracy qualifications in addition to vocational qualifications.
- Effective assessment in programmes where literacy and numeracy are embedded
 makes use of Learning Progressions to provide direction for teaching programmes
 and to monitor progress toward learning goals.
- Embedded literacy and numeracy provision is facilitated by appropriate organisational policies, management structures, resourcing and working conditions (TEC, 2009d, p. 5).

The final point in this list indicates that improving learner outcomes is to be regarded as the responsibility of all concerned, not only the specialist literacy or numeracy teacher. The report points out that for embedding to be effective in the long term, the value of literacy and numeracy must be understood and they must be viewed as integral parts of vocational training. Teaching materials are seen as important tools that can substantially influence the content and enactment of instruction, professional development programmes can be effective in improving tutor practice and learner performance and assessment data can be used systematically to improve programmes (TEC, 2009d, p. 7). Guidelines are available for embedding literacy and numeracy in different tertiary education sub-sectors (TEC, 2009a, 2009b, 2009c).

In 2012 specified funding for literacy and numeracy in tertiary education organisations was withdrawn and these are now treated as business as usual for funding purposes. At the same time, the importance of professional development as "a key ongoing priority" was reiterated (TEC, 2012a, p. 5). Meanwhile, the tertiary education sector (the sector) is becoming increasingly professionalised, and from 2015 Foundation Level tutors are required to hold a literacy and numeracy qualification.⁴

The National Centre of Literacy and Numeracy for Adults (the National Centre) was established in 2009 to support this work, funded primarily by the TEC and hosted by the University of Waikato. The National Centre builds the capability of the sector in literacy and numeracy through research-informed professional development, research and critical engagement with policy and practice at a national and international level.

The National Centre's professional development work in literacy and numeracy has evolved in response to sector need and government priority, mediated by the TEC. It equips tutors to become competent and critical 'embedders' of literacy and numeracy and users of the literacy and numeracy infrastructure to support learner achievement.

From 2012, with literacy and numeracy officially business as usual and the sector becoming more familiar with embedding literacy and numeracy and with the infrastructure, tertiary education organisations began asking for evidence of

how well they were doing. At the same time, an annotated bibliography of research undertaken for the TEC found that:

The final challenge in the New Zealand context relates to embedding. The studies in this bibliography show that it works, but only with conditions in place related to whole-of-organisation approaches and programmes that are informed by LLN and vocational content. (Alkema & Rean, 2013, p. 34)

The National Centre has developed just such a whole-of-organisation approach to support educators to meet the challenge of embedding literacy and numeracy in Aotearoa New Zealand.

A WHOLE ORGANISATION APPROACH TO IMPROVING EMBEDDED LITERACY AND NUMERACY PRACTICE AND LEARNER OUTCOMES

The National Centre's embedded literacy and numeracy whole organisation framework (the Framework) comprises a guided self-assessment process using a strengths-based approach. It supports managers and other professionals to embed literacy and numeracy across the whole organisation. It works by building a shared understanding of what needs to be done to improve learner outcomes, based around the 'three knowings'.

The Framework has been developed for multiple uses and users, encompassing processes and practices at all levels of the organisation, including leadership roles and responsibilities, communication strategies, enrolment processes, teaching, assessment and professional learning. It covers: strategic planning for senior management; good practice in embedded literacy and numeracy teaching, learning and assessment for tutors and those involved in learning support; embedded literacy and numeracy programme development and programme approval for academic staff; and guidance on embedded literacy and numeracy funding criteria for managers. This approach supports the management of change at the learner, programme and organisational levels to achieve effective, efficient, ethical, inclusive, sustainable embedding of literacy and numeracy.

Figure 1, below, is a schematic representation of the whole-organisation Framework. The inner circle components represent systems and processes and those in the outer circle represent outcome measures, as defined by the New Zealand Qualifications Authority (NZQA) (2009). The wavy components represent those processes that happen across and through a number of components, binding the organisation together. Meaningful connections between the components are determined by the organisation's vision for embedding literacy and numeracy and the first step in the process is the articulation of this vision.

The Framework is aligned with a range of relevant elements (TEC, 2009d). These include: the New Zealand Qualifications Authority's (NZQA's) key evaluation indicators, as set out in its External Evaluation and Review (EER) process⁵, the

standard means of reviewing the quality of performance in Tertiary Education organisations; the government's TES priorities (Ministry of Education & Ministry of Business Innovation and Employment, 2014); the Adult Literacy and Numeracy Implementation Strategy (TEC, 2015); the TEC's Table of Embedded Literacy and Numeracy Practices (TEC, 2012b) which characterises organisations at 'emergent', 'partial' and 'mature' stages of development; workshops and coaching with senior managers to develop a strategic-plus-operational plan for embedding literacy and numeracy; and professional development modules to support the plan.

Ultimately, the purpose of embedding literacy and numeracy in vocational tertiary education is to improve adults' literacy and numeracy capabilities alongside their vocational capabilities. Whether or not there is a need for improvement with regard to literacy and numeracy will depend on the answer to the question "Do learners' literacy and numeracy outcomes improve?" Accordingly, as the Framework developed, we identified the need for a data-utilisation model to sit within it that would assist organisations with evaluating learner outcomes through the analysis of data on learner performance in literacy and numeracy. The findings of such evaluation could then be used by organisations to improve their processes of embedding literacy and numeracy. Our model needed to support organisations to self-assess both their organisational processes and practices in embedding literacy and numeracy (through use of the Framework) and their learner outcomes, with the aim of improving both.



Figure 1. A whole organisation picture of embedded literacy and numeracy

Developing Data-Driven Decision-Making in a Whole Organisation Framework

This section of the chapter describes the data utilisation model we developed as part of our 'whole organisation' approach to improving learner outcomes, guided by research and scholarly literature and by our knowledge of adult literacy and numeracy and the environment in which tertiary education organisations are operating and utilising relevant performance data.

We began by identifying four necessary conditions for the data utilisation model to be effective. It needs to:

- reflect good practice with regard to data-driven decision-making
- acknowledge compliance requirements with regard to embedded literacy and numeracy
- · acknowledge that embedded literacy and numeracy is business as usual
- allow for a manageable and meaningful data utilisation process.

We then identified research-informed indicators for each of these condition statements (National Centre of Literacy and Numeracy for Adults, publication pending).

Data-driven decision-making is a complex process. It is easy to drown in data, and it is equally easy to focus on one type of data only and pass over the idiosyncrasies of particular situations, which might provide a deeper understanding of the matter at hand. The data utilisation model needed to find a balance by limiting the amount of data to what is manageable, and at the same time providing sufficient focused data that are meaningful to whomever is engaging in the decision-making process. To allow for this complexity, the data are not used to drive, but to inform decision-making, through a process of inquiry (Schuyler Ikemoto, 2007). The data act as a starter of the conversation, through comparing them with an agreed benchmark, followed by a dialogue to create understanding and to develop strategies for improvement. There should be ample space for participants in the process to include additional data and to bring in their own observations to support the dialogue. As conclusions are drawn and judgments made, the key question is: "How do we know – what evidence do we have?"

A Self-Assessment Model for Literacy and Numeracy Data Utilisation

At the heart of the data utilisation model is the cycle of self-assessment which every non-university tertiary education organisation in Aotearoa New Zealand is expected to implement, as set out by the New Zealand Qualifications Authority (NZQA, n.d.). This allows the model to be aligned or integrated with the existing system of self-assessment within an organisation. The process is shown in Figure 2. It includes stages similar to those in the self-assessment cycle described by NZQA (NZQA, 2009). At the centre of the diagram are the benchmarks: the indicators against which judgments may be made about learners' literacy and numeracy

abilities and practices. Benchmarks may be minimum standards, or aspirational targets, or a combination of both. They are a measurable reflection of the pathway towards realising an organisation's vision for embedded literacy and numeracy. It is therefore important that an organisation is clear about its vision before it defines its benchmarks.

Depending on the structure of the organisation, benchmarks can be defined: at organisational level; at faculty/school/department level; at programme level; and at the level of support service departments (e.g., learning services, pastoral support services, academic services, staff development). It is important however, that all benchmarks are coherent such that they together contribute to realising the organisation's embedded literacy and numeracy vision.

While the vision is important for setting the benchmarks, the benchmarks are critical for identifying which data to collect, how to analyse them and how to make decisions and plans for improvement. Therefore, both the vision and the benchmarks are key to a system that is aimed at improving the utilisation of data to improve embedded literacy and numeracy practices and outcomes. Once the vision and subsequently the benchmarks are known, all steps in the self-assessment cycle are carried out in relation to the benchmarks, as Figure 2 illustrates.

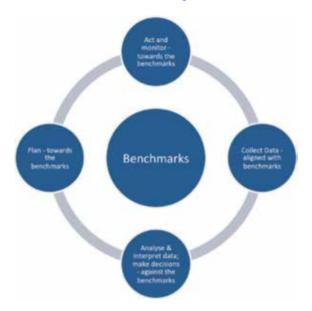


Figure 2. Self-assessment cycle as the basis of the literacy and numeracy data utilisation system

In the data utilisation model, self-assessment cycles, as shown in Figure 2, exist at each level in an organisation: the organisational level; the department/school/

faculty level; the programme level; the service department level; and any other level relevant to the particular organisation.

Multiple self-assessment cycles may be undertaken per year, or per learner cohort. Cycles across the organisation are connected through using outcomes at one level as data to inform work at another level.

The model incorporates the use of NZQA's six key evaluation questions (KEQs) that are expected to guide self-assessment processes in tertiary education organisations (NZQA, 2009). There are two outcome KEQs:

- KEQ1: How well do learners achieve?
- KEQ2: What is the value of the outcomes to stakeholders, including learners?

In addition there are four process KEQs:

- KEQ3: How well do programmes and activities match the needs of learners and other stakeholders?
- KEQ4: How effective is the teaching?
- KEQ5: How well are learners guided and supported?
- KEQ6: How effective are governance and management in supporting educational achievement?

In analysing the data, participants in the data utilisation process consider KEQ1 and potentially KEQ2 in relation to the benchmarks, and then use one or more of KEQ3 to KEQ6 to analyse the processes that have led to the outcomes. Which KEQs are used will depend on the organisational level under consideration, as at different levels in the organisation people will look through different lenses. For example, a senior management team will look at the data through the lens of KEQ6 'How effective are governance and management in supporting educational achievement?' while teachers working at the programme level will use KEQ4 'How effective is the teaching?' as their lenses to consider the data.

The National Centre started providing guidance to organisations on the use of the KEQs to analyse their practices through the development of the Embedded Literacy and Numeracy Whole Organisation Framework, outlined above, in 2012. The data utilisation model described here incorporates the use of the Framework to assist organisations with gaining a deeper analysis and understanding of the processes that may have contributed to the literacy and numeracy outcome data.

FACTORS INFORMING THE DEVELOPMENT OF OUR APPROACH

Our approach has been informed by a number of factors. Work in England on a whole organisation approach (Skills for Life Support Programme, 2010) and raising standards (Quality Improvement Agency, 2008) was influential but we were determined not just to apply a solution developed elsewhere that might not suit the Aotearoa New Zealand context. Accordingly, we also considered a range of research and theoretical literature and consulted widely with the sector, as well as initiating

a project on data utilisation in a large Institute of Technology and Polytechnic (ITP) to test that aspect of our emerging model. We wanted the model to be practical and appropriate for its intended users, so it was important to align it with NZQA's KEQs, outlined above. This alignment enables organisations to follow similar processes for embedding literacy and numeracy as part of their whole organisation development and for self-assessment and External Evaluation and Review evidence-gathering, each of which feeds into the other. This aligned approach reinforces the importance and visibility of embedded literacy and numeracy and feedback to the National Centre indicates that this is appreciated in the sector.

International Research on Embedded Literacy, Language and Numeracy

In developing our model we considered international research on embedded literacy, language and numeracy (LLN) and the organisational factors that impact on provision in these areas, reviewed by Leach, Zepke, Haworth and Isaacs (2010). They identified four major strands in the literature: vocational language, literacy and numeracy; English as an Additional Language and biliteracy; language, literacy and numeracy practice; and critical literacy/New Literacy Studies. They synthesised their findings into a set of guidelines for language, literacy and numeracy development and delivery in organisations (Leach, Zepke, Haworth, Isaacs, & Nepia, 2009, pp. 5–7). The same team of researchers investigated how a sample of tertiary education organisations in Aotearoa New Zealand embedded literacy, language and numeracy. They found common features in all five case study organisations, each of which had a literacy, language and numeracy 'champion', either a strategic manager or a unit within the organisational structure, driving the embedding process (Leach et al., 2010, pp. 2-3). These literacy- and numeracy-specific findings guided our work on the development of the Embedded Literacy and Numeracy Whole Organisation Framework and data-driven decision-making.

Research on Organisational Change

Research on organisational change also informed the development of the model. However, in this we were hampered by the weakness of much of the work in this area and the lack of literacy- and numeracy-focused studies of organisational change. As Rune Todnem By states in his critical review of the literature on organisational change management:

theories and approaches to change management currently available to academics and practitioners are often contradictory, mostly lacking empirical evidence and supported by unchallenged hypotheses concerning the nature of contemporary organisational change management. (By, 2005, p. 369)

One author we have found useful in relation to organisational change is the Sardinian communist Antonio Gramsci. Gramsci's concepts of hegemony (Coben, 1995) and 'war of position' may be especially pertinent, although they were developed in the very different context of revolutionary struggle in early twentieth century Italy:

Gramsci developed a strategy for revolution in countries where the state holds power as it were in reserve, through the institutions of civil society, rather than through force alone [...]. The war of position entails the building of alternative, revolutionary forms of organization [...]. The hegemony of the dominant fundamental group pervades all aspects of civil society, including the law, education, morality and culture in the widest sense and so it is in these areas, as well as in the military field, that the revolution must be waged in order to form a new 'historical bloc'. (Coben, 1998, p. 15)

Gramsci describes 'hegemony' as:

the 'spontaneous' consent given by the great masses of the population to the general direction imposed upon social life by the dominant fundamental group; this consent is 'historically' caused by the prestige (and consequently confidence) which the dominant group enjoys because of its position and function in the world of production. (Gramsci, 1971, p. 12)

Mumby (1997) offers a "re-reading" of Gramsci's concept of hegemony for organisational communication studies, arguing that:

How we conceptualize hegemony has consequences for the ways in which we think about the social actors who engage in processes of organizing. A dialectical understanding of hegemony allows for a critical conception of organizations and society that is more sensitive to the nuances of resistance and control. (Mumby, 1997, p. 370)

We are interested in just such "a critical conception of organizations and society that is more sensitive to the nuances of resistance and control" in the context of Aotearoa New Zealand, a parliamentary democracy in which compliance with certain state directives is mandated for educators whose work is supported by the state.

In Gramsci's view, the state in a parliamentary democracy is "an instrument of 'rationalisation', of acceleration and of Taylorisation. It operates according to a plan, urges, incites, solicits, and 'punishes'" (Gramsci, 1971, p. 247). Arguably, this is what is happening with regard to adult literacy and numeracy in Aotearoa New Zealand. The 'plan' is the Tertiary Education Strategy (Ministry of Education & Ministry of Business Innovation and Employment, 2014) and through providing an infrastructure and mandating educators to use it, the state, through its agencies, 'urges, incites and solicits' the consent of educators and 'punishes' those who do not comply.

These insights resonate for us because they bring to the foreground issues of power, resistance and control that are germane to our experience of the regulatory regime in which we work, and which we have outlined above. While not necessarily

sharing Gramsci's revolutionary aims, we recognise the tensions Mayo describes in his case study of the Centre for Labour Studies in Malta:

Despite its contestation of dominant forms of practice, of being "against" hitherto legitimized social relations, the Centre is also "in" the institution – part of the institution whose hegemonic practices it contests. This situation of being "in and against" the system or state can lead to strong contradictions, possibly bordering on co-optation. (Mayo, 2005, p. 83)

So what are the challenges of embedding literacy and numeracy in Aotearoa New Zealand and how can these theoretical insights help us to address these challenges? We briefly outline some of them here: at the policy implementation level; at the level of the organisation; and at the level of the tutor.

CHALLENGES AT THE POLICY, ORGANISATION AND TUTOR LEVELS

Challenges at the Policy and Policy Implementation Levels

Since 2009 the pace of change in adult literacy and numeracy education policy and policy implementation in Aotearoa New Zealand has been considerable. An infrastructure and funding regime has been developed that, while robust and internally coherent, is not yet well articulated with other educational sectors or with the workplace. The focus of policy implementation has remained at the level of the programme and the tutor rather than the organisation as a whole and remained largely within the Tertiary Education sector. Policy implementation across government has sometimes lacked coherence, with, for example, different rules for use of the Assessment Tool in TEC-funded and non-TEC-funded work.

Challenge at the Organisational Level

It is evident from the research literature that a clear focus on literacy and numeracy is critically important for all concerned in the organisation: teachers; learning support; management; governance; marketing; administrative staff; employers; community; family; and most of all for learners. One of the unintended consequences of literacy and numeracy becoming business as usual is that organisations may lose literacy and numeracy focus and switch resources to the next area seen as representing a funding opportunity. This is worrying because while pockets of good embedded literacy and numeracy practice may exist in an organisation, these may not be generalised across the whole organisation. Evaluations to date undertaken by the National Centre of Literacy and Numeracy for Adults suggest that whereas embedded literacy and numeracy is usually a clear focus for the literacy and numeracy tutor and for the Chief Executive, this may not be followed through at the middle management level, resulting in disproportionate responsibility resting with the tutors. Without a whole organisation approach, embedded literacy and numeracy provision is not supported

(Casey et al., 2006) and little improvement in learners' literacy and numeracy outcomes is likely to be evident.

We have identified key areas within organisations which house related processes, systems, policies and practices, each of which needs to support embedded literacy and numeracy and each of which needs to be the responsibility of an identified individual or group. When this is done, the lens on embedded literacy and numeracy shifts from a tutor focus to an organisation focus, requiring the active participation of senior and middle management, learning support, administration, reception and marketing staff, governing and advisory boards, as well as tutors and Assessment Tool administrators. This issue is particularly pertinent in private training establishments (PTEs⁶) many of which are small organisations without a large organisational infrastructure.

Challenge at the Tutor Level

A major challenge at the level of the tutor is churn. Continuity is important for learners and tutors alike and it is disruptive for learners and wasteful for organisations to be constantly training up new tutors only for them to leave a few months or even weeks later.

Also, a piecemeal approach in some organisations has meant tutors have been faced with a succession of requirements for compliance. These have induced a degree of initiative-fatigue and, together with the organisational factors outlined above, left some tutors feeling that they are left 'holding the literacy and numeracy baby' in their organisation.

Another challenge at the tutor level is around use of the infrastructure to support the embedding of literacy and numeracy. While most adult literacy and numeracy practitioners and managers in Aotearoa New Zealand tertiary education organisations probably agree in principle that embedding literacy and numeracy is a good thing, there is some resistance to aspects of the infrastructure that are designed to support embedding, such as, for example, the TEC's requirement that tertiary education organisations with Foundation level programmes use the Assessment Tool with learners. The fact that this requirement is linked to funding means that some in the sector see use of the Assessment Tool as primarily a compliance issue. This is compounded by over-reliance in some parts of the sector on a casualised workforce with an ethos of volunteerism, sometimes accompanied by an over-protective attitude to adult learners. Sometimes compliance is seen as an end in itself. For example, one tutor said she was relieved that her students did not have to use the Assessment Tool, while acknowledging that both she and the students needed to know if they were equipped to cope with the more rigorous literacy and numeracy demands of the more advanced programme which they aspired to join, at a level covered by the Assessment Tool. This somewhat contradictory position underlies the need for a critical understanding of the unintended consequences of mandatory regimes, in this case, tending to limit rather than expand learner outcomes.

This is where Mumby's "re-reading" of Gramsci's "dialectical model of hegemonic struggle" is particularly apt. As he points out, it "enables critical organizational scholars to recognize that discursive practices intersect in multiple, frequently contradictory, ways to provide myriad interpretive possibilities" (Mumby, 1997, p. 369). He also points out that Gramsci's "philosophy of praxis argues for a dialectical relationship between critical scholars and social actors, such that knowledge claims about the world are the product of both" (Mumby, 1997, p. 370). This helps us to understand the contradictory positioning of components of the adult literacy and numeracy infrastructure, including the Assessment Tool. Use of the Assessment Tool is a compliance issue and the Assessment Tool is a diagnostic tool for informing teaching and learning as well as a tool generating data for managers to consider when deciding on the shape, scope and scale of provision (decisions which also may be embraced or resisted by those effected); it is not simply one or other of these things. Similarly, the National Centre may be seen by some 'resisters' as an instrument of government control rather than a source of support and professional development for the sector; to an extent this is fair comment, while also being unfair, since it is both.

CONCLUDING REMARKS

So how can educational organisations ensure that literacy and numeracy are embedded across the whole organisation – effectively, efficiently, ethically, inclusively, critically and sustainably? We argue that the National Centre's whole organisation approach can and does support organisations to do this. The approach supports efficacy and efficiency to the extent that is driven by a shared vision and communicated across the organisation with key roles and responsibilities clearly identified. It is ethical and inclusive insofar as the shared vision and associated processes are ethical and inclusive, with common reference points and shared understandings. Moreover it is inclusive insofar as the organisation operates democratically and transparently, taking ownership of the process by self-assessing against desired outcomes for learners and designing and developing its own action plan for implementation. It supports a critical approach in that it enables organisations to analyse how well they are doing through identifying strengths and weaknesses in current practice in a robust, critical and transparent way. It supports sustainability in that it identifies key processes, practices and systems essential to sustaining embedded literacy and numeracy in the long term - built-in, not bolted on – incorporating the whole organisation.

What is new about this work? The model for self-assessment itself is not new; it has existed in the quality assurance literature for many years, and is similar to one already in use for generic organisational self-assessment in Aotearoa New Zealand (NZQA's EER). The novelty is found in the explicit focus on literacy and numeracy, on organisations taking ownership of and being explicit and transparent about what they are trying to achieve with embedded literacy and numeracy, and on everyone in

an organisation working towards these goals in a coherent, ethical, sustainable and critical way.

The model has been developed in the spirit of use–inspired enquiry (Stokes, 1997). As Smith, Schmidt, Edelen-Smith, and Cook point out:

In his canonical Pasteur's Quadrant, Stokes (1997) proposed that rigor and relevance are complementary notions that, when merged, further the production, translation, and implementation of instructional practices that are both rigorous (i.e., evidence-based) and relevant (i.e., practice-based). (Smith, Schmidt, Edelen-Smith, & Cook, 2013, p. J47)

The National Centre's Embedded Literacy and Numeracy Whole Organisation Framework, incorporating data-driven decision-making in a cycle of self-assessment, is both rigorous and relevant. In principle, all members of the organisation have a voice in creating the path towards realising the vision. Whose voice is heard will ultimately depend on the power relations being played out within the organisation and the wider context, as Gramsci would attest. Learner self-assessment is regarded as good practice in the process and further work will focus on ways of strengthening the learner voice.

Compliance with requirements set by the funding provider creates a tension with the idea of an organisation taking ownership over its literacy and numeracy vision. Compliance is necessary for organisations in order to survive financially and organisations are unlikely to create a vision that is not informed by compliance factors. The idea of the Framework is that, once the vision has been created, this becomes the driver for the organisation's practices. Compliance requirements are then used as enabling factors for realising the vision, rather than as drivers themselves, and certainly not as limiting factors.

Tufekci's (2014) concerns about the dangers of 'big data' are also relevant here. While the data-driven decision-making model outlined above is intended to devolve power to the organisation and the educator, the data on which it depends can be used to enforce compliance with targets over which the educator and the organisation have no control. Much depends on the transparency and ethical standards maintained by all concerned as they negotiate the relations of power and control articulated around the literacy and numeracy infrastructure. We believe that data-driven decisionmaking in adult literacy and numeracy education can enhance the professionalism of the educator and manager, inform policy makers and policy implementers of adult learners' progress as an issue of legitimate public concern, and enable adult learners themselves to gauge their progress. In the process, the hegemony of the state is maintained but for Gramsci, "hegemony is always contested; only ever a temporary resolution of a continual conflict" (Coben, 1998, p. 15). We hope this chapter will encourage debate that will move beyond the reductive binary of compliance/noncompliance and contribute to the development of a deeper ethical and critical notion of professional responsibility – to learners, to colleagues and to funders – amongst adult literacy and numeracy educators.

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The views expressed in this chapter are those of the authors and do not reflect the views of the Tertiary Education Commission or any other organisation or individual.

NOTES

- Aotearoa is the Māori name for New Zealand. In this chapter we are using both names to reflect the fact that Te Reo Māori is an official language of New Zealand.
- The Aotearoa New Zealand adult literacy and numeracy infrastructure is outlined at http://www.tec.govt.nz/Tertiary-Sector/Tertiary-Education-Strategy/Literacy-and-Numeracy-Implementation-Strategy/
- ³ Stages in learning are set out as 'steps' in the Learning Progressions for Adult Literacy and Numeracy (TEC, 2008a; TEC, 2008b).
- http://www.nzqa.govt.nz/providers-partners/self-assessment/make-self-assessment-happen/toolsand-resources/key-evaluation-questions/
- http://www.tec.govt.nz/Tertiary-Sector/Tertiary-Education-Strategy/Literacy-and-Numeracy-Implementation-Strategy/Qualification-requirements-for-literacy-and-numeracy-educators/
- 6 PTEs must be registered with the NZQA and their curriculum and academic standards must meet national standards.

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9. MUSEUM LITERACIES

Reading and Writing the Museum

INTRODUCTION

Museums are rich sites for informal learning. But visitor statistics in Australia and many other countries show that museum visitors are represented largely by the "better-off and better-educated" sections of society (O'Neill, 2006, p. 99, see also Gazzeri & Brown, 2010). Within the current political economy of public museums where market ideologies dominate, museums are seeking legitimacy to operate as public institutions, and to that end, expand their visitor base. What would enable museums to expand the visitor base to non-traditional, under-represented visitors – the not very well off and less well-educated? We are interested in how museums 'read' and 'write' who they are and who they perceive are their visitors through their everyday institutional practices. We are interested in developing a concept of museum literacies to understand how museums produce inclusion and exclusion of certain groups of visitors. We are also interested in what museums afford visitors to use, transform or resist museum literacies (Eakle & Chavez-Eakle, 2013). What does it mean to be museum literate?

This chapter develops a conceptual framework of museum literacies building on a recent research project that examined literacy practices of traditional and non-traditional visitors in a family oriented museum exhibition. The findings from the research suggested that an understanding of literacy practices in museum exhibitions can be extended by an understanding of the literacies produced and practiced by and with the museums in which the exhibitions reside. Thus in this chapter we begin to widen our lens from a focus on literacy practices in exhibitions to a focus on museum literacies, employing a New Literacy Studies (NLS) perspective of literacy.

In the next section we provide a brief review of some of the conceptual resources from NLS that are helpful for researching literacy practices in exhibitions and museums. In the third section, we introduce work from the field of museum studies that resonate with our work in developing an understanding of museum literacies. It describes a working framework for museum literacies that derives from O'Neill's (2006) call for a new epistemology of museums that incorporates principles of fairness and social justice. In the fourth section, we discuss findings from our earlier research on literacy events in a museum exhibition and how they suggest the value of examining such literacy events within a broader framework of museum literacies.

CONCEPTUAL RESOURCES FOR STUDYING LITERACIES IN MUSEUMS

We locate our study of literacy in museums broadly within the perspectives of NLS, viewing literacy as a social practice, that is, as an activity that is contingent on the socio-cultural and political contexts and interactions involved in the activity (Barton, 2007; Baynham, 1995). In our research (Yasukawa et al., 2013), we studied visitors' visits to exhibitions as literacy events, and observed the different practices of visitors at a family-oriented exhibition.

Literacies in museums involve more than traditional print-based texts. In their work on museum literacies, Eakle and Chavez-Eakle (2013) define literacies as "including the production and uses of communication media such as oral scripts, gestures, images and other objects that include, but are not limited to, printed language texts" (p. 2). Terms such as multi-modal literacies (Rowsell, Kress, Pahl, & Street, 2013), new literacies (Lankshear & Knobel, 2011), and multiliteracies (Cope & Kalantzis, 2000) are increasingly popular to allow a broader discussion of literacy that includes the above-mentioned range of literacies, not only in the museum experience but in the contemporary everyday multi-media experiences more generally. A useful concept for studying literacies in museums is Pahl and Rowsell's (2012) concept of critical artifactual literacy that expands the concept of literacy to one that involves "understanding of literacy as a situated social practice together with literacy as materially situated" (p. 50). To develop a concept of literacy, more particularly reading, that encompasses the expanded range of literacies, Serafini (2012) proposes a framework that builds on the 'four resources model' developed by Freebody and Luke (1990) and then revisited by them in Luke and Freebody (1999). The four resources model conceptualises the successful reader as taking on four 'necessary but not sufficient' roles in relation to the text as:

- Code breaker (coding competence)
- Meaning maker (semantic competence)
- Text user (pragmatic competence)
- Text critic (critical competence) (Luke & Freebody, 1999).

Serafini (2012) expands on this model with the multimodal reader in mind, and proposes a framework for understanding the multimodal reader as:

- Navigator "attending to the grammars of visual design, in addition to the grammar, structures and typography associated with written language" (p. 155).
- Interpreter "synthesis[ing] perceptual abilities with structural perspectives and political, historical and cultural understandings" (p. 157).
- Designer—"select[ing] from all the possible ways of positioning a text, the various design, visual and textual elements presented and the sociocultural contexts of the act of reading and decid[ing] on how a particular text is to be read in a particular time and place" (p. 159).

 Interrogator – "look[ing] not only at the relationships within a work of art but beyond the work itself to the historical, cultural and social contexts in order to comprehend its meanings" (p. 160).

Serafini (2012) acknowledges that these four roles are not hierarchical or independent of each other; there is much blurring between these multimodal reader roles. For example, if we imagine a reader negotiating a website, the 'navigator' would recognise different features of a webpage – for example, how the information is organised according to topics or audiences, how to zoom in/zoom out of certain parts of an image on the page, which texts are hyperlinked, as well as the features needed for decoding the print-based texts. But often a webpage calls for the reader to assume the role of the 'designer' to design their pathways into other parts of the website by clicking into other internal and external websites from the page. Depending on the path taken, what the reader does as an 'interpreter' changes because the information presented would be different, and in some cases, written for different audiences and purposes. So the designer is concurrently interpreting the information that is uncovered and interrogating the purposes and audiences as well as the authority of the information as they interpret what is being presented.

In the museum exhibition context, Hackett (2014) introduces spatial and temporal dimensions of the literacy event in her study of how children navigate between different exhibits in nonlinear trajectories, sometimes stopping for a brief moment, sometimes for intense and long periods at different exhibits. In our study (Yasukawa et al., 2013), we found that the literacy events in the exhibition were collectively negotiated events in some instances, where children and teachers played the role of mediators in helping non-traditional adult visitors negotiate the exhibition.

An important feature of the multimodal reading practices suggested by Serafini's (2012) framework (and by Freebody and Luke's original model) is that the practices "are *adapted*, not simply *adopted*, by readers as they transact with the texts and images in the various contexts in which they are encountered" (p. 161). Thus, being literate assumes the reader can exercise agency in the way they negotiate the text. In developing an understanding of museum literacies from a NLS perspective, we need to examine the affordances of agency in museums. Alternatively, we can examine how the museums are denying agency except to the better-off and better-educated.

TOWARDS A FRAMEWORK FOR MUSEUM LITERACIES

Museums themselves have developed a concept of museum literacy drawing on broad definitions of literacy. A European project that examined "the lack of visitors with low educational attainment in museum audiences" (Gazzeri & Brown, 2010, p. 5) conceptualised museum literacy as embracing the following elements:

• The possession, by the potential users of the museum, of sufficient cultural capital for decoding and appreciating complex cultural products

- More particularly a sufficient acquaintance with the consumption of complex cultural products that may act by itself as an important motivational incentive
- Sufficient self-esteem and trust by the users in their own skills and education, perceived as a necessary prerequisite for leaving the museum in a satisfactory and not frustrating way... (pp. 6–7).

They note that these elements are related to having an understanding of what a museum is, acknowledging that both the objects within a museum and the experiences that can be had in museums are constantly evolving. However, in order for these elements of such a definition of museum literacy to be analytical resources for examining literacies in museums, we must have a way of examining what it means to know what a museum is, and whether the way it writes its purpose and authority is contestable or assumed as given.

In Yasukawa et al. (2013) we discussed the resonances between the democratic goals of NLS, and the school of New Museology in museum studies that challenge the traditional authority of museums in naming and representing knowledge and curators of exhibitions assuming the role of the specialist experts. New Museology recognises the possibilities of multiple narratives that can be given for any objects in a museum and has opened up ways in which decisions are made about the representations of histories and artifacts in museums (Vergo, 1989). But more than two decades after the influences of the thinking from New Museology started to have an influence, the better-off and better-educated still dominate museum audiences.

Grek (2004, 2006) observes that many museums in the United Kingdom (UK) are trying to broaden their visitor demographic in order to be institutions that promote 'social inclusion'. However, she critiques the ahistorical and apolitical adoption of this term. She explains that:

The term 'social exclusion' was initially constructed to imply disaffected and vulnerable individuals in need of care and support; however it is often being used to describe an 'underclass' of people, whose life experiences have to be 'included' to be considered valid and worthwhile. Instead of arguing for museums becoming agents of 'social inclusion' ... this particular ideological construct leads museums to practices which embody a deficit discourse of museums. (Grek, 2006, p. 253)

In effect, Grek is arguing that this construct of social inclusion keeps the museums and who they are intact, while blaming those who are not engaging in museums. Similar critiques of deficit discourses are put forward by adult education and literacy scholars in relation to adult literacy and lifelong learning where deficit discourses abound (see for example Lea & Street, 2006 in the higher education context, Rogers, 2006 in the lifelong learning context, and Black & Yasukawa, 2013 in the vocational education and training context).

Taking a political economy angle, Ross (2004) examines the question of why it is difficult for museums to "rid themselves of their elitist image and outlook, and

abandon monolithic visions of history [in order] to have ethical justifications for their continuing existence" (p. 85). He argues that, in the UK, the need for museums to expand and diversify their visitor base is in fact working to strengthen the status quo. While throwing open to market forces might be assumed to lead to the breaking down of traditional patterns of cultural consumption, Ross argues that market domination of the cultural industry leads to the construction of museum visitors as customers or consumers, rather than as citizens who are exercising their right to access and shape public cultures and their institutions. His conclusion is not optimistic:

The ability to participate in this form of cultural consumption seems likely to remain the preserve of educated and privileged classes. It is questionable then, how far the debasement of the politically empowering concept of the public citizen, and its replacement with that of an individual consumer of cultural and material values can lead to any substantively democratised politics of representation in the public museum. (Ross, 2004, p. 100)

O'Neill (2006) argues that in order for this to change, we need to examine the epistemology of museums that is underpinning each museum's practices. He outlines two dominant epistemologies: essentialist and adaptive. He explains that the essentialist view is one where "museums have no purpose other than to carry out the functions of preservation, research and display ... which [are] not subject to change and development" (2006, p. 96). The essentialist view holds the archiving as its primary role, and displaying to and educating the public as secondary roles. This view is in direct contrast to the adaptive view that sees the rationale for a museum's existence as serving the public. O'Neill says that "proponents of this view see themselves as part of a changing history which they seek to respond to, not least by trying to attract audiences from amongst excluded groups" (p. 97). But he says that both views are "naïve covers for the ideological role of museums in supporting power structures" (p. 97) and that "reinforcing the status quo within the society is not a secondary, but a core function of museums" (p. 98) in these epistemologies. O'Neill calls for a new epistemology that is underpinned not by an ideology of elitism but by principles of justice and fairness.

The new epistemology, according to O'Neill (ibid.), can be framed as one having the four dimensions of:

- Knowledge of Objects where what is worthy to be experienced in a museum can be contested
- Knowledge of Visitors where visitors and their lived experiences in the museums rather than the idealised visitors and experiences are examined
- Museums' Knowledge of Ourselves [the museum as an institution and as museum staff] – where the museum staff's assumptions and values about knowledge production and museum practices are uncovered
- Knowledge of Society where the relationship of museums to the rest of society is examined within a theory of justice.

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This provides an epistemological basis for conceptualising what museum literacies underpinned by principles of justice and fairness can mean. O'Neill's framework incorporates the multi-layeredness of knowing what museums are – knowledge about museums is not only what the museums themselves want people to know about. It includes the multiple narratives that surround objects that are and could be displayed in museums; how museums are perceived and experienced (or not) by the public – both who is included in and excluded by the museums; what the museums think they know about their visitors, and what they don't know; the self-awareness museum staff have about their own values, position in and relationship to the rest of society; and knowledge about the politics and contexts in which museums exist. Museum literacies can therefore be understood as both the reading and writing of multiple layers of knowledge that make up a museum. Museum literacies are practices of museum staff (collectively and individually), visitors and non-visitors. Literacy in and about museums must therefore be understood as literacies, and museum literacies must allow for contestation both about the 'content' knowledge in museums and the practices of knowing in museums. Moreover, as we (Yasukawa et al., 2013) showed, literacy events in museums are not always individually negotiated; in some cases they are collective experiences involving mediators, and therefore should not be solely focussed on the practices of individuals.

Serafini's (2012) model of reader roles for multi-modal texts helps us to conceptualise what museum literacies mean in relation to knowledge of objects, particularly if artifacts are include in the range of multimodal texts considered in this model. Equally, the model can be adapted to help us consider the reading and writing of the knowledge of visitors, of the museums as institutions, and of society and its positioning of museums. Thus, we suggest that a two dimensional model of museum literacies can be contemplated as shown in the table below. In the table, the columns represent the different knowledge domains of O'Neill's (2006) new epistemology of museums, and the rows represent the different reader roles from Serafini's model of literacy.

Objects Visitors Museums Society

Navigator
Interpreter
Designer
Interrogator

Table 1

As Serafini (2012), in relation to the reader roles of multi-modal texts notes, the reader roles overlap and each of them can rarely be examined in isolation of any of the others. This is likely to be the case for the reader roles in relation to museum literacies. At the same time, it points to the critical reader role of the interrogator

which is necessary in developing an understanding of the power dynamics – of inclusion and exclusion – in museums. The matrix is a representation of the multi-layeredness and multi-dimensionality of museum literacies where the boundaries between the cells are permeable.

In the next section we revisit our data from our project using this museum literacies framework as a lens to see how different layers of what a museum is, is read and written by different museum staff and different visitor groups. The interpretation of reader roles related to the objects and visitors domains are interpreted from the data of our research, while the interpretation of reader roles related to the museums and society are speculative at this stage as we see this as the necessary next step in our research.

FROM LITERACY EVENTS IN EXHIBITIONS TO MUSEUM LITERACIES

Our project researched visits to exhibitions as literacy events in a family-oriented exhibition in a public museum about a popular children's entertainment group – the Whirly Gigs (pseudonym). We aimed to examine how or whether the texts (including the full range of multimodal texts) in exhibitions influence visitors' particularly non-traditional visitors' experiences at the exhibition. Our research methodology was designed to uncover multiple perspectives on this question and involved exit intercept interviews with traditional visitors (those visitors who were not specifically invited to visit the exhibition for the purposes of this research), focus groups with non-traditional visitor groups specifically recruited for this project, observations of both traditional and non-traditional visitors in the exhibition space, interviews of members of the exhibition team, online surveys of the enthusiasts of the Whirly Gigs, and data from the museum's own exhibition evaluation survey.

Reading and Writing the 'Objects'

The objects of the exhibition featured a range of print-based texts (labels for exhibited objects, archival materials about the Whirly Gigs, instructions for activities), audio recordings, a range of computer interactives, and material artifacts – some displayed purely as exhibit items and others available as activities for children and families. Although these different multimodal texts form part of the single Whirly Gigs exhibition, interviews with the exhibition design team revealed that these texts were authored by different exhibition team members (for example, the curator, the exhibition designer, the editor, the interactive designer, the audio-visual producer, the project manager) working independently of each other according to their specialist expertise to meet the curator's brief.

The curator had provided an overall concept of how the exhibition told a coherent story about the history of the Whirly Gigs, and we could read this from the spatial features of the exhibitions. The exhibition was organised so that a visitor would engage with information and activities associated with each of the members of the Whirly Gigs one at a time, as they travel through one side of the exhibition space. They would then reach an area where they would see a holographic performance of the group, two of the group's vehicles - the 'double decker bus' and the 'flying carpet' - that the children could climb into and play, and a long wall of print-based archival material about the group's activities behind a glass case, intended for an older audience. The coherence of the exhibition as a single multi-modal text was challenged in several ways because of the exhibition objects being designed by different specialists, independently of the other team members. The exhibition designer who described her role as designing "the mudmap/layout of how the curator's ideas would be dealt with on the floor" said that there were some tensions between the audio-visual designers and the interactive designers because the sound level was so loud in many parts of the exhibition that it could interfere with visitors' engagement in other activities. The editor, who designs the object labels in the exhibition also commented on the irony that the quiet corner that was designed for adults and children to read together was right next to an interactive that invited children to shout 'Attention Bob!' in order to activate a reaction on the screen. Thus the exhibition staff's museum literacy practices of writing their objects could be seen to impact on the reading of the objects by the visitors; while the visitors experience the exhibition as a single text, the fragmented writing practices lead to certain objects being overlooked or being made difficult to interpret in the way the designer had intended. In our observations of both traditional and non-traditional visitors, we observed only a very few adults reading to their children in the 'quiet corner'. Many adults also commented on the exhibition space being too loud.

In observing a group of non-traditional visitors, a group of adult literacy learners from an Adult Basic Education (ABE) class who were recruited for this project, we noticed that their teachers played a significant role as literacy mediators. In some cases, the teacher helped learners to decode and interpret the meaning of a word on a label they were looking at. One of these words that a student from a migrant background for whom English was an additional language asked about was 'board shorts'. For this student, the term for the clothing worn by surf-board riders was new, and the teacher helped the learner relate the words in print to the image of the Whirly Gigs member in board shorts. But additionally, the teacher played a role in helping the learner interpret the significance of the words as part of the iconic image of the Whirly Gigs — as a group of young men who appeared in colourful board shorts in their early performances. Mediation of this particular interpretation was not necessary for some of the other learners who knew about the Whirly Gigs through their children's enthusiasm of this group.

The teachers also played a role in designing the exhibition tour for some of the adult learners by pointing out particular objects that they thought would be of interest to them, drawing on what they knew of the adult learners' interests or what would be new or surprising to them. Having selected an object the teacher and the learners interpreted the object through dialogue and questioning. Another instance where the learners' 'reading' of an object occurred was just outside the exhibition space where there was an indoor garden with a flowing stream, plants, fish and stone steps, all created through lighting effects. A group of the adult learners looked at the garden with great interest, but it was only after one of the teachers stepped through this 'garden' that the learners realised that this was a garden that they could actually walk through. Thus, while the object was 'written' for the visitors to exercise this agency, the adult learners only realised this through the assistance of their teacher.

Not all objects or learners required a literacy mediator. Two of the learners spontaneously started dancing with the music when they reached the holographic performance space where the Whirly Gigs were dancing to their music. These learners commented on this as a highlight of the visit: "lots for children, so you could just do what children normally do ... dancing".

While most of the 'non-traditional' visitors expressed enthusiasm about this exhibition in the focus group immediately after their exhibition visit, some also expressed difficulty reconciling certain features about the exhibition and the museum with their expectations about what an exhibition visit would be like. Several of the learners expressed an expectation of a museum exhibition along the lines of what O'Neill would call the 'essentialist' view – a place where they can expect to see "everything old, traditional", that is a place for preservation and conservation, rather than a place for active participation. Some of the learners also wanted to know more about the history of the museum and why it appeared to be so different to the natural history museum they had visited. In the focus group environment, with the support of their teachers, they were keen to take the role of the 'interrogator' to learn about the socio-cultural positioning of the museum in relation to the other public museums in their city.

Reading and Writing the 'Visitors'

But how does the museum read and write their visitors? In our interview with museum staff, none of them, except for the editor, had considered an exhibition visit as a literacy event in anyway. The editor, who called herself "the audience advocate" did say she considered literacy as an issue in her work of creating labels. She talked about how she would receive a large amount of dense text about each of the objects from the curator, and she would edit out a large chunk of this and reduce the text to about a 80–100 words so that they would not be conveying "the obvious" that was clearly visible from the object that the visitor would be looking at.

The editor also explained to us how the Whirly Gigs exhibition included labels that had a distinctive coloured border. These, she explained were "questions to be posed to the child" by the accompanying adults, and they were "open-ended questions" to assist adults who may feel "challenged because they are not attuned to how to interact with a three year old in an exhibition". She referred to how she interacted with her young child when she explained how these labels were designed to work.

However, in our observations of both traditional and non-traditional visitors who came with children, we did not see a single instance of adults and children interacting with these coloured labels. Moreover, there were no explanations or instructions that were available to visitors about the colour coding of the labels and what they indicated about the way adults were expected to use them in their interaction with children. It was also made apparent to us by the exhibition staff that once the exhibition opens, they do not go into the exhibition to observe how the visitors are experiencing their exhibition. Thus, any knowledge of how effective, engaging, or problematic the visitors found the exhibition or parts thereof are learned by these staff members through other means.

One of the other non-traditional visitor groups that we recruited to this project were groups of mothers and their young children from an early-literacy group for migrant families. All of these families were largely guided by where their children wanted to go, what they wanted to look at and do in the exhibition space. And the children – both from traditional and non-traditional visitor groups – were attracted to activities with artifacts (e.g. building patterns with blocks, making paper flowers, sitting on the 'flying carpet'); interactives (e.g. making movements in front of the Wii, colouring in on a computer screen); and dancing to the music at the holographic performance space.

In the intercept interviews with adults, most of the adults commented that they did not read the print-based materials because they were too busy keeping an eye on their child or children, although a few who did read them said they found it interesting. Their comments on the other objects in the exhibition were assessments of the value for their children. For example, the double decker bus "makes a huge difference in making the area enjoyable for kids", and the exhibition was "fabulous—so many things for kids to do. I don't interrupt their exploration of the exhibition".

At the post-visit focus group, the mothers in the early-literacy groups commented that the exhibition was done well, but there were certain features that they were dissatisfied with. The first and foremost was that there was no place for a photo opportunity where the children could be photographed against an image of the Whirly Gigs. They were unanimous on this complaint and referred to another public museum where such opportunity existed, and for free. A second complaint was the difficulty of finding a map that explained how the exhibition space was to be navigated (one of the mothers had eventually found a map and showed it to the others). Another source of dissatisfaction was that the "moral messages were not very strong". They said that they had expected stronger messages about healthy eating and good behaviour to be conveyed through the activities. There was also a complaint that there should have been more computer interactives. Thus there were particular expectations that these visitors, while not being frequent museum visitors, had about the exhibitions that were not met, and which in a focus group environment, they freely discussed.

O'Neill (2006) identifies as a problem of many museums that the visitors that many museums have in their mind when they design exhibitions are the idealised

visitors, often a projection of themselves. In that way, the ways in which museums design exhibitions produce and reproduce the audiences they imagine, rather than producing a wider audience (that may also include their idealised audience). Our research suggests that the museum where our research was located was 'reading' the visitors through a narrow lens. For example, their evaluation was based on an individually completed paper based English language survey that visitors such as the adult literacy learners may have found difficult to complete. Another source of data that the museum cited on the success of the exhibition was an online 'blog' of the Whirly Gigs enthusiasts. This group, not surprisingly given they were enthusiasts, rated the capacity of the exhibition to engage them and their children very highly. When we surveyed this group, we found of the 144 respondents, 94 percent spoke English at home, over 80 percent had a post-secondary school qualification (including over 62 percent with a university qualification), and over 85 percent were employed or working as a home or family carer (including 65 percent who were in employment) and 1.4 percent were unemployed or looking for work. Thus the 'enthusiasts' who were survey respondents were in the category of the well-off and well-educated visitor groups.

Currently, therefore, the museum 'navigates' and 'interprets' who their current visitors and potential visitors are through limited channels, that by design, ignores the actual experiences of visitors or the perceptions of those who do not visit.

Reading and Writing the 'Museum'

Our research suggests that in order to understand how the museum's practices of reading their audience includes or excludes particular demographic groups, we need to research how the museums themselves read and write who they are, and how they see themselves positioned in relation to their visitors. We heard from the editor that she saw herself as the "audience advocate"; yet, the ways in which she had envisaged families to engage with the special labels were not being realised on the exhibition floor. Visitors can exercise different degrees of agency in their reading practices – they may engage or they may resist the literacy practices that the exhibition designers may have created for them.

To understand how the museum staff's own values and expectations are being written into exhibition designs and other everyday practices of the museum, and more importantly for museum staff, to recognise this process, there may need to be some 'disturbance' or 'perturbation' that is introduced that would provide an impetus for museum staff to question the orthodoxies that prevail in the museum. During our project, we found that the exhibition staff of the Whirly Gigs exhibition did not go back to the exhibition site to observe how visitors were engaging with the exhibition. Selecting some of the research observation notes or the comments from the exit intercept interviews with the exhibition staff could be a reflexive approach to facilitate museum staff's examination of their own assumptions about who they are in relation to the actual, rather than their imagined visitors. In 'navigating' and

'interpreting' such data, they may find different ways of 'designing' how they write who they are through their practices, and thereby 'design' how they want to be read by the visitors. But this should also involve 'interrogating' the museum's place in the wider society.

Reading and Writing 'Society'

So, how are the museums reading changes in society? What role do they see in writing a different social future? By examining museum practices through a NLS lens, we can see the same kinds of contradictions between the goal of expanding and diversifying the museum visitor base, and that of promoting literacy. In the same way that Ross (2004) is sceptical about the possibilities of a radical transformation of museums while market ideologies dominate, Yasukawa and Black (this volume) have argued in their analysis of Australia's National Foundation Skills Strategy for Adults the difficulty of expanding literacy agenda from a purely productivity-motivated one to an alternative broader agenda that takes account of a diversity of opinions and discourses.

CONCLUSION

Marrying NLS with New Museology enables us to consider a framework for investigating and analysing how museums construct inclusions and exclusions of different visitor groups. The work-in-progress framework that we outlined in this chapter builds on the critical (multi-modal) literacy framework of Serafini's (2012) and the framework for a new epistemology of museums proposed by O'Neill (2006). In bringing these two frameworks together, we believe we have a framework that enables us to think about reading the objects in museums as intimately related and dependent on: how both the visitors and the museums read the visitors and who they are; the museums and who they are in relation to the visitors; and the world and how museums sit in relation to it.

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10. POPULAR EDUCATION AND MASS LITERACY CAMPAIGNS

Beyond 'New Literacy Studies'

In Australia and internationally, politicians and policy makers continue to believe in a direct and unproblematic relationship between literacy on the one hand and a wide range of social benefits on the other. As literacy advocates and practitioners, we are reluctant to argue with this, because it helps our case for more funding and support. On the other hand, most practitioners also know that there have been several decades of academic research and writing now which have seriously questioned the nature of these links. Some researchers associated with 'New Literacy Studies' (NLS) have been particularly influential in problematising the Freirian concept of the link between literacy and social transformation (Rogers, 2011; Street, 2001). In this chapter, I will argue that there are significant problems with the NLS approach. In the first instance, its dismissal of the emancipatory narrative of popular education relies too much on post-structuralist theory and ethnographic methodology, while paying scant attention to the ongoing political economy of adult education and development in the Global South (Lambirth, 2011; Youngman, 2000). Second, and related to this, the NLS critique has, perhaps unwittingly, strengthened the neoliberal argument against large-scale state- and social movement-led adult literacy campaigns. I will use historical analysis and contemporary examples to demonstrate that, in the right context, mass literacy campaigns can indeed be socially transformative, just as Paulo Freire and many other twentieth century popular education theorists believed (Freire & Macedo, 1987).

INTRODUCTION

This chapter results from my efforts to understand and unravel a contradiction in the contemporary theory and practice of adult literacy. On the one hand, academic literacy studies have been dominated for the last thirty years by the 'New Literacy Studies' (NLS) approach, which problematises the idea of literacy as a set of skills, whose acquisition directly benefits both individuals and society. On the other hand, the same period has been marked by the growing hegemony of a particularly oppressive example of this model, namely human capital theory. The resolution of this apparent contradiction begins with recognising that, despite their obvious

differences, the NLS and the advocates of human capital theory share a scepticism towards the Freirian vision of popular education, in which mass literacy campaigns are an integral part of the struggle for human liberation (Freire & Macedo, 1987). This recognition invites further analysis, to explore how this scepticism arose, and to understand how two otherwise very different intellectual frameworks can arise from and co-exist within the same material reality.

The analytic work in this chapter is by no means disinterested. My field of practice is popular education, and, as part of my work as a researcher and practitioner, I have been directly involved in the planning and implementation of mass literacy campaigns since 2004. These campaigns, which use the Cuban model known as Yes I Can, have been undertaken, first in the newly-independent country of Timor-Leste (Boughton, 2010), and more recently in several remote Aboriginal communities in Australia (Boughton, Ah Chee, Beetson, Durnan, & Leblanch, 2013). Over the last ten years, as I have been writing accounts of the campaigns in which I was involved, I have been struck by the fact that mass literacy campaigns, which were the subject of intense interest among adult educators in the 1960s, 70s and 80s (e.g. Arnove, 1986; Arnove & Graff, 1987; Bhola, 1984; Cardenal & Miller, 1981; Kozol, 1978; Lind, 1988), have today almost disappeared from English-language writing in the field. This seems all the more strange in that we are only now, in 2013, coming to the end of the final year of the United Nations Literacy Decade. Meanwhile, the academic literature of adult education in general and of adult literacy in particular has all but ignored one of the most outstanding achievements of this decade, namely the extension of literacy via the mass campaign model to millions of people in the Global South.

In my doctoral research in the 1990s on the history of radical adult education in Australia, I used historical research methods to uncover the ways in which radical and especially socialist forms of adult education had been excluded from the so-called official accounts of the field (Boughton, 1997). In the last few years, I have used similar methods to discover why, from the 1980s onwards, there was a deliberate turning away from one of the most potentially transformative examples of adult education work. This is a largely uncharted area, and much research still needs to be done, but the broad outlines of the story are now fairly clear. In this chapter, I analyse some of the significant developments in the last fifty years which help explain who and/or what 'killed off' academic interest in mass literacy campaigns, and how and why it was done. In the process, I also explore some of the theoretical and empirical limitations of the NLS which made this form of literacy scholarship an unwitting ally in this process.

Because there has been little written in recent years on the subject, some definitional clarity is required. A mass literacy campaign is a form of adult education practice in which methods of large-scale social mobilisation are used to engage the whole society in the process of reducing the incidence of illiteracy in the nation or the region of the campaign. A literacy campaign, unlike literacy programmes which are more familiar to today's readers from the countries of the industrialised North,

seeks to make a significant improvement in the overall literacy rate within a specific period of time. The Indian literacy scholar Bhola defined a campaign in this way:

A mass approach that seeks to make all adult men and women in a nation literate within a particular time frame. Literacy is seen as a means to a comprehensive set of ends – economic, social, structural and political ... (It) suggests urgency and combativeness ... it is something of a crusade. (Bhola, 1984, pp. 5, 196. My emphasis)

There have been many such campaigns in history, some occurring as early as the sixteenth and seventeenth century, but they became much more widespread in the twentieth century, particularly in countries which were undergoing major social transformation, for example, following a revolution and/or the achievement of independence (Arnove & Graff, 1987). While each campaign takes on distinct characteristics of its national, historical and cultural context, most involve three phases. In the first, the population is mobilised to support the campaign through the establishment of national, regional and local structures and activities to 'socialise' awareness of the importance of literacy. In the second phase, basic literacy is built through classes taught by local facilitators trained by the national structures. The third phase, post literacy, consolidates the newly-acquired literacy through varied informal and non-formal education activities. The campaign continues in each locality or district until the target number of completions has been achieved.

THE NEW LITERACY STUDIES

As one of its acknowledged founders, Brian Street recently said, the 'new' literacy studies is no longer very new, having been around since the 1980s.¹ The origins of this way of studying (and, to a lesser extent, developing) adult literacy lay in a critique of what was seen at that time to be a dominant view, namely that literacy was an individual cognitive capability or set of skills, the acquisition of which allowed people to develop higher order understandings and knowledge. In the process, according to this cognitive view, which Street named 'autonomous', literacy leads directly to many other beneficial effects on individual and social wellbeing. Adult learning theorists working in fields other than literacy studies were, like Street and his colleagues, beginning to see the limitations of analysing learning as individual cognition; and like the NLS theorists, they were more interested in the social aspects of learning, the idea that learning occurs through participation in particular kinds of social activity (Hager, 2005).

In order to understand the social practices that constitute literacy, literacy studies turned to the discipline of ethnography. This is not surprising, given that a lot of literacy work occurs in the Global South, and anthropology has long been a major tool for social scientists working in the field of development studies. Street's own original work was undertaken in Iran (Street, 1984). But social practices are studied in many other disciplines besides anthropology and with many other methods

besides ethnography. To restore a more holistic view, literacy studies will need to re-discover its earlier multi-disciplinarity, epitomised in the work of Freire and his many collaborators in the global popular education movement (Schugurensky, 2011). In particular, we need to re-assert the importance of history, political sociology, political economy and philosophy to the construction of an adequate theoretical basis for our work.

MASS LITERACY CAMPAIGNS

By the time Paulo Freire began his work in north eastern Brazil in the early 1960s, literacy work among the poor and marginalised with a view to engaging people in the struggle for their own liberation already had a long and proud history. In fact, the student organisation with which Freire began this work was led by activists who were inspired by the Cuban literacy campaign which had occurred two years earlier, in 1961 (Pérez Cruz, n.d.) The Cuban revolution was also, likewise, not an isolated or unique phenomenon, but part of a world-wide anti-colonial and antiimperialist movement across three continents, Asia, Africa and Latin America, a movement intimately related to the international socialist movement which emerged in Europe in the nineteenth century. In almost every country where radical social movements against capitalism arose, mass literacy campaigns became part of the process by which the revolutionary leadership built the support and understanding of the majority of the people for their goals. The basic reason was simple, namely that people could not be expected to change the world if they could not understand it, and to develop that understanding they needed to study and to read and to write. Mass literacy campaigns, then, including the one with which Freire became involved in 1963, were one of the key organising and mobilising 'tools' of anti-capitalist and anti-imperialist social movements of the nineteenth and twentieth centuries. In short, they were an archetypal form of what the field of adult education now calls "social movement learning" (Choudry, 2009, p. 5).

The movements which adopted literacy campaigning in this way were engaged in a bitter global struggle, a class struggle on a world scale, a struggle in which education, including literacy campaigning, was only one 'moment'. In many countries, the liberation movements were forced to take up arms, as they did in Cuba, in the African colonies of Portugal, and in many parts of South East Asia, including, from 1975 until 1999, in Timor-Leste. This was the so-called 'Cold War', which for millions of people was anything but cold. In the 1960s, the 1970s, and the 1980s in particular, up until the overthrow of the apartheid regime in South Africa in 1991, national liberation movements faced an unholy alliance of local dictators and military rulers backed and armed by the western powers, led by the United States (US). This is the essential 'background' context in which the debates around mass literacy campaigns need to be understood.

Over and above, as it were, the military campaigns being waged for control of land, resources and people, there was an ideological campaign, a struggle over

models of development. The fundamental choice was, as it had been since the middle of the nineteenth century, between capitalism and socialism. On one side stood the US and Western Europe, the so-called advanced industrial countries of the capitalist First World, along with their client states and their Asian alliance partners like Japan and Australia. On the other side stood those 'Second World' countries which had attempted to forge a non-capitalist path of development, principally China, the Soviet Union and the Eastern European communist states. In the middle, as it were, was the Third World, the countries emerging from colonial domination to political independence, and having to decide on a path of development (Youngman, 2000).

The United Nations and its agencies were major sites in which the ideological struggles of the second half of the twentieth century were played out, and how a country should approach the problem of mass illiteracy was one of the issues where this occurred. Sometimes this occurred at the level of the UN General Assembly, which called for a global literacy campaign in 1961. But more often the debates occurred within and between the UN agencies with a specific interest in education and development, namely United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Development Program (UNDP), United Nations Children's Fund (UNICEF) and the International Labour Organization (ILO). Two other international institutions have also played crucial roles, the Organisation for Economic Co-operation and Development (OECD) and the World Bank (Jones, 1990, 1997; Wickens & Sandlin, 2007).

It would be a mistake, however, to assume that this was mainly a matter for the countries of the Global South. Both because literacy is also a key issue in debates around education and the economy in the so-called advanced countries, but also because the 'North' is the hegemonic centre of academic endeavour (Connell, 2007), debates about literacy and development in the South inevitably influenced, and were in turn influenced by, literacy debates in the countries of the North. This helps to explain why a Brazilian educator like Freire could come to have such an extraordinary influence on ideas about literacy and education in the West (Schugurensky, 2011). Moreover, the dominant intellectual framework for linking education (including literacy education) to economic development, namely human capital theory, provided the key ideological underpinning of the pro-capitalist argument across the world (Youngman, 2000, pp. 55–56).

In summary, then, the history of the mass literacy campaign as an idea and as a strategy for development occurs alongside and heavily influenced by the Cold War geopolitical struggle between capitalism and socialism. To understand things in this way, it is necessary to move beyond ethnography to other ways of studying and understanding human society. The framework used in this chapter is historical materialism, that form of inquiry first developed by Karl Marx and Frederich Engels to assist the emerging working class movement of nineteenth century Europe to analyse the conditions in which it found itself and to decide, on the basis of that analysis, how to proceed. Historical materialism, which is the preferred method of analysis in the popular education movement, is an amalgam of political economy,

historical analysis and dialectical materialist logic and philosophy. A detailed account of how it is applied in the field of adult education studies can be found in the works of Paula Allman (2010), Frank Youngman (1986, 2000), John Holst (2002), Sarah Carpenter and Sharzad Mojab (2011), among others, and will not be repeated here. Rather, the analytic method will simply be demonstrated through its application.

Mine is not the first attempt to understand literacy studies from within this framework. In two major books, *Adult Education and Socialist Pedagogy* and *The Political Economy of Adult Education and Development*, Frank Youngman from the University of Botswana in Southern Africa utilised historical materialist analysis to examine specific instances of mass literacy campaigns, in the former, and the role of the international donor agencies, in the latter (Youngman, 1986, 2000). More recently, Andrew Lambirth has applied the same framework to an interrogation of literacy studies, policies and practices, chiefly in the context of school education in the United Kingdom and US (Lambirth, 2011). A Marxist approach informs a number of other accounts of specific literacy campaigns, and some analysis of international policy actors especially of the role of the World Bank, but recent English-language Marxist analysis in adult education has not directly engaged with the issue of adult literacy or the mass literacy campaign.

CULTURES AND RESISTANCE

While there are notable exceptions, most ethnographic work in literacy studies proceeds with little or no critical analysis of the wider debates around development policy referred to above. It is not that policy is ignored, rather that it is assumed. Many adult literacy scholars do attempt to connect their detailed analysis to questions of policy and programme planning, but this generally proceeds inside a very depoliticised notion of policy and how it comes to be, and the problem of reconciling policy and ethnography reduced to a technical one. For example, Robinson-Pant (2008) acknowledges that ethnography deals in a level of detail which appears fairly irrelevant to policy makers, because the valorisation of highly-localised practices which is the mark of the ethnographic approach appears to be in direct contradiction to the need among people planning large scale literacy interventions, including mass campaigns to analyse what they are doing at an international, national or at best regional level. On the other hand, the assumed lack of attention to the local is considered by NLS scholars to be one of the fundamental flaws in the mass campaign approach.

Some literacy studies scholars argue that Street's autonomous versus ideological model has over-stated the extent to which literacy practices can best be understood at a local level, creating the false impression of a 'great divide' between the local and the global. Maddox (2007) argued that the ethnographic approach, and the associated critique of the 'autonomous' model, downplayed the importance of literacy's impact, and its role in progressive social change, citing other authors who shared this view,

including Luke (2004). His paper used data from his work in Bangladesh to illustrate his argument. He was building on previous work by Brandt and Clinton (2002), who thought that Street and his colleagues were "exaggerating the power of local contexts to define the meaning and forms that literacy takes" (p. 337). Literacy, they argued, connected people in local contexts with a much wider world, and therefore "understanding what literacy is doing with people in a setting is as important as understanding what people are doing with literacy" (p. 337). In other words, as people become 'more literate', they engage in different ways with the world beyond their own village and community.

However, these criticisms remained firmly within the new literacies studies paradigm. For example, they do not acknowledge, other than negatively, that creating a sense of being part of the wider national body was a deliberate intention behind literacy campaigns undertaken by national liberation movements. For Amilcar Cabral, for example, a leader of the liberation struggle in the Portuguese colonies of Africa, all local cultures in a colonised society were, objectively-speaking, forms of resistance, since indigenous practices and institutions, including local languages and forms of land ownership and use, objectively stood in the way of the colonists development agenda. But spontaneous resistance was not enough. For the independence struggle to be won, and a different, postcolonial society to be built, those forms of cultural resistance had to become aligned with a wider movement, nationally and internationally, against colonialism and imperialism (Cabral, 1973).

In Paulo Freire's last public interview, given to Literacy.org in 1996, he discussed the relationship between the local literacies and languages used by people who come to literacy classes and the wider national and global literacies with which they must engage:

First, their way of speaking is as beautiful as our way of speaking. Second, they have the right to speak like this. Third, nevertheless they need to learn the so-called dominant syntax for different reasons. That is, the more the oppressed, the poor people, grasp the dominant syntax, the more they can articulate their voices and their speech in the struggle against injustice. (Freire, 1996)

The most telling critique of the NLS is that, while they acknowledge the need for transformation they have been unable to locate their work within a comprehensive theory of social change. Instead, they have retreated into post-modern theories of power and society which add little to Freire's sophisticated dialectical analysis (Au, 2007). Without a theory of how society changes, which requires attention to history and political economy, they cannot articulate the link between literacy acquisition and effective social change action/movements. Their ethnography leaves them stuck with individuals and small groups; and with the dominant development model unaffected. This is exactly the outcome that the US and World Bank sought when they shut down the mass campaign movement of the 1960s and 1970s.

NLS CRITIQUE OF CAMPAIGNS

The critique of mass literacy campaigns which has been made by Street (2001, 2005, 2011) is echoed in many of the detailed studies which apply the NLS approach. These include Papen (2001), a study of the Namibian campaign in one locality; Robinson-Pant (2000), a study of women's literacy in Nepal; and Bartlett (2005, 2007), studies based on her work with Freirian literacy programmes in Brazil. Running through this body of work, there is a fairly consistent argument being put that mass literacy campaigns are ineffective, but this is almost never based on comprehensive studies of actual campaigns. More often than not, NLS scholars' empirical work is conducted on small scale examples of literacy programmes being run by governments or nongovernment organisations (NGOs). While these are sometimes part of a wider coordinated national effort, that does not make them campaigns, in the sense this chapter uses the term. When reference is made to evaluations of actual campaigns, e.g. when Street (2001, p. 6) cites the review done by World Bank researcher Abadzi (1994), or when Rogers and Street (2012, p. 90) cite UNESCO evaluations of campaigns in Kenya and Tanzania, it turns out on closer inspection of the studies being referred to that they are fairly limited in their understanding of the campaign model.

For example, in his introduction to a major collection of NLS studies, Street (2001, pp. 6–7) wrote:

When literacy campaigns are set up to bring literacy to the illiterate – 'light into darkness' as it is frequently characterised – I find myself first asking what local literacy practices are there and how do they relate to the literacy practices being introduced by the campaigners? In many cases, the latter forms of literacy fail to 'take' – few people attend classes and those who do drop out, precisely because they are the literacy practices of an outside and alien group. (Abadzi, 1996)

While Abadzi's 1996 study quoted above by Street has proved impossible to track down, the same author, a World Bank researcher, published a report in 1994, which argued a similar case:

many countries undertook large literacy campaigns in the 1950s, 1960s, and 1970s with the help of international organisations, and the World Bank included literacy in thirty education projects between fiscal years 1963 and 1985. In contrast to children's education, however, *adult literacy programmes* have yielded disappointing results worldwide. They generally fail to teach stable literacy skills to the intended beneficiaries, who thus cannot access useful information. About 50 percent drop out during the course and about 50 percent of those who stay fail to meet performance criteria at the end. Not only are dropout rates inordinately high, but relapse into illiteracy seems widespread, particularly among populations with few opportunities for daily

reading. In campaigns conducted during the 1970s, efficiency could be as low as 12 percent. (Abadzi, 1994, p. 6; my emphasis)

But, as pointed out by Lind (2008, pp. 62-63), Abadzi's claim of only 12 percent success rates for campaigns was referenced to a UNESCO/UNDP evaluation of the United Nations Experimental World Literacy Program (EWLP) which took place between 1966 and 1974. As Jones (1990) recounts, the EWLP deliberately bypassed mass campaigns in favour of functional literacy programmes, as a result of a US intervention into UNESCO and UNDP in the 1960s - an intervention which coincided with the CIA-backed military coup in Brazil which led to Freire's imprisonment (Schugurensky, 2011, p. 23). Moreover, Abadzi, and presumably Street in following her, ignored other literature which demonstrated the success of several campaigns, including Lind's own study of the campaigns in Mozambique (Lind, 1988). Since then, as Lind points out, there have also been successful experiences with campaigns in Ecuador (Torres, 2005), Namibia and India. She might also have added, though she did not, the campaigns which were led by Cuban educational missions in Nicaragua, Venezuela, Bolivia, Brazil and many other countries (Artaraz, 2012; Muhr, 2013); and now, also, Timor-Leste (Boughton, 2010). At the time, and in several follow up studies, there were also positive evaluations of the 1961 Cuban campaign (Lorenzetto & Nevs. 1965) and the literacy crusade in Nicaragua (Arnove, 1986). Reflecting the interest of comparative educationalists and literacy scholars at that time, an edited collection of national campaign studies appeared in 1987 (Arnove & Graff, 1987) which also included campaigns going back several hundred years. This has recently been reprinted with a slightly updated title (Arnove & Graff, 2008).

Twenty years later, Abadzi, still at the World Bank, repeated her claims. In a 2004 brief for UNESCO's Education for All Global Monitoring Report on literacy, produced at the mid-point of the United Nations Literacy decade, she wrote:

In the 1960s-1970s, many countries carried out literacy campaigns; but these early programmes offered government-led, top-down and brief courses without follow-up and made few people literate. A minority of eligible participants enrolled, and of those about 50 percent dropped out. Of those who stayed on, about 50 percent passed literacy tests, and of those about 50 percent were estimated to have dropped back into illiteracy. Overall, many of the 1970s campaigns had efficiency rates of about 12.5 percent, with few participants acquiring stable literacy skills.

But this time she adds a qualifying footnote:

The literacy programmes discussed in this document were not random, and results may have been presented in an effort to neutralize the effects of socialist literacy campaigns. (Abadzi, 2004, p. xx. My emphasis)

She was quite right about the anti-socialist bias, since the results of the Cuban campaign documented by UNESCO (Lorenzetto & Neys, 1965) would have directly

contradicted the findings on which she had relied, as would those from evaluations of several other campaigns.

Rogers and Street in their most recent book also recycle their criticism of mass campaigns:

In terms of the number of people using literacy fluently in their everyday lives, mass campaigns (after an initial period of success, as in Cuba, Tanzania and Nicaragua) seem to have had little long term impact. (Rogers & Street, 2012, p. 90)

In fact, the Cuban campaign had substantial and long lasting effects (Abendroth, 2009; Kozol, 1978), including, as one recent study found, on the empowerment of women (Herman, 2012); and the Nicaraguan campaign was the subject of much positive commentary at the time and since (e.g. Arnove, 1986) including one study which demonstrated a significant impact on the health of the children whose mothers had participated (Sandiford, Cassel, Montenegro, & Sanchez, 1995). It is hard to escape the conclusion that the NLS scholars who write about mass literacy campaigns in a negative vein do so, not on the basis of any detailed empirical investigation, but rather because a hegemonic ideology has rendered invisible the success of large scale campaigns, i.e. because they were led by radical socialist movements. This is somewhat ironic, given that Street and his colleagues have been at the forefront of promoting what he called the 'ideological' view of literacy, namely that literacy practices could only be understood through a close analysis of the interests which were being served.

To understand the ideological determinants of the literacy debate, and in particular why mass literacy campaigns driven by reforming government and movements no longer attract the positive attention of literacy studies academics, it is necessary to move back into the policy realm, and look more closely at the role of the international agencies and donor countries.

LITERACY, THE WORLD BANK AND NEOLIBERALISM

The hegemonic narrative about mass adult literacy campaigns in contemporary academic literacy studies, as outlined above, is that they have been relatively ineffective, due to their failure to come to terms with local literacy practices, in turn a consequence of their centralist top-down design, their overly-political motivation and their naïve belief in the 'autonomous' power of literacy to improve individual and national well-being. This contrasts sharply with the view which prevailed from the 1960s until at least the mid 1980s, during which period many scholars and policy advocates in adult education and the leadership of many newly independent countries and national liberation movements endorsed the idea of mass literacy campaigns and celebrated the achievements of those that had occurred. As late as 1989, Paulo Freire himself, as Secretary of Education in the Brazilian city of Sao Paulo, was continuing to promote the mass campaign approach (Schugurensky,

2011, p. 37). Moreover, while academic studies and opinion may have 'moved on', many social movements and some national governments, India included (Loomba & Mathew, 2007), have continued to advocate for and actively promote the campaign model up until today.

In 2013, I interviewed Professor Budd Hall, who holds a UNESCO Chair at the University of Victoria in British Columbia, Canada. Hall, a well-known figure in the international popular education movement, had been present in 1982 at a seminar in Udaipur, India, when the International Council of Adult Education discussed a report on mass campaigns prepared by the Indian adult education scholar Bhola (1984). This report, and the meeting which considered it, reviewed experiences around the world in previous decades, and recommended a massive expansion of this work. What happened, I asked him? Why did the movement, which appeared to be so strong and to have such momentum, become so marginal by the time of the Jomtien Declaration on Education for All in 1990? His answer was simple. The World Bank had come to the table in 1990, with enormous resources to distribute to the education strategies of countries of the Global South, and had ruled that these would be dependent on those countries focusing all their resources on basic, i.e. primary school, education. While a few countries had held out, Tanzania being one, most had finished up agreeing, and adult literacy was relegated to the responsibility, not of national governments, but of NGOs. Moreover, what little funding would be provided for literacy and non-formal adult education would need to focus on functional literacy for out-of-school youth and young adults (Hall, personal communication, June 2, 2013).

Hall's recollections are corroborated by a range of studies of the World Bank's role in international literacy debates, going back to the 1960s, including studies commissioned by the Bank itself. In summary, these demonstrate that the Bank maintained three strong positions over the last 50 years. First, the only adult literacy in which the Bank has any interest is functional literacy, by which it meant the literacy necessary for people to become more productive. Second, the focus should not be on raising the literacy levels of the adult population as a whole, but on out-of-school youth and young adults, because this 'investment' is more likely to reap an economic return. Third, non-formal education, including literacy programmes, should not primarily be the responsibility of national governments to fund and provide, but rather, the effort should be left to NGOs supported by the donor community. The net effect, in the words on one observer, was that, in the 1990s:

the adult literacy area retains a virtual pariah status within the Bank, despite some lip-service to the contrary. The matter is primarily one of ideology. (Jones, 1997, p. 368)

Recent experience in Timor-Leste suggests that, while the Bank now claims on its website that it has a strong interest in adult literacy and basic education, in practice it advises governments to restrict their efforts in this area in accordance with the three points above. In debates within Timor-Leste over the importance and direction of the national literacy campaign, this position was put by the Bank, and supported by

the key UN agencies including UNDP, UNICEF, UNESCO and the ILO (Boughton, 2009).

Studies by the World Bank itself, including those by literacy researcher Helen Abadzi cited above, set out the reasons why the Bank has adopted this position. Literacy campaigns and programmes are inefficient and difficult to evaluate, and there is little evidence, so it is said, to justify the expenditure. But this is clearly only part of the story, and, as has been shown, the evidence in support of this position is marshalled quite selectively. The real reason, obliquely alluded to by Abadzi herself, is that the most successful campaigns were conducted in socialist countries and/or led by radical political movements, which, from the Bank's point of view, brought with them the danger of promoting an alternative development path. Towards the end of her 1994 study, Abadzi appears to backtrack on her negative assessment of campaigns, but there is a 'sting in the tail':

It appears that successful mass literacy has a better chance when it is integrated in a national plan of development and where the political will to implement it is clearly articulated in theory and in practice ... There is a lesson to be learned from the fact that some of the more successful campaigns (in China, Cuba, and Nicaragua) were conducted for specific purposes, *such as political indoctrination*). (Abadzi, 1994, p. 36; my emphasis)

As any critical literacy practitioner will recognise, "political indoctrination" in this context is code for 'promoting a development model contrary to the one supported by the Bank and its Board'. Interestingly, a development intervention informed by modernisation theory or neoliberalism does not count as "political indoctrination". This is the real nature of hegemony – the power to rule on which knowledge and ideas are legitimate and which are not.

CONCLUSION

While work on adult literacy, especially in the Global South, regularly seeks to analyse the relationship between literacy and development, it is rare to find any explicit discussion of the fact that, throughout the twentieth century and right up until the present, the hegemonic position in the West has been to assume that development means capitalist development. The foundation text of 1960s modernisation theory, Rostow's 1960 publication *The Stages of Economic Growth* was subtitled "A Non-Communist Manifesto" (as cited in Youngman, 2000, p. 54). Education policy, including adult education policy, is always underpinned by development theory; and one of the most powerful theoretical concepts, human capital theory, makes this very clear. Human capital theory is a theory of capitalist development. It explains poverty and inequality as manifestations of a 'lack' of development, and argues that the development of a country's 'human resources' – its stock of human capital – as the key to capitalist economic growth. If people become literate and educated, the argument goes, they will become more productive, and the economy will grow.

There is clearly some truth to this, but it is only half the truth. Countries and regions which are 'underdeveloped' are products of the same global historical processes which left other regions and other counties 'developed'. For people living in those regions, literacy and education will not provide a path out of poverty unless the processes which put them there in the first place are radically altered. This is the other side of literacy – that it is a necessary part of acquiring the means of changing those structures. Freire developed his approach to literacy inside the anti-capitalist paradigm of 1960s and 1970s dependency theory, whose advocates rejected modernisation theory and the capitalist path of development which it laid out for countries of the Global South.

In the 1980s and 1990s, this radical critique was shut down, largely through interventions by the OECD and the World Bank into global education policy, and the collapse of the alternative model of development previously provided by the communist countries. This was the context in which the NLS replaced the emancipatory discourse of Freirian popular education with its more modest vision of transformation through small-scale localised experiments based on detailed ethnographic study. While this was rationalised by reference to the alleged 'failure' of the mass campaign model, actual evidence that the model had failed turns out to have been fairly sparse. The more modest aspirations of the NLS proponents could be accommodated within the neoliberal development model which merged in the 1980s, because it too rejected large scale action, especially led by states, to address educational inequality. Post-modernist and post-structuralist analyses of power helped to smooth the path for this unlikely collaboration (Luke, 2012, p. 6), since they too problematised the 'master narrative' of human liberation that had always been central to the socialist project – and still is.

One manifestation of the outcome of this commonality of interest is the NGOisation of radical social movements (Choudry & Kapoor, 2013). Literacy and popular education initiatives once carried by social movements allied with socialist political parties – as with FRETILIN in Timor-Leste in 1975 (Da Silva, 2011), or with the KSSP (Peoples Science Movement) and the Communist Party of India (CPI) in Kerala in the 1980s (Franke & Chasin, 1995) – are now located within NGOs funded by international donors. Once in this donor-dependent relationship, it is much harder for those literacy initiatives to be allied with calls for a more radical development strategy, or any critique of the underlying expansion of global capitalism which is resulting in continued reproduction of gross inequality.

The tide, however, has begun to turn. In the last ten years, six million people have taken part in literacy campaigns developed using the Cuban Yes I Can campaign model (Boughton & Durnan, 2014). Not all these campaigns will necessarily lead to major social transformation. But in countries such as Brazil, Nicaragua, Venezuela, and Bolivia, where the campaigns are part of a wider process of change led by national governments and movements with an alternative development agenda, mass popular education is reaching millions of people, helping them to play a more active role as agents of significant social change, a "socialism for the twenty-first century"

(Harnecker, 2010). The problem for literacy studies, then, is not whether literacy is a social practice, or whether it leads directly to improvements in people's lives. Rather, the question is what more we can do, in both our theoretical and practical work, to re-connect our own 'literate practices' with this international movement and to help make the global expansion of literacy once more a key element in the wider struggle for social transformation. As Freire himself so eloquently put it:

Concientización is not exactly the starting point of commitment. Concientizatión is more of a product of commitment. I do not have to be already conscious in order to struggle. By struggling I become conscious/aware". (as cited in Fischman, 1998, p. 207)

NOTE

This comment was part of a brief exchange on the BALID site, involving Brian Street, Alan Rogers and myself. See http://www.balid.org.uk/online-discussions

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PART 3 CONTESTING DOMINANT DISCOURSES

VICKY DUCKWORTH AND MARY HAMILTON

11. THE SIGNIFICANCE OF RESEARCH AND PRACTICE IN ADULT LITERACY IN THE UK

INTRODUCTION

The authors, Vicky Duckworth and Mary Hamilton, first met in 2001 when they were both members of the steering group for the Learning and Skills Development Agency Project *Learning journeys: learners' voices* (see Ward & Edwards, 2002). Since then, we have been linked in our friendship, love of urban history and passion for literacy and social justice.

When we met, Vicky was working as a basic skills lecturer at a Further Education College in Manchester in the North West of England while Mary was based at Lancaster University, teaching and researching in the field of literacy studies and involved with the national Research and Practice in Adult Literacy group, RaPAL.

We were drawn together by our shared enthusiasm and conversations about the power of practitioner research to generate meaningful knowledge in the field of adult literacy and to demystify the process of research and the academy. For Vicky this was the first step on a journey that saw her complete a PhD with Mary as her supervisor and move on to her current post as Senior Lecturer at Edge Hill University where she coordinates a large programme of teacher training in the post-school sector whilst continuing to be actively involved in community research and action. Vicky's PhD was a collaborative research study that drew on her students' experiences of learning (see Duckworth, 2013) as well as elements of her own story.

We both firmly believe that literacy education can be used to disrupt inequitable hierarchies of power and privilege and that practitioner informed policy can drive forward social justice. This is the first time we have written together. Our personal histories are woven into the fabric of this chapter, bringing together our experience of the challenges and benefits of linking research and practice in adult literacy.

The aim of this chapter is to document the history and significance of initiatives to develop such links in the United Kingdom (UK). In it we describe a range of initiatives and networks that have aimed to support practitioners to access and to carry out their own research and also ways of linking research and practice through formal professional development in initial teacher training, Masters level courses and research degrees. We explain and evaluate the development of these activities in relation to the broader context of lifelong learning and adult literacy in the countries of the UK. We argue that the idea of reflective practice prevalent in professional development is based on the belief that learning and teaching are inseparable aspects

of good educational practice and that practitioner involvement in research activities can support this goal. However, we also note that linking research and practice is not always easy to achieve nor is the outcome always empowering to teachers and learners. There are many factors, both practical and ideological that mitigate against authentic and widespread opportunities for practitioner engagement with research.

Adult Education in the UK has a long history and is often traced back to medieval guilds where origins of the vocabulary we still use (apprenticeship, for example) originated (Lucas & Green, 1999). The lifelong learning sector has always had a complicated relationship with other sectors because education is often associated with children, so there seems to be something incongruous about adults in classrooms, doing homework or taking tests. A measure of this has been the manner in which Further Education and Training (FET) has often been ignored or given less importance when governments have developed policy. Many major reforms and enquiries have treated education as if it were only about schools with adults being left out of the picture or mentioned as an afterthought (Duckworth, 2014). This has given the sector a 'Cinderella' image for much of the last century, despite the fact that Further Education (FE) colleges, Adult Centres and other organisations have played an essential role in vocational and community education as well as holding out the possibility of a second chance to hundreds of thousands of people who had failed in or been failed by their school experience.

The education system in the UK is a complex, changing and dynamic system with the rate of change particularly rapid in the area of vocational education and training, which includes literacy, language and numeracy (LLN). Since the 1970s, national policy initiatives have significantly reshaped the FET curriculum. In the UK, FE colleges now play a key role in providing LLN programmes although these began informally as volunteer supported initiatives in adult community education (see Hamilton & Hillier, 2006). The government has taken a more extensive interest in the education and training of adults over time, as lifelong learning has become part of the currency of international policy (Field, 2000). The Moser Report A Fresh Start – Improving Literacy and Numeracy (1999) drew on evidence from the 1997 International Adult Literacy survey (IALS) to estimate that approximately 20 percent of the UK population (as many as seven million people) apparently had difficulty with functional literacy and/or numeracy. This was defined as the ability to read, write and speak in English and use mathematics at a level necessary to function at work and in society in general. The resulting strategy, Skills for Life (SfL) identified a number of priority groups in England and Wales, including people living in disadvantaged communities (Department for Education and Skills [DfES], 2001). It funded provision mainly in FE colleges to address their needs which were seen primarily in vocational terms. In Scotland adult literacy has traditionally been delivered mainly in the adult community learning sector and the attainment of literacy was positioned as a key to achieving the Scottish Executive's social inclusion and widening participation agendas (Scottish Executive, 2001 and see Crowther, Hamilton, & Tett, 2001; Hamilton & Tett, 2012).

The *Skills for Life* strategy, like other areas of public policy at this time, was closely monitored by central government. It introduced auditing and inspection of programme quality alongside outcome-related funding that resulted in a performativity target culture. Core curricula in LLN were developed, based on the National Curriculum in schools.

The status and professional nature of practitioners and tutors in the FE and Skills sector has long been a topic of debate with FE lecturers, including those who teach LLN, employed on very different terms and conditions to their school teacher counterparts. The professionalisation of basic skills tutors was therefore seen as a big challenge. Adult literacy teachers, many of them working part-time and as sessional workers in FE or community-based programmes, were regarded as ineffectively trained and in need of professionalisation. This deficit view, positioned them as ineffectual rendering the informal, practice-based knowledge gathered over many years by experienced teachers as invisible and of little value. A specialised qualification structure and professional standards were created for them. As we write this chapter, the professional regulation introduced during SfL has been removed from the sector and teaching qualification are no longer a requirement to teach in FET. It is once again up to individual colleges/providers which qualifications they might ask for. This history of debate and uncertainty around qualifications and training calls into question what it means to be a professional literacy teacher in the FET sector. In particular, for this chapter, to what extent is it necessary for such teachers to access theory and research in relation to their role and how are they able to access these sources of knowledge?

BEING A PROFESSIONAL IN ADULT LITERACY

Most professions and crafts have a tradition whereby people who get on well in the job are encouraged to move into the preparation of the next generation of practitioners. This can also be seen as something which derives from the medieval guild model of master/journeyman/apprentice. In this model the FE teacher is often seen as a specialist who has 'earned her or his dues' within their role, has appropriate qualifications, skills and experience and now wants to pass this on to others.

However, surrounded by a myriad of definitions, what it means to be a *professional* in FET is difficult to pin down. The phrase 'professional foul' can be used to suggest that professions may well pass on cynical or self serving beliefs and professions are often seen as in George Bernard Shaw's words 'a conspiracy against the laity'. In this way professional status can be viewed as a kind of closed shop which protects the lifestyles of its own members. Simultaneously, the last hundred years have seen a general tendency for jobs of all kinds to try to attain professional status, a process sometimes called the 'professionalisation of everyone'. A second concern is to develop professional standards and values, perhaps enforced by a professional body which lays down what kinds of knowledge and skills a practitioner should have and sets the rules by which they should/must practise. Jobs, for example, like

nursing, social work, police and others adopted a strategy of 'professionalisation'. This involved specifying acceptable levels of qualification, setting out and enforcing ethical codes, insisting on updating and staff development throughout people's careers. In the UK, teaching could be seen as a *professionalising* occupation in this sense with the process culminating in the establishment of the General Teaching Council in the 1990s.

REFLECTION IN ACTION: LEARNING AS A PROFESSIONAL IN ADULT LITERACY

One classic explanation of the professional learning process is the model of learning from experience as in the apprenticeship model historically used in the craft Guilds. Kolb (1984; Gibbs, 1988) proposes a model based on the idea of learning as a cyclical process where the learner moves from concrete experiences through reflection, conceptualisation and experiment to new experiences understood in the light of changed perceptions. The core of the model is the one element which might be seen as crucial to professionalism, that of reflection, which has a long-standing history in educational research (see, for example, Brookfield, 1995; Hillier, 2002; Schön, 1983) and in adult literacy specifically (Hamilton & Hillier, 2006).

Schön, a key figure in thinking about professional learning in recent decades, describes the nature of the learning processes which take place within professional practice. His writings are based on his rejection of what he saw as the dominant model of professional knowledge based on 'technical rationality' and his desire to develop an alternative model. Schön has a very specific view of the kind of work which can be identified as professional and he attempts to construct an:

epistemology of practice implicit in the artistic intuitive processes which some practitioners ... bring to situations of uncertainty, instability, uniqueness and value conflict. (Schön, 1983, p. 49)

His hostility to 'technical rationality' suggests that he sees occupations without this human or creative dimension as by definition non-professional.

Schön sees professionals as commonly engaging in complex, blurred situations which require creative and original responses to solution discovery. In these unpredictable situations professionals draw on their experiences as if intuitively (knowing-in-action) but simultaneously they *reflect* on what it is they are doing. It is this latter aspect that Schön stresses.

Reflection-in-action has flourished in terms of its hold over professional educators. Schön's (1983) book *The Reflective Practitioner* has been widely used in teacher training programmes during a critical period of growing concern with how to define professionalism in the curricula of 'newly professionalising' occupations (Becher, 1994; Eraut, 1994; Goodlad, 1984; Troman, Jeffrey, & Raggl, 2007).

Critics of Schön's approach have emphasised the problematic nature of his concept of reflection, proposing that the idea of the reflective practitioner is actually re-interpreted by professionals in very different ways, reflecting a range of different

emphases and models of professional good practice (Wellington & Austin, 1996). Eraut's (1994) critique questions the value of the concept of reflection and proposes a model which distinguishes between the kinds of immediate adjustments made during practice and the sorts of deliberation and conceptual re-thinking which may be pursued later through reframing and reflective conversations.

From this we can see that reflection in professional practice is not a new concept and that teachers' attitudes towards reflection may vary, as does their systematic use of reflection to improve practice. When used effectively reflection can increase teachers' confidence, resilience and self-efficacy. For Schön, learning through reflection on practice is not just an optional extra for professional workers. It is an intrinsic part of what it is to be a professional. It is this link between practice, learning and research that we now focus on to explore professional learning as a driver for research in adult literacy.

PROFESSIONAL LEARNING AND PRACTITIONER RESEARCH

Practitioner research (PR) ostensibly incorporates the idea of professional reflection and is also a well-developed strategy within adult education in many countries outside the UK. It is promoted, if unevenly, by a range of government agencies and Non-Government Organisations (NGOs). In North America and Australia, a variety of approaches have been implemented in recent years and these have been reviewed by Quigley and Norton (2002; for Australia see Davis & Searle, 2002; Shore, 2002; for Canada see Niks, 2004; Norton & Malicky, 2000; and for the US see Cochran-Smith & Lytle, 2004; Fingeret & Pates, 1992).

The notion of reflective professional practice and its relationship to research has historically been linked to action and participatory research methodologies which focus on collaboration, participation and praxis (Atweh, Kemmis, & Weeks, 1998; Somekh, 2006). In the UK, Participatory Action Research (PAR) gained recognition in the area of literacy through the writings of Brazilian educator Paulo Freire (1972) who in Latin America, was involved in literacy with marginalised populations of Brazilian peasants as collaborators, researchers, and activists. Freire believed that meaningful social transformation would only occur in conjunction with the people affected by it. Freire's revolutionary pedagogy aimed to facilitate ordinary people to develop the critical literacy and inquiry skills that would allow them to more powerfully engage structures of power. While Freire's work is important to any discussion about critical inquiry and literacy development, the antecedents of participatory action research go back much further. The tradition of inquiry for advocacy is as old as the tradition of inquiry itself (Hueglin, 2008).

The view of PR as emancipatory is however problematic in a context where the technical rationality approach of expert knowledge dominates. Some of the contradictions and constraints around PR are discussed in a special issue of *Studies in the Education of Adults* (see Hamilton & Appleby, 2009).

Competency discourses of professionalisation can be reductive so that PR becomes a measure of professional performance, reproducing a 'what works', problem-solving approach (Brookfield, 1995), rather than a form of critical inquiry. Groundwater-Smith and Mockler (2005) identify such research as limited by technical knowledge interests. They argue that the popularisation of PR has led to it becoming 'domesticated and appropriated as an implementation tool' (p. 3), limiting critical reflective processes and their liberating potential. Performativity as the driver, can be linked to the output of individuals against productivity criteria of educational organisations and policy indicators. Practitioners can therefore be commodified within a structure where there is the 'issue of who controls the field of judgement and what is judged, what criteria of measurement are used or benchmarks or targets set' (Ball, 2008, p. 49). This reductive approach is far removed from the goal of PR which is critical, democratic and participatory (Armstrong & Moore, 2004; McNiff & Whitehead, 2002; Somekh, 2006; Whitehead & McNiff, 2006), and gives a voice to the marginalised and oppressed (Atweh, Kemmis, & Weeks, 1998; Carr & Kemmis, 1986; Duckworth, 2014).

These issues are further reinforced within contemporary debates about what counts as *real* research where more quantitative approaches to literacy research, in alignment with an instrumental drive in education, are put forward as the 'gold star' in relation to quality, validity, and rigor in social scientific research.

SUPPORT STRATEGIES FOR LINKING RESEARCH AND PRACTICE WITH PROFESSIONALS IN ADULT LITERACY

Hamilton and Appleby (2009) identify three types of PR that embrace different traditions which relate to issues such as independence, legitimacy, resources and critical voice. These include:

PR that is part of commissioned or funded research; second, PR that is part of professional development which can be mandated, accredited or informal; PR that is part of networks and practice communities. (p. 110)

The first approach includes large scale government policy research initiatives (e.g. Hamilton, 2008; James, 2004), whereby the PR's role includes collecting the data, for example, interviewing students in a FE college or as a research collaborator. PR may also be part of commissioned and funded research programmes seeking to impact upon practice (Hamilton & Wilson, 2005; Hamilton, Davies, & James, 2007). The outputs from this research can potentially lead to national reports, through which the research forges links to policy and may therefore be positioned to access resources and a wider audience, all of which are often difficult to achieve (Ade-Ojo & Duckworth, 2015; Coffield et al., 2007; Gardner, Holmes, & Leitch, 2008). Conversely, this approach may restrict autonomy and sustainability, heralding the question of whether increased resources and profile are helpful outcomes when, for example, time and and financial constraints, can still be real

barriers to PR (Tummons & Duckworth, 2012). A motivation for getting involved in literacy research for practitioners may be a secondment from teaching to carry out research; linking with experienced researchers who can support and guide them and importantly accessing research tools that they can utilise to develop their practice and empower themselves as a professional.

The second approach is sometimes part of a professional development curriculum framework within initial teacher education programmes where practice-based research supports teacher inquiry (Appleby & Banks, 2009; Appleby & Barton, 2009). It is also a feature of postgraduate study in further and higher education at Masters and PhD levels. The third approach, however, emphasises a community of practitioners working within a particular subject area or as part of practice networks supporting independent critical inquiry (Quigley & Norton, 2002).

It is important to note, however, that although the drivers of PR can be separated as highlighted above, they do not necessarily play out alone; each can flow and feed into each other.

This flow can be seen from Vicky's own experience of developing PR which we will describe later in this chapter, where drivers two and three were closely knitted together.

Opportunities for Practitioner Research

In the UK, there are many examples of teacher or PR within the school sector (Dadds & Hart, 2001; Freeman, 1998; Middlewood, Coleman, & Lumby, 1999). For example, The Teacher Training Agency for some years ran a programme of best practice scholarships for individual school teachers and school-based research consortia and supported an online PR network (see Kushner, Simons, James, Jones, & Yee, 2001). However, until very recently, examples in the post-school sector have been scarce. The Learning Skills Development Agency (replaced by the Learning and Skills Improvement Service [LSIS]) funded a strategy for supporting PR for the Further Education sector, giving special emphasis to the development of regional networks and developing a Research Toolkit for practitioner training. The Economic and Social Research Council (ESRC) Teaching and Learning Programme emphasised practitioner involvement in research (James, 2004). An example is 'The Transforming Learning Cultures in Further Education' (TLC) project, whereby 16 FE learning 'sites' (four programme areas per college) provided the foci for an intensive examination of educational practice, learning processes and learning cultures by means of a four-year longitudinal study. The principal aims of the project were to deepen understanding of the complexities of learning; identify, implement and evaluate strategies for the improvement of learning opportunities; and enhance practitioners' capacity for enquiry into FE practice.

The practitioner-led research initiative. A further initiative includes the Practitioner-Led Research Initiative (PLRI) was run by the government-funded National Research

and Development Centre for Adult Literacy and Numeracy (NRDC) between 2004–2006. It provided opportunities for groups of practitioners to engage in practical research. The aim was to develop effective relationships between research, policy and practice as part of the SfL programme juxtaposed to:

- building research capacity in the field
- creating findings that give new insights into adult literacy, numeracy and ESOL,
 and
- embedding the activities of the NRDC in practice and developing and reinforcing networks linking practice, research and policy.

Applicants, from anywhere in England, were invited for the projects. Criteria included being a locally-based research group of between three and six practitioners and there was an expectation that these groups would link into existing local and regional networks. The groups (which carried out 17 small-scale projects) were funded over three rounds, receiving the award of up to £10,000 for each successful project. To be part of the project/s the lead applicant must also have been involved with programmes delivering LLN programmes in any organisational setting. Practitioners were recruited for nine months, and taken from a wide range of institutional settings, specialisms and geographical locations. As part of the project dissemination they were tasked with producing a 5,000 word report documenting activities and findings. Ongoing support was offered to the practitioner with a designated Research Support Person (RSP) to support day-to-day project activities, arrange/deliver research methods training and coordinate report writing. The project facilitated research practitioners to develop their research skills, work in a community of practice and importantly generate their own knowledge which could be implemented in their practice, shared with colleagues and disseminated to a wider national audience. Whilst the PLRI created a valuable space for practitioners to engage with research it had many limitations (Hamilton, 2007). The bidding process inevitably acted as a kind of filter on the projects so that those that were funded were aligned with the aims of policy rather than the priorities of practitioners or learners. The initiative was not successful in linking practitioners' research activities with recognised professional qualifications and practitioners still found it difficult to carry out their research alongside the demands of their work as teachers. It was therefore difficult to sustain engagement once the project had ended. It was also a struggle within the NRDC to get recognition for this research alongside the high status quantitative projects which were the main emphasis of the R&D centre.

Literacies for Learning in Further Education (LfLFE). The LfLFE project (Ivanič et al., 2009) was a collaboration between two universities, Stirling (in Scotland) and Lancaster (England); and four FE colleges, two in Scotland – Anniesland and Perth, and two in England – Lancaster and Morecambe, and Preston.

The teaching staff in the four colleges were recruited as participant researchers within the LfLFE project. The research was based on the premise that collaboration

and team work was a central driver of the research project (see later section Supporting research and practice through networks and organisations). Practitioners participating in the project were given secondments to assume the role of College-Based Research Co-ordinators (CBRC) for a period of three years. The project drew on previous work on literacy practices engaged in by people in schools, higher education, and the community (see, for example, Barton & Hamilton, 1998; Barton, Hamilton, & Ivanič, 2000) and aimed to extend the insights gained from these studies into further education. It explored the literacy practices of students and those practices developed in different parts of the curriculum. It was the first major study of literacy practices in colleges in the UK. The PR component of this large prestigious project enabled the teachers to gain experience via working alongside a highly experienced, professional research team, who had already gained the respect of the national and international research communities.

The learning journeys project: A first-hand example of Vicky's practitioner research. My research journey began with the opportunity to be seconded as a research practitioner on a Learning and Skills Development Agency (LSDA) funded research project 'Learner learning journeys: Learners' voices. Learners' views on progress and achievement in literacy and numeracy' (Ward & Edwards, 2002). I was one of 14 researchers, from eight different North West literacy and numeracy providers. Geographically from both urban and rural areas, we represented FE, adult and community learning and the voluntary sector and between us interviewed 70 learners. The seconded practitioners were trained in research methods regularly through the project and also offered telephone, e-mail and face-to-face support. Participation in the project was both liberating and empowering. I gained the confidence, skills and experience to carry out qualitative research and importantly made links to experts in the field of literacy (including Mary Hamilton). Meeting Mary and speaking to her about the research that was taking place at Lancaster University Literacy Research Centre made me realise the value of a collaborative and democratic research process. It was also the catalyst to my pursuit of further PR which resulted in completion of a part-time PhD with a sociological focus on literacy, identity and symbolic violence (Duckworth, 2013).

A number of practitioners on the project, however, experienced drawbacks on their research journey. Ward and Edwards (2002) describe how:

One person withdrew completely because of the pressure of work and three were unable to complete the data analysis for the same reason. Estimates of time spent on the project ranged from 48 to 124 hours over 22 working weeks. The main reason for the difference was that we had asked each institution to carry out 15 interviews, including one group interview. This was based on the assumption that a team would carry out the research but, with hindsight, we should have adjusted this where researchers were working alone ... the project created pressures as we started at the beginning of December, which

was so near the end of term that it was difficult to organise the pilot phase. The researchers were trying to finish the data analysis and make sense of the findings in late spring and early summer, which is one of their busiest periods of the year. (p. 49)

The above initiative was not linked to accreditation. This was a positive aspect of the project because I could focus on the learners and research rather than worrying about how to find the time and space to write assignment/s and being judged on them. The lack of accreditation did not stop the criticality. The research facilitated us to engage critically with questions about what counts as 'evidence' and how this relates to both educational policy and professional identity. Questions about how professionals use evidence in making practical decisions were actively explored in the development sessions rather than simply assumed. Such exploration is especially important in a climate of 'evidence-based practice' linked to a growing skills agenda in the education of adults (see Bingham & Smith, 2007).

Professional Qualifications and Research: Formal Routes for Linking Research and Practice

Research is not only a focus for university academics, lecturers, professors and researchers. Both undergraduate and postgraduate students carry out empirical research as part of their Bachelor of Arts (BA) or Master of Arts (MA) degrees which may lead to writing a lengthy dissertation. For undergraduates, a small-scale project can often form a *pilot project* for a more sustained piece of research as part of an MA.

Teaching in the UK is set to become to become a Masters level profession, bringing it into alignment with some of the highest performing school systems such as Finland, where the notion of a Master's level teaching profession is considered to be a contributing factor to its success (Tryggvason, 2009). MAs are now an established Continuing Professional Development (CPD) route for literacy practitioners in the UK and several dedicated programmes have been offered on full, part-time and distance learning basis. Participation has been limited by a lack of funding for full-time study, with some employers optionally paying fees for individuals. Lancaster University, for example, ran a flexible, modularised blended learning programme between 2001 and 2010. Over 200 students enrolled during this time. The taught curriculum as well as the dissertation component was organised to link research, theory and practice and some participants progressed to doctoral level research.

The fundamental importance of studying at Masters level is the assumed increase in reflectivity and reflexivity. Within the FET sector the route into teaching can determine the level of the teaching qualification. It is still possible to enter FE teaching, which includes teaching LLN, with no teaching qualification and begin a qualification once teaching. Practitioners also arrive to teaching with different

levels of specialisms and study in different settings. In a higher education institution, practitioners with a level three qualification, for example, an A Level in English, may follow the undergraduate route; whilst practitioners with a degree may study up to level seven. Across the levels of study and qualifications offered, a central component of teaching qualification is reflection and PR. This can take many forms. As part of the assessment literacy practitioners may prepare a research paper or presentation focusing on contemporary issues around literacy teaching and their influences on their own personal and professional development linked to current and future practice.

Having tasted level seven study through the Postgraduate Certificate in Education (PGCE), progression to a full Masters can be very appealing for practitioners, providing the opportunity to undertake a more substantial research project related to their area. The credits gained from their earlier study can be presented as Accredited Prior Learning (APL) resulting in practitioners progressing straight onto the dissertation element of study.

Supporting Research and Practice through Networks and Organisations

Progression through PR research may be supported by a community of practice (Lave & Wenger, 1991; Wenger, 1998; Wenger, McDermott, & Snyder, 2002). The concept of learning communities draws on a wide body of theory related to learning and sociology. They relate to a constructivist approach to learning that recognises the key importance of exchanges with others, and the role of social interactions in the construction of values and identity. The need for networks is reinforced by Kitchen and Jeurissen's declaration that:

if we are to take seriously the business of creating an environment which will nurture teacher research then there must be places where the voices of teacher-researchers can be seen and heard beyond their own school gates. (2006, p. 39)

There are a number of research and practice networks in the UK, which align to the above constructivist approach to learning and which link with literacy practitioners. Some key examples are described below. Firstly, the *Collaborative Action Research Network* (CARN, see http://www.esri.mmu.ac.uk/carnnew/index.php) was founded in 1976 in order to continue the development work of the Ford Teaching Project in UK primary and secondary schools. It has grown to become an international network drawing its members from educational, health, social care, commercial, and public services settings. CARN encourages and supports action research projects (personal, local, national and international), accessible accounts of action research projects, and contributions to the theory and methodology of action research. It is committed to supporting and improving the quality of professional practice, through systematic, critical, creative inquiry into the goals, processes and contexts of professional work through regular conferences and study days and publishing papers resulting from these.

Established in 1985, the Research and Practice in Adult Literacy group (RaPAL, see http://rapal.org.uk) promotes itself as the only British national organisation that focuses on the role of literacy in adult life. An independent network of learners, teachers, managers and researchers in adult basic education, it campaigns for the rights of all adults to have access to the full range of literacies in their lives and offers a critique of current policy and practice arguing for broader ideas of literacy starting from theories of language and literacy acquisition that take account of social context (see Herrington & Kendall, 2005). It encourages a broad range of collaborative and reflective research involving all participants in literacy work as partners whilst supporting practices whereby students are central to a learning democracy and their participation in the decision-making processes of practice and research is essential. RaPAL is run and funded entirely by its membership. Over its 30 year lifetime, RaPAL has published a journal three times per year and it organises an annual conference to which researchers, activists in adult literacy, practitioners, learners and policy makers are welcomed. Practitioners involved in postgraduate level professional development find RaPAL a useful network and value the independent space for discussion that it offers. The Learning and Skills Research Network, (LSRN, see http://www.lsrn.org.uk) began in 1997 and was supported by a quasi-government organisation, the Learning and Skills Development Agency. It is a network based in the regions of England and Northern Ireland with links to multiple partners in all the countries of the UK. It brings together people involved in producing and making use of research in the learning and skills sector and higher education and provides a welcoming atmosphere for those new to research. Like the other networks described here it has an annual conference which provides the opportunity to discuss PR findings and their implications for practice. The audience can often provide feedback that can help practitioners drive the research forward and help them further explore the research findings.

The networks described above, and other, more local and transitory ones act as safe and nurturing spaces for practitioners.

Continuing the Practitioner Research Journey through PhD Level Study

In Vicky's research journey, involvement with these networks was both refreshing and vital in sustaining her energy and commitment. Vicky's own research took the form of a PhD and was part of her professional and personal development. This extended also to the literacy learners she worked with who were co-investigators and co-constructors of the knowledge generated (Duckworth, 2013). Vicky began to listen more closely to the learners' voices, letting their needs, aspirations and dreams shape the lessons and curriculum. The pedagogy allowed for critical discussions whereby Vicky and the learners were able to unpick the themes of the research and see how this could be further expanded on and illuminated in the lessons and in the local and wider community. This involved developing activities that valued the learners' everyday practices within the classroom (Duckworth & Brzeski, 2015).

The critical spaces formed enable dialogic engagement whereby the learners shared the barriers they faced on their learning and personal trajectory and the violence and trauma they had experienced in their lives. Issues related to addressing violence and trauma were then embedded into lessons and are now part of a set of national resources (McNamara, 2007). Strong networks and practice communities were forged on the research journey by both Vicky and the learners with, for example, the Lancaster University Literacy Research Centre Group, RaPAL and, in the US, the Adult Higher Education Alliance which saw Vicky and her former literacy learner Marie McNamara travel to Alabama to receive, respectively, the International Professional Scholarship and the International Graduate Student Scholarship.

Vicky's experience of PR shows how, by its nature, it can offer practitioners a voice in the research dialogue and cycle and enable them to claim an equitable place on the research continuum.

CONCLUSION

The potential strengths and indeed benefits of PR are well documented in the existing literature in North America and Australia (for example, Cochran-Smith & Lytle, 2004; Comber, 1999; Smith, Bingman, Hofer, & Media, 2002). These benefits include: to improve practice through encouraging critical reflection; to inform and challenge policy; to enable dialogue between practice and research; and to create new knowledge through the recognition of practitioner perspectives. In addition, in writing about the experience of funding PR in the UK, Hamilton, Davies and James (2007) identify how practitioner standpoints can offer a fresh perspective and findings of particular use to policy. For example, Duckworth (2013, 2014) highlights how PR is a powerful tool to challenge inequality and work towards social justice both within and outside the classroom. Involvement in PR additionally contributes to professional development and can boost the status of a marginalised professional area such as adult literacy.

PR does not take place in isolation but in a wider context of professionalism, policy and practice that may support or undermine its aims. Mainstream social policy research in the UK, North America and Australia increasingly aims to incorporate PR into its own vision of research impact where PR is also seen as a way of encouraging 'evidence-based' practice and even as a self-monitoring tool. The field of adult literacy in the UK has become more organised by quantitative survey measures such as the Organisation of Economic Co-operation and Development's (OECD) International Adult Literacy Survey (IALS) (OECD, 2000) and the Programme for the International Assessment of Adult Competencies (PIAAC) (see Hamilton, 2014a, 2014b). These measures further encourage a performative approach to professionalism, the valuing of quantitative evidence and the judgements of distant experts as a basis for assessing notions of good practice. The strengths of qualitative research based on practitioner enquiry which we have presented in this chapter, have constantly to be asserted in such an environment and are marginalised in terms

of the funding allocated for research. This means that for many teachers, carrying out PR in the FET sector it is not an easy landscape to navigate through. Often the emotional labour which teachers invest in their job can be draining (Avis & Bathmaker, 2004). In addition finding time plus funding can be real barriers for both potential and in-service literacy practitioners partaking in qualifications and other forms of Continuous Professional Development informed by PR. However, PR is fundamental to developing a greater understanding of the work of practitioners and what happens in the classroom and should also enable professionals to widen their thinking and approaches to teaching and learning as educationalists.

Debates about who are the legitimate creators of knowledge and what is the relationship between theory and action are at the heart of debates around educational and literacy research (Estrella et al., 2000). Being positioned as an 'insider' is the lynchpin of action research as is its democratic ethos (Kemmis, 1993) and emancipatory nature (Zuber-Skerritt, 1996). It challenges the status quo, and in doing so questions the nature of knowledge and the extent to which knowledge can represent the interests of the powerful and serve to reinforce their positions in society. This position challenges positivistic approaches to knowledge which suppose that those with distanced and 'objective' views of practice (for example, researchers from the academy) can best understand and steer practitioners who are seen to be too close to practice to perceive it accurately. Such positivistic approaches lead to a hegemonic understanding of knowledge where practitioners cannot begin to take ownership of and understand their own practice. Instead, they must seek 'experts' to create and clarify knowledge. The institution takes control and the practitioner is positioned as passive and disempowered – not a maker of knowledge, but a receiver. The shift in the power position in relation to the role of teacher as researcher, allows the practitioner researcher to take agency and generate their own knowledge (Hamilton, Ivanič, & Barton, 1992).

PR can be powerful both for the teacher and their learners. There is an urgent need for more recognition and investment in practitioner-led initiatives where practitioners can be seconded and have the space to engage with research. Institutions like FE colleges need to see the value of research to their teaching activities and their workforce. Being involved in action research allows teachers to come to their own understandings about their teaching. It is based on the belief that the practitioner is the best judge of her or his practice. In an era of compliance and delivery, practitioner enquiry based on informed professional judgements offers a way for literacy teachers to engage more deeply with research and through this to become more active in crucial educational policy-making arenas.

NOTE

Recent policy on adult literacy has been formulated by the UK government in Westminster, but only applies to England because education is now the responsibility of the devolved administrations in the

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other countries of the UK (Northern Ireland, Scotland and Wales). This chapter focuses on England and except where specifically noted.

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12. THE FOUR LITERACIES

An Exercise in Public Memory

[T]o remember is ... not simply to turn backward; it is itself a type of action that steadies us in the face of an unknown and unpredictable future.

(Browne, 1995, p. 60)

Public memory is a foundational resource for any community in articulating its identity, values, aspirations and practices. In this sense, shared public memory functions as the informal equivalent of a political constitution, what in earlier times was called the 'sensus communis'. Unfortunately, a combination of strong government policy and weak, casualised practitioner base has been catastrophic for sustaining a shared public memory within and of the field of Australian adult literacy. Modernist policy-makers ignore the past in order to (re)found the field afresh with each new Framework they push out with increasing regularity to an increasingly resigned cynicism, while the casualisation of practitioners has meant an inevitable loss of practitioner memory. The upshot of these two trends is State domination of the definition of the field and a superficial 'presentism' in the field. Bev Campbell's Reading the Fine Print (2009) valiantly set out to remedy this loss of public memory and historical depth writing from the point of view of 'the first generation of adult literacy educators' in the state of Victoria in Australia and their adherence to whole language and process. In this chapter, I add a counter-voice from the point of view of what might be called 'the second generation of adult literacy educators' by tracing one strand of adult literacy theory/practice – the so-called 'four literacies' framework. Hopefully, over time many others will add reflective accounts of their own distinctive 'theory/practice' pathways into and within the field of adult literacy, thus over time building a richer, more complex discourse, one that can hold its ground as a kind of foundational constitution that is able to stand up to the inherently forgetful, presentist instrumentalism of neoliberal government policymaking.

INTRODUCTION

This chapter is a reflective account of the emergence of what would later be known as the Four Literacies (4L), a literacy framework formulated in the late 1980s in Victoria, Australia to specify the kinds of learning adults returning to study need in

order to achieve their aspirations. It was the framework used to conceptualise the CGEA (Certificate of General Education of Adults). This chapter confines itself to a, largely personal, reflective study of the original contexts, interests and issues shaping the formulation of the 4L framework. My intention is to assemble what Wittgenstein calls "reminders" (Wittgenstein, 1953, p. 127) for future practitioners: concepts, images, ideas, narratives that point to the larger vision and aspiration embodied in the history of adult literacy practice, reminders that may assist in the darker times we seem to be entering, times when so-called 'foundation skills' may eventually succeed in erasing the larger educational vision historically associated with adult literacy. Thus, the hope of this chapter is to strengthen solidarity, resistance and hope by recalling an earlier time that provided a short window of opportunity in which practitioners struggled to articulate the kinds of curricula from which adult literacy students could benefit.

Over recent years there has been a re-evaluation of memory and its significance in social life (Haggis, 2001; Ricœur, 2004; Schatzki, 2006). Instead of being viewed as a fallible oral precursor to the rigour of fact-based written history, memory has been accorded its own place as a value in its own right evidenced by the rise of oral histories (Attwood, 2008; Read, 1999) and autoethnography (Bathmaker & Harnett, 2010; Ellis, 2004). In fact, memory is now considered to be a vital ingredient in community- and nation-making (Anderson, 1991; Salazar, 2002). Public memory is a foundational resource for any community in articulating its identity, values, aspirations and practices (McCormack, 2005; Salazar 2002; Weedon & Jordan, 2011). In this way, shared public memory functions as the informal equivalent of a political constitution, what in earlier times was captured in the evolving notion of 'sensus communis' (see Gadamer, 2004, pp. 19–28).

Unfortunately, in the case of the field of Australian adult literacy, a combination of strong government policy and a largely casualised practitioner base has been catastrophic for sustaining a shared public memory that could function as a constitution for the community as a field. This lack is compounded by the fact that there is no recognised canon of founding fathers or mothers, not even founding texts – despite ritualised citations of Freire (McCormack, 2009). As a consequence, the State has been able more and more to position itself as the Subject underwriting the constitution of the adult literacy field, especially through their regular restructures and reforms which are posited as new constitutions; thus, wittingly or unwittingly, inaugurating a public policy of forgetting that renders the past, and thus the role, experience, motifs and motivation of both past and present practitioners and educators irrelevant.

This stance of public amnesia inherent in most governmental 'reform' is what I am dubbing 'governmental presentism'. It implies that somehow the understandings, values and activities of practitioners should emerge *de nova* in spontaneous accord with each new policy setting; as if practitioner habitus, practices and material arrangements carried no substantive or formative residue from earlier understandings, cultural capital or habitus. It is as if educators are cognitive machines standing at the

ready to have their past and current operating systems trashed and a new operating system (OS) installed, an OS that will supply all the intellectual, social, and cultural resources needed to 'be an Adult Literacy educator' during the reign of this version of the OS – which may span, of course, a mere three to four years. Without it being explicitly stated, however, this form of governance implies that the ethico-cultural pedagogies, practices, discourses and politics grounded in practitioner-based horizons of practical and theoretical understanding and investments are disposable and can be simply ignored without harm to the educational field and its practice.

By contrast, my argument is that the claim of policy makers to the unilateral right to (re)define, and thus re-found, the Adult Literacy field 'from above' should be resisted. I want to argue that there are two ways of understanding the notion of constitution. One is where the grounds of legitimacy are passed down through a sacred or kingly lineage that is distinct from those who are governed by the laws of that constitution (see McCumber, 2012). The other was instituted by the ancient Greek discovery and institutionalisation of the concept of democracy where constitutions are the outcome of public collective discussion and debate by the 'people', the *demos* (Arendt, 1958; Castoriadis, 1984).

These two contrasting 'social imaginaries' (Castoriadis, 1984; Taylor, 1989) and their ever shifting dialectical contestation and interweaving are as old as 'western civilization'. In relation to education, we can think of the competing traditions of Plato's advocacy of philosophy as expert demonstrative knowledge versus Isocrates' advocacy of rhetoric as the establishment of a civic domain in which citizens discuss and debate how to find resolutions to fissures in the social fabric (Marrou, 1956). Whereas Plato wished to base education, social life, and government on the theoretical knowledge of experts in opposition to the *doxa* of citizens, Isocrates argued for the creation of a discursive public realm in which different opinions, interests and perspectives debate and work to persuade audiences towards a 'sensus communis', a *doxa* that all can live with. One construes the constitution of community as a 'top-down' matter of imposition from above, the other as a 'bottom-up' formation by communal consensus.

One way to resist the hegemony of expert knowledge, it seems to me, is to insist on the value of community-forming memory against the factual discourse of the expert historian. Thus this piece is an exercise in evoking an earlier moment in time, a time when educational practitioners within the field of Adult Literacy possessed stronger agency and powers of categorisation, a time before the field had been colonised and disciplined by state governmentality. More precisely, a time of struggle between practitioners and the State as the field tried to resist moves by State to regularise the field of adult and further education by neo-liberal forms of governance via competition, auditing and assessment and deploy it as an instrument in workplace reform. Invoking the past should not be taken as a retreat from the politics of the present. To form a shared memory of the past can in fact strengthen a sense of community and re-activate helpful cultural resources and horizons of meaning.

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Of course, I do not assume that what is invoked by this piece *must* become part of the public memory of the field, but set it out in the hope that perhaps it *may* form one small sliver in a larger collective endeavour by the field. My hope is that it may provoke or inspire others to also put pen to paper, or fingers to keyboard, to also contribute to the formation of a substantive collective living memory of the field, a collective memory that should be subject to continual dispute, difference and complexity, thus remaining fully alive and actual into the future – and thereby help resist the presentist erasure by the State of both the past and the right and role of practitioners as a community in forming and reforming the constitution framing the field.

FROM AL TO ABE, THENCE TO ALBE

A funny thing happened in Further Education and Adult Literacy in Victoria, Australia in the late 1980s. A chance conjuncture of sociocultural trends, governmental policies, institutional contexts, and theoretical developments conjoined to produce something new, something perhaps unique, that released new meanings, new practices, and a new shape into the educational world. Campbell (2009, p. 141) described this conjuncture, this crisis, as "perhaps the greatest pedagogical struggle the adult literacy field has seen in the last thirty years ... the closest thing to pedagogical warfare that the adult literacy field has experienced". Even if these terms are too grandiose, it remains true that many adult language and literacy educators invested enormous energy, enthusiasm and passion at that time, generating, discussing, disputing, rejecting, re-working and interpreting their educational ideas and practices, often through considering what the Four Literacies framework (4L) were or could mean for their educational practice and the kinds of learning they made available to their students. This irruption of theory and pedagogical exploration is now usually interpreted as simply the prelude or perhaps the first act in a governmental narrative whereby the Australian state founded the new regularised field of education called LLN (Language, Literacy & Numeracy) and disciplined it through audits and a succession of competency frameworks. However, this was not how it was experienced at the time by many practitioners in the state of Victoria. Many of us were intent on forging a quite different narrative (McCormack, 2011).

Of course, we knew that the government was bent on deploying adult literacy and adult ESL (English as a Second Language) as instruments in workplace reform, but there were many other social forces and trends in the air at that time which pointed towards a different possible future for the field. Leaving aside the intentions of policy-makers, there were four additional elements to the emergence of the 4L framework. First there was the fact that universities had opened up alternative entry points for mature aged students. Secondly, there was a broad and powerful shift in the educational and vocational aspirations of women. Thirdly, Further Education courses developed to foster and support this shift. These first three elements were fostered, addressed and articulated most notably by women adult literacy and

further education educators associated with two dynamic institutions: the Diamond Valley Learning Centre and the Victorian Council of Adult Education (CAE). The third element was the emergence of the 4L framework itself from the pedagogies developed within the Language Development Centre, Footscray College of Technical and Further Education¹ (henceforth, LDC).

During the late 70s and 80s, a radical shift in the aspirations of women took place: as women entered the workforce, they realised that because they had left school early – typically in mid-secondary – the new opportunities and new self-definitions opening up in front of them were tantalisingly out of reach, so they searched around for ways to redress this lack. To my mind it is these women, the original 'matureaged' second chance students, who are the true heroes of this story. They deliberately set about returning to study in order to continue their education from where they had left off 15-20 years earlier, often without finishing secondary school. They were not interested in 'adult education' courses that dabbled in personal culture or crafts, nor did they need basic alphabetic skills offered by traditional 'adult literacy'. As a rule, they had been reasonable students at school but the ideological climate of the times had guided them towards abandoning their studies in mid-secondary school in order to take up menial work while awaiting their eventual destiny - to get married and bring up a family. However, the tectonic economic, social, political and cultural shifts of the 60-80s, especially the wide circulation of feminist discourse, provided these women with the opportunity to re-invent their aspirations and life direction. Most entered the workplace; many went back to study; many divorced; many entered tertiary studies and graduated as professionals.

Whereas middle class women who had attended private schools and still read or discussed fiction could succeed in re-entry via matured-aged High School Certificate (HSC), working class or migrant women without this background, faltered, failed and felt demeaned. So, to meet this new need, a tangle of Further Education courses developed beyond the formal curriculum offerings. Awareness of the courses was passed on by word of mouth within families or between friends: one family member would attend a course, then the next year or even the next week their sister, cousin or best friend would turn up with the thought: "If she can do it, so can I!" However, because these courses were not subject to formal oversight, there was almost complete freedom in the design of these courses. They could be tailored tightly to where the students 'were at' and 'where they wanted to get to', and as a consequence they generated enormous energy, enthusiasm, and commitment from educators, mostly women, who dedicated their energies, experience and talents to nurturing and developing this new educational space. It is in this still relatively de-institutionalised context that the competing, even conflicting, approaches taken up by the Diamond Valley Learning Centre, the Melbourne CAE and Footscray TAFE must be placed – leaving aside for brevity's sake the many other TAFE Colleges and Neighbourhood Houses also entering this new educational space. Competing approaches and pedagogies were developed to support this new cohort of students and their aspirations, approaches that by engaging in hegemonic discursive struggle with one another around questions of pedagogy and educational philosophy, in fact thereby created, almost unknowingly behind their backs, a new public space, a new region of adult education, one that was beyond early adult literacy but did not frame itself as 'alternative' to the 'mainstream' – as many adult education classes had. The aspirations of these students were not to be 'alternative', but rather to fulfil an expanded sense of educational, social and vocational aspiration.²

Meanwhile governments were moving in the opposite direction, shifting the focus of TAFE more towards vocational and workplace training and redefining general education for adults as subordinated to this vocational and workplace focus. However, Victorian TAFE teachers in Further Education (FE), energized by the growth in second chance students, mobilised to defend the place of further education, especially second chance education, a new point of intersection between fields such as adult education, adult literacy, adult ESL, migrant education, return to study, tertiary preparation, mature-aged HSC, located across an ensemble of institutional sites or 'educational places': evening classes in schools, neighbourhood houses, migrant centres, TAFE Colleges, and the Council of Adult Education was being created. There was now a cadre of passionate, committed and professional educators who had worked extensively in, as well as engaging in the political activities of, other educational sectors. Among this cadre of educators these were exciting times filled with intense conversation, discussion, debate and interchange around political strategy, curriculum design and pedagogic practice³.

Once it was clear that a framework was inevitable, the only question was who would produce it: us or the government. After rejecting the so-called Griffin Scales (Griffin & Forwood, 1991) it became critical to come up with some sort of framework ourselves, a framework that would support and foster the curriculum work that was emerging in this new second chance space. It felt as if we were pioneers entering terra nullius, and thus able to imagine a new educational structure de nova, a structure that would be at once different from the reified schooling offered to children, different from the bourgeois cultural adornment classes offered in adult education, different from the focus on 'personal meaning' in adult literacy classes, and different from the vocational training of vocational TAFE courses. Or perhaps more accurately, a structure that wove these different strands into a richer cloth that would point to a more well-rounded education, one that was more in accord with the aspirations of our students. Hopefully this would achieve two goals: stymie the efforts of government to reduce further education to a component of workplace training while producing a much richer curriculum. Our interest as practitioners was in protecting and developing curriculum; it was not to produce an assessment framework. Thus there was a clear difference in focus and intent between educators and policy-makers. At the time I firmly believed that it might take around two decades of dedicated work by practitioners to develop the rich coherent curriculum practices and structures needed to effectively support adults in their efforts to reposition themselves according to their emerging aspirations. But even though we

wanted 'a thousand flowers to bloom', we also needed some guide-rails. Hence, the notion of a curriculum framework.

It is important to remember that for practitioners, although not for government, these were pre-neoliberal times: there was no neoliberal sense of competition between educators from different organisations beyond that inherent in professionals striving to do their best and argue their case with peers. Rather, there was a shared excitement of the field as a community participating in exploring and opening up rich new educational territory and practices, work that had significant social justice implications.

Many TAFE colleges and Neighbourhood Houses as well as the Council of Adult Education at the time possessed the professional talent and intellectual capacity to produce such a framework. In this sense it was largely happenstance more than anything else (perhaps together with that fact that I had purchased a Macintosh computer in 1985) that I was the one who penned the framing categories (McCormack, 1991) which were then developed by Delia Bradshaw in framing the CGEA. Certainly, I did not feel as if I was simply acting or speaking in my own name. I felt as if I was simply giving voice to what we were all saying in one way or another. I felt that the final categories formed a kind of *sensus communis*, a consensus that would have to be tested against the intuitions and judgments of the field as a community. My hope was that practitioners encountering the 4L framework would experience that sense of recognition we feel when we find that someone has put into words what we have been thinking all along but only inchoately.

The categories needed to resonate with what my peers already felt and believed. The point was not to produce arguments for the intellect, but meanings and metaphors that intuitively resonated with the motives and motifs, aspirations and commitments of second chance educators in this new field we were calling Adult Basic Education (ABE). Without this intuitive face validity, the framework and its categories would inevitably morph into mere matters of institutional compliance, not enlivening terms of professional practice. For this reason, I refrained from responding to criticisms of the 4Ls: it was important that practitioners 'own' the framework as a way for thinking about and constructing curriculum, not that it simply be experienced as a reporting or assessment framework for institutional purposes. Moreover, I wanted the more experienced and expert practitioners in the field to assess whether the framework did articulate their own pedagogic intentions, and that they did experience it as a clarification of these intentions, not an alienation from them. Without this process of evaluation by practitioners, the 4L framework would not help to protect Adult Literacy and Basic Education (ALBE) from simply becoming yet another reified, codified educational sector.

LDC: Forging a Discursive Understanding of Language and Learning

Having outlined the role of the four literacies in framing the extended scope of adult literacy to include ABE, I want to break off this narrative and return to re-excavate

the pre-history of the four literacies by describing how they first grew out of the work of a team of Language and Learning Support staff in a TAFE College, work that was not in any way allied to the adult literacy field. And so, this brings me to the third element in the emergence of ABE and the 4L framework: the Language Development Centre, Footscray College of TAFE (LDC).

The LDC was a language and learning support unit focused on supporting pathways, transition and ongoing academic language and learning support for two groups of students: senior secondary Year 11/12 TOP (Tertiary Orientation Program) students who had transitioned from Year 10 in Technical Schools; and mature-aged second chance adults who had left school early but were returning to study. Established in 1978 with six full-time staff, the LDC embodied a fundamental commitment to the intelligence and educability of students from non-academic technical schools in the industrial western suburbs of Melbourne *if* they were simultaneously supported by an explicit pedagogy to develop their language, learning and literacy capacities. Providing this support was the mission of the LCD.

Three different approaches to language and learning support were implemented in the LDC. The first iteration, based on US sentence diagramming and sentence combining exercises, focused on machine-learning of abstract grammatical forms in the hope that students would transfer these grammatical forms to their actual academic writing. With the demise of this program, a second iteration was implemented: 'process writing' which argued that students had problems with academic writing because they found it alien and unnatural, and so the focus was on helping students feel at home and fostering forms of reading and writing that connected with their existing sense of things and the shape of their worlds, that expressed their own experience.

Finally, with the demise of this approach, the third iteration, to which I belonged, tried to split the difference between these two previous approaches. We valued the explicit pedagogy into the grammar of academic discourse emphasized by the first approach, but also valued the focus on meaning embodied by the second approach. We saw ourselves as trying to move beyond the exclusive attention to autonomous language patterns of the first approach, as well as beyond the spontaneous lived meaning of the second approach. Our gambit was that just as the new knowledges and the criteria of judgments of academic disciplines were alien to the prior experience and education of students, so too these new forms of knowledge called for alien forms, structures and patterns of language. So, we hypothesized that students needed to learn both new understandings and new forms of language.

The methodology we developed for exploring this hypothesis was to compare what students *actually* wrote with what they were *expected to* write, and then endeavour to discern what different understandings and/or language were required in order to transform what they had *actually written* into what they *should have written*. We did this by regularly taking samples of student work and re-writing them ourselves so that they meet the expectations, and then trying to theoretically articulate the specific differences between the two versions.

What we found through these weekly self-imposed writing workshops was that what teachers look for in student writing is evidence that they understand their subject, and that to display this understanding students need to call on quite specific forms and patterns of language. With our intellectual backgrounds in philosophy, social theory and education, we construed 'what-needed-to-be-understood' as discourses (Foucault, 1972; Pêcheux, 1982), imaginaries (Castoriadis, 1984), traditions (Gadamer, 2004), paradigms (Kuhn, 1996), forms of life (Wittgenstein, 1953) or fields (Bourdieu, 1977).

Four things seemed critical.

First, coming to understand was not simply a matter of learning new information or factual information. Coming to a new understanding is not a neutral cognitive operation, but rather a matter of coming to inhabit a new subject-position, a new identity, entailing a new horizon of understanding, new criteria of judgment and evaluation, a new sensibility. Students are being apprenticed into communities of enquiry within which ideas, meanings, ways of reasoning and judging reasons, concepts, exemplary cases, paradigmatic theorists and texts, technical terminologies, guiding values, sensibilities, habituated stances and ways of being in the world circulate. In short, the change expected of students is as much ontological as cognitive.

Secondly, we found that the subject that students had the most trouble with was English. This was not because English is difficult or deals with difficult subject-matter. It is because English hides the abstract discourses it wants students to use as their yardsticks and criteria for judging other texts, fictional characters and situations requiring discernment or judgement. Although English presents itself as if it does not carry abstract discourses, as if it is simply noticing and describing everyday things and stories in the same way as we do in our ordinary lives, we found that English was in fact structured by at least two quite explicit abstract discourses, one discourse to do with citizenship and the other to do with cultural growth towards ethical maturity. These discourses also formed the stances that students were expected to express in their own speaking and writing.

Here is how we critiqued the pedagogy of 'subject English' at the time:

[T]he problem with humanist progressivism is that it locks students into what Pecheux calls the 'pre-discursive' (Pêcheux, 1982). Students are expected to somehow spontaneously generate the meanings, conventions, perspectives, contexts and genres of the major abstract discourses shaping and shaped by modern life from within their own concrete experience. However, there is another way of thinking about the relations between experience and abstract discourse (Foucault, 1972). Instead of hoping that abstract discourse will grow out of personal experience, students can be systematically initiated into these more abstract ways of saying, meaning and being, but in a way that does not suppress or reject their current frameworks and meanings. This means that the concept of literacy as empowerment should shift from a view

of 'personal voice' as simply the expression of private experience, to a notion of 'voice' that gives full weight to the fact that voices must be framed in terms of underlying discursive frameworks. 'Voice' is not simply the expression of personal meanings, but a site at which personal meanings and a range of public meanings dialogue, clash, interpret and comment on one another. (Pancini, Moraitis, & McCormack, 1990, p. 70)

Thirdly, we found that written text is a key medium for publicly presenting and modelling these shifts of subject-position. Written text is a fixed record or document upon which are inscribed enactments and representations of the very intellectual processes and activities, emotional reactions and responses indexing the target discourse, meanings that can be highlighted, 'read', studied, interpreted and consciously imitated by students. So, for us written texts were a public manifestation or display of an abstract discourse or contest between discourses. In English, prescribed texts are selected precisely to model and create a desire in students to take up these new abstract discourses or new cultural stances. Once students consciously understand that this is what is being transacted – that they are not being offered new information or knowledge nor new opportunities to express their own prior cultural understandings or opinions, but that they are in fact being asked to step into new shoes and to see, feel, and be different, then they can tackle the curriculum tasks with much more clarity. Here is how we framed this at the time:

Until now we have been writing as if discourse could be characterised without reference to the texts which realise it. This is misleading: in fact abstract discourse is both realised through and constituted by the textual forms and structures employed in text. That is, the textual grammar, the way a text goes about its business, is both expressive of and constitutive of abstract discourse (Halliday & Matthiessen, 1985; Halliday, 1985; Kress, 1982, 1989). Pedagogically, what this means is that an important avenue for mastering an abstract discourse – its framing, its forms of thought – is mastering the textual structures, strategies and rhetorics it deploys. It is this relationship between the deep meanings of a discourse and the textual forms shaping texts within that discourse that provide a point of leverage for teachers and students. Textual forms can be used to illuminate the underlying forms of thought within a discourse, while induction into the forms of thought can be used to illuminate textual forms (Dillon, 1981). It is this interplay back and forth between form and meaning that helps students deepen their grasp of a discourse. (Pancini et al., 1990, p. 70)

Fourthly, we found that in order to display their ability to speak from inside a new subject-position, students need to draw on fairly unfamiliar grammatical structures and vocabulary. The primary way to show that you inhabit a discourse is to be able to show how reality (aka everyday life and entities) and other competing discourses 'look' from the vantage point of that discourse. We developed our own 'term of art'

for this activity, calling it *glossing*. Here is how we tried to express these matters in 1990:

The importance of literacy is that it enables students to imaginatively project themselves into these different – more abstract – forms of life or discourses through the recontextualised logic of prose – recontextualised, not decontextualised (Bakhtin, 1986). This means that students are not confined to the meanings available to them through personal experience ... For example, for a student to understand or 'speak' the forces currently operating on the Australian economy they must be able to imagine themselves in various roles – minimally, the role of a Treasurer controlling the monetary and fiscal parameters of a nation, and the role of a capitalist trying to maximise profit. Both these roles are outside the range of student experience – nor is it possible for all students to do work experience in the Treasurer's Department! The power of literacy is that it provides an alternative avenue to understanding and imaginatively participating in the meanings available to and employed by an author, in this case the Treasury, in making decisions. (Pancini et al., 1990, p. 70)

Towards a Second-Chance Secondary Schooling for Adults: Adult Literacy as Adult Basic Education

This team exploring the third iteration of LDC pedagogy had been working hard at addressing the needs of second chance adults along with Further Education educators in other TAFE settings since 1983. So, when the struggle over the future of further education within TAFE Colleges generally in Victoria and more specifically around the definition and scope of LLN emerged in the late 80s, we had already, like many of our colleagues, been grappling practically and theoretically with the role of language and literacy in enabling learning in higher secondary education and in university preparation courses for nearly a decade. And so it was felt that what we had learnt in supporting exit-Year 10 TOP students and Mature-aged Return to Study adults may be relevant to the re-framing of adult literacy as ABE, that is, as a developmental general education curriculum framework that did not concentrate on learning literacy as such, but on *learning the abstract discourses carried by literate institutions, cultures and practices*.

However, it was clear that the government was determined to re-purpose adult literacy towards the workplace. The question was whether, by engaging with policy makers, the field could secure a broader framework that allowed the field to engage with the full scope of adult professional contexts and life situations underwritten by written language and education. What was needed was a set of categories able to encompass the full range of subjects and disciplines studied in schools and higher education. However, the categories needed to be of an even higher order of abstraction, not just specifications of decontextualised academic subject-matter,

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but specifications of the contexts, institutional settings and roles that adults could find themselves in during their lives. That is, designing an educational system from scratch, like ABE, provided the opportunity to re-connect the relationship between learning and life. While schools and higher education had taken on a life of their own and closed in on themselves, in the process closing themselves off from the wider social world, designing a new curriculum framework provided a pretext for forging a new openness between living and learning – or at least, so we dreamed – before the whole exercise was warped into a competency-based assessment grid.

Although this may now seem an extravagant ambition, to us it seemed obvious that the attributes posited by policy-makers for the 'new flexible workers' in the 'post-Fordist workplace' would be best and most effectively cultivated through a rich curriculum such as this. In our view, drawing on a reductive account of literacy as autonomously defined linguistic skills together with an atomistic task-focused account of the workplace would not produce workers with the appropriate attributes and understandings. In terms of goals, it seemed that our curriculum designs were realistic, while those of the bureaucracy seemed utopian and inherently doomed to failure.

And so, the LDC turned its attention to recasting its own pedagogic practices and understandings into a form that may be useful to framing a new field of ABE. In an article titled *Adult basic education: New directions for curriculum*, for a special issue of *Australian Journal of Reading* dedicated to Adult Literacy, we suggested that:

there are a small number of specific abstract discourses that are powerfully deployed in modern life; that it is possible to analyse these domains and develop an explicit pedagogy for initiating students into them; and that this can be done without regressing to a form of 'banking education'. (Pancini et al., 1990, p. 70)

In that first attempt to describe what we were finding, we summarised these discourses as:

Discourse of *the self* centred on the self and the construction of a meaningful self as a unitary locus of historically embodied awareness, reflection, and responsibility – particularly as exemplified in *'bildung'* fiction.

Discourse of *technicality*: Technical writing is writing that traces the lineaments of an 'abstract machine' – its functions, relationships, taxonomies, elements, components, uses, the causalities that constitute it, the outcomes or consequences it can effect, and its procedures for operation.

Discourse of *the factual* construes itself as straightforwardly 'factual' and finds expression in scientific knowledge whether in the natural sciences or human sciences.

Discourse of *the problematic* concerns itself with the forms of public judgment in modern communal life and finds expression in current affairs, newspapers, parliaments, public policy documents, and so on. (Pancini et al., 1990, p. 71)

Thus, when asked to contribute a chapter about Adult Literacy for a national research project on school English, I took the opportunity to draft a more developed, rigorous and theoretically articulated account of these four abstract discourses (McCormack, 1991) as a possible reframing of adult literacy *as ABE*. The opening paragraph reads:

There are many ways to classify differing literacies. In this paper I attempt to sketch some of the principal contexts, fields, and uses of written text in contemporary adult life as viewed from the perspective of the newly emerging field of Adult Basic Education. I will do this by analysing the place of literacy within the lives of adults in terms of four regions: epistemic literacy; humanist literacy; technical literacy; and social literacy. This specification of the uses of literacy into four regions is not intended to be absolute, but rather a heuristic and provisional way of pointing to four clusterings of aporias, theories, practices, pedagogic orientations, contexts, institutional locations, assumptions, values, and normative genres. (McCormack, 1991, p. 175)

I then proceeded to define the four regions of literacy:

epistemic literacy ... is the uses of written text in the production, distribution and application of modern knowledges

technical literacy ... refers to the uses of written and electronic text in enacting the procedural sequences necessary for practical action whether in everyday life and more specifically in the workplace

humanist literacy ... is the use of forms of reading and writing to inculcate ethical schemas centred on the aporias of the self within modernity

public literacy ... is intended to include the forms of written interchange used to debate and negotiate social and political differences through public discourse within a modern polity. (McCormack, 1991, p. 175)

It was these four regions that later became known as the Four Literacies. In 1994, my description was:

[T]he '4 literacies' operate at a higher level than the notions of Reading and Writing, Oral Communication, etc. The four literacies operate at the level of discourses, contexts, social practices, regions of social practice – a level at which it becomes less important exactly what the medium of inscription is. The inscription may be a spatial layout such as a seating arrangement, an architectural form such as a shopping centre; a set of procedures, a collection of utterances, a film, an advertisement, a piece of legislation, a baton charge, a

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student text, a photo, a student contribution to a discussion. Any of these things can be read as 'social texts' implicated in administrative procedures, realising concepts and knowledge, negotiating competing cultural and personal identities or subjectivities, positioning themselves in the ongoing public formation of policy.

In modern life, ALBE is aimed at opening up those forms of education, knowledge, action and ways of thinking that tend to be handed on or transacted through written text, modes of social activity that are not easily accessible to common sense or vernacular practical life. ... Four dimensions of modernity were nominated as key fields opened up or gate-kept by literacy: the self as a self-choosing agent constructing a meaningful life; modern forms of knowledge; modern bureaucratic institutional structures; and a public sphere. These were framed as four key sites of modernity. (McCormack, 1994a, p. 14)

And later again:

The four literacies: To say that ALBE includes four literacies is to say that four forms or regions of answerability and accountability traverse the ALBE field, four vectors or horizons of answerability. ...

Personal identity: One horizon foregrounds the personal identity formation of our students, their sense of themselves as agents of a sociocultural narrative, their sense of the connections between different phases of their lives and their present capacity to speak to, on behalf of, and from within their lives. It is within this context that issues of sexual, cultural, social, and class difference are picked up.

Modern knowledge: A second horizon points to the production and distribution of modern forms of knowledge. Here we are concerned that ALBE begins to introduce students to the discursive forms of modern knowledge. This will include learning to read and write expository and textbook prose. Here we envisage ALBE educators developing diverse curricula that begin to apprentice students into the discursive forms and practices of such subjects as History, Sociology, Biology, Legal Studies, Cultural Studies, and so on.

Organisations: The third horizon embraces the diverse understandings and competencies required to engage with contemporary organisation and institutions, especially those of the workplace. Here we are trying to include those competencies covered by 'functional literacy', and to acknowledge that modern life is fundamentally shaped by abstract organisations, bureaucracies and structures, institutions that depend more on written communication than face-to-face presence.

Citizenship: The fourth horizon is what we could call the horizon of the polis. This horizon tries to foreground the fact that modernity also contains a

horizon or project specifiable as democracy. This horizon articulates the right and duty of contemporary individuals to contribute to the public discourse which is continually questioning, resisting, proposing and counter-proposing our communal activities, policies and ways of life. (McCormack, 1995, pp. 229–230)

The four literacies were deliberately formulated as initiation into *domains of meaning and activity*. So, from the very beginning, as social theorists and students of Wittgenstein and Foucault, we formulated these domains as meta-linguistic, that is, as comprising an order of abstraction not reducible to language as an autonomous system, even though they were intimately interwoven through and through with language, and perhaps only learnable with the assistance of language. In fact it was precisely the intimate connection between 'language games' and 'forms of life' (to draw on Wittgenstein's terms of art), or between 'word' and 'world' (to draw on Gadamer's terms), or between 'learning language' and 'learning through language' (to draw on Halliday's terms) that constitutes the key gambit of the four literacies. Thus, instead of defining 'literacy' as facility with written language as an autonomous skill, we defined literacy as induction into sociocultural regions or orders via engagement with the written language, linguistic activities and texts of those regions.

Moreover, influenced by poststructuralist theory, we did not posit 'society' as a holistic entity, system or structure. Instead we thought of 'the social' as a site of conflicting ideologies, histories, cultures, disciplines, institutions and communities. Similarly, we did not think in terms of a single language, say English, but construed language as more like registers expressive of different communal 'forms of life'. Each region of communal life was made up of a clothe woven from places, histories, forms of reasoning, concepts, activity, actions, motivations, values, commitments and emotional investments. If these were the warp comprising these regions of meaning, then language and 'languaging' were the weft. And so learning the language of a domain or disciplined region was an important ladder into understanding, especially the reflective or theoretical understanding of that realm and its subject-positions.

The 4L framework was thus quite different in emphasis and focus from the Sydney School's 'genre' framework (McCormack, 1990, 1994b). The 4L framework posited the goal of ABE as initiation into the reflective discourses, ideas and ideologies deployed to govern, discuss, reflect on and creatively re-invent forms of life and social normativity. Moreover, by emphasising issues of asserting, discussing, deliberating over 'the fit' between actions, events, historical movements, motives, motifs in relation to the normative orders in terms of which they made sense and against which they were accountable, the 4L model placed the focus on the texture, grammar and lexis at work in construing the relationship between the concepts of these normative backgrounds and the detailed 'empirical' content at issue. We called this relationship between theoretical concepts and values and their application to cases and instances, glossing; and because a gloss is always arguable, it is the arguments for and against

the construal characterising x as a manifestation or instance of p, that was at the heart of ABE pedagogy as an equivalent of secondary education. Thus the focus of ABE was (or was intended to be) on the glossing of life and the world by disciplined concepts, values and themes, a pedagogic practice that would emphasise the broader cultural disciplinary orders encompassing genre as action, cultural orders in relation to which not only beliefs and actions are accountable, but also motives, feelings, lives, texts, fictional characters, in fact almost anything.

REFLECTIONS

So, what are my thoughts about the four literacies in 2013, 25 years later?

First, I would like to believe that the 4Ls may have gone some way towards their primary goal, which was to road-block the government's drive to reduce the scope of adult literacy to a myopic focus on the workplace. By positing four public domains of adulthood encompassed by the communicative practices of reading and writing, it was more difficult for government to insist that only one of these adult roles and responsibilities mattered. That it took 25 years for the government to finally achieve its goal of reducing Adult Literacy to workplace preparation may have to some extent been a function of the fact that practitioners already possessed a formulated framework encompassing the fuller range of skills and capacities they wished to foster and develop in their classrooms. This is of course not to deny that, despite the resistance of practitioners and their representative organisations, the government eventually won this long battle. Yet this only adds to the sense that it is worth recalling the 4Ls framework and the rich ALBE community out of which it grew.

Secondly, my hope is that this piece which points to an unfulfilled counterfactual narrative may provide some motivational sustenance that strengthens the resolve of Language Literacy and Numeracy, Further Education and any other denominations within our congregation to fight against the neoliberal labour-ist ideology. This fight has become even more critical now that the cohort of second chance students has shifted to include many more Aboriginal and Torres Strait Islanders, migrants and refugees from other countries, as well as refugees from our own schooling and justice system. In short, precisely at the moment when cultural and political issues are coming to the fore in adult education and training, the State is determined to define students solely in terms their relation to the workplace and to Centrelink⁴, thus ignoring these other issues of identity, family, community and responsibility.

Thirdly, in terms of my own subsequent educational work, I have not found reason to reject or revise the 4Ls as a map or platform within which to design and think about curriculum. My earliest work was helping exit-Year 10 students from Technical schools get to grips with English literature and reflective writing. Later I was involved in a Return to Study program for many years that focused on understanding 'the culture, context and conventions of academic discourse' (McCormack & Pancini, 1991). Moving to the Northern Territory, I designed and delivered 'transition to university' units for second chance Aboriginal and Torres

Strait Islander adults that focused on performative public speaking of epideictic discourse (discourse that calls communities together around their deepest values and cultural experiences) thereby weaving together the two domains of political discourse and identity discourse (Gilbey & McCormack, 2013). And, now I find myself working with PhD students focusing again on academic discourse. So, like many others, I have moved through many different contexts (institutional and student-wise) but have not found that the 4Ls impeded my ability to engage with the context or student. Rather, it has enabled me to both engage, yet also to draw on the other vectors, domains or accountabilities in order to critique, enhance and complicate what is usually offered.

Finally, my principal disappointment has been that no sooner had the government got its ALBE competency framework than resources for curriculum research and development began to dry up. Thus the dream of developing a range of innovative texts across the whole spectrum of fields and concerns, including history, sociology, philosophy, human geography, the sciences, maths, politics never eventuated. Despite initial efforts to design a different kind of textbook, one that engaged with serious adult issues and ideas while also supporting language development (see McCormack, 1992; Moraitis & McCormack, 1995), government moneys have been directed more towards matters of compliance and have largely neglected educational or curriculum matters.

Although this chapter has been a reflective melange of exposition and personal narrative, I trust it may in some small way contribute to the formation of a sense of history and community among practitioners able to speak back to the power of the State and its implicit claim to write the constitution of the field in ways that ignore the experience, aspirations and hopes of practitioners and students. This would be to inherit the Isocrates tradition in which the field exists in and as result of the democratic public space instituted by discussion and debate among the community of practitioners. Without this community of discussion, the community of practice will fall away from full-blooded educational activity and lapse into mindless compliant behaviour; a place of despair, not the place of hope it was for us back in those halcyon ABE days!

NOTES

- Technical and Further Education Colleges (TAFEs) are public post-secondary educational institutions catering to the vocational and cultural development of adults. Many adults, especially women, attended them as a pathway to alternative entry into university. They have been radically weakened by the neoliberal shift to the provision of adult education by competing private providers and the residualisation of the 'further education' component with its focus on second chance literacy, education and cultural development.
- It is not easy to point to documentary evidence for the energies at work within the field of adult literacy and ABE within Victoria at this time because much of the discourse was transacted orally in meetings, workshops, forums and discussion groups while written texts were typed and distributed by photocopy. The internet did not really exist at this time nor were computers widely used. However, Campbell (2009) whose only written archive is the Victorian adult literacy journal, Fine Print,

together with the oral reminiscences of thirteen practitioners, points to energies and passion actually in play during this time only hinted at in the written record. For example, under the heading 'The tug of war – adult literacy or basic education', she writes:

For those who have never known VALBEC by any other name, it is difficult to recreate the tensions ... which surrounded the time of the proposed name change from VALC to VALBEC. The process of name change took several years and involved lengthy internal and occasionally heated debate ... (p. 71)

But this name change was in 1987, which was well before the full onset of the battle between adult literacy and adult basic education. This developed with the formation of a new VALBEC Publications Activity Committee and a new *Fine Print* editor, Dale Pobega, beginning with Vol 15, No 3, 1993. If one compares the contributors to this issue – Mary Kalantzis, Rosa McKenna, Delia Bradshaw, Geri Pancini, Liz Suda, Nick Gadd, Tricia Bowen – with the preceding issue, Vol 15, No 2, it is clear that a radical sea-change is taking place in the field, a 'crisis' that will dominate the entire 100 pages of the second section of Campbell's book.

- ³ The best, perhaps only, place to access the vibrancy of the Victorian adult literacy field during this time is in the journal, *Fine Print*, from Vol 15, No 2 (1993) onwards. Unfortunately some of the key early issues are still not available as PDF.
- ⁴ Centrelink is the Australian government service responsible for governing 'the unemployed' and others drawing on welfare support or services from the State.

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JEFF EVANS AND LUDI SIMPSON

13. THE RADICAL STATISTICS GROUP

Promoting Critical Statistical Literacy for Progressive Social Change

INTRODUCTION

The Radical Statistics Group is a longstanding independent movement which engages its members and interested citizens in critical analysis of statistics and research. Its members are statisticians, research workers and interested citizens, mainly in the United Kingdom (UK). It has focussed particularly on statistics relating to public policy making, health, education and general welfare. Discussion takes place via the email list and social media, through a range of publications, and face-to-face at the annual conference and other meetings. Thus the group promotes statistics learning, at the same time as supporting action related to issues of public policy and governance.

The very idea that statistics might be valuable, rather than a means of sowing confusion, may be a challenge for many. That statistics might be radical adds a second perspective that this chapter will hope to clarify.

Radical Statistics (RadStats) was founded in 1975, and celebrated its 40th anniversary at a conference in London's Conway Hall in March 2015. It has produced an unbroken publication of a substantial newsletter/journal of original articles and reviews two or three times each year. It has outlived the British Society for Social Responsibility in Science to which it was affiliated (see below).

Nevertheless, the group has changed with the times. There are fewer active subgroups allied to green, radical, peace and democratic movements, just as there are fewer such social movements currently in the UK. The group's newsletter/journal contributions have become more academic, often taking articles from students and young researchers, or early thoughts from more experienced academics who wish to try out new ideas – or to reach an audience which is sympathetic to politically progressive sentiments. Membership has never reached 500, but has hovered between 200 and 450 throughout most of its years.

Throughout these years the Group has frequently returned to themes of statistical literacy and the social functions of quantitative analysis (e.g. MacKenzie, 1979/1998). Although many of its members are academics, and although some of its products are used in academic teaching, the organisation has never itself been housed by an academic institution nor worked by academic rules. It has instead focused on debate and on practical support for campaigning organisations.

A number of factors contributed to the founding of Radical Statistics. In the 1970s many young statisticians were being recruited into several key settings: into posts in academia, which the Robbins Report (1963) had recommended expanding substantially; into the government statistical service to help deal with the expansion of official statistics that had begun after the Second World War, and accelerated from the mid 1960s; and into organisations that relied on experimentation and testing, notably the drug companies. There were chronic concerns, not only from statisticians, about the way that statistics were being cited and used in policy debates by politicians, the media and business. And the 'spirit of the age', including questioning rather than accepting 'what you were told', was evident in enough statisticians and researchers to create a critical view from within the profession.

The same spirit created other organisations self-critical of their own profession, including Radical Philosophy and Radical Midwives. Radical Statistics was affiliated to the British Society for Social Responsibility in Science (BSSRS) (see Wellcome Trust, 2015, and the BSSRS archive website address, in the References). All hoped for new approaches in the aftermath of the student uprisings that included those in May 1968, and in the context of recognition of the fluidity of world politics as so many colonies won political independence, as well as successes of the labour movement against national governments and established ideas.

The lack of academic restrictions has allowed Radical Statistics to maintain a perspective critical of the establishment. Its criticisms have generally accepted that statistical practice is closely related to economic interests, especially through the funding of data collection and analysis; see for example the concluding chapter of *Statistics in Society* (Dorling & Simpson, 1998a). The Group has frequently asked 'Whose interests are being served?' and allied our publications and meetings to campaigns of anti-racism, of publicly-funded healthcare, of teachers' working conditions, and against weapons of mass destruction. In every case we have worked for open documentation and justification of statistics, therefore contestable in a democratic process, at the same time as demonstrating those principles by collating statistics of relevance and practical use to the campaign with which we were associated.

This democratic political edge is probably the clearest explanation of what can be radical about statistics. The Group's current mission is 'Using statistics to support progressive social change'. At times we have argued that statistical methods themselves can be shaped by political interests (e.g. Dorling & Simpson, 1998b), and supported the idea of a community agenda for statistics.

When the authors of this chapter write of Radical Statistics as 'we', it does not mean that we two people are responsible for Radical Statistics, nor that there is any agreed history of the group. It simply refers to 'some of our contributors at some time'. We two authors have a pride in membership and in the successes of the organisation, but no pretence to producing an official or approved history. There has been no single clear analysis or declaration of what radical statistics are, nor of the aims of Radical Statistics as an organisation.

The annual conference elects a committee of three to support activity and oversee group continuity in the following year, but there are few formal rules and no formal constitution. That lack of formal structure may appear to be a weakness, but has also been seen as a strength. The group has seldom been troubled by disputes, and has welcomed new members and committee members without any more contribution from them than they are willing to offer. Nonetheless, the organisation's successes have carried it to longevity. This chapter aims to define us through our activities, though it will not be the last word.

As with many grassroots organisations, the group's history includes some successful, and some less successful, campaigns. Several of these are discussed below.



Figure 1. The meanings of 'unemployment'

A SHORT HISTORY OF RADSTATS: ACHIEVEMENTS AND DISAPPOINTMENTS

Difficult Early Relationships with the Relevant Professional Association

One of the Group's first initiatives had to do with (one of the two) professional organisations of statisticians in the UK at the time, the Royal Statistical Society (RSS). This summary comes from an account in a recent issue of *Radical Statistics* (Simpson, Goldstein, Hill, Bibby, & Evans, 2013).

In the spring of 1975, Radical Statistics had recently held its inaugural meeting. Campbell Adamson, ex-President of the Confederation of British Industry (CBI, the main UK business lobbying organisation), with no statistical affiliation himself, was

nominated first in an election for RSS Council membership. This was at a time when the Council usually nominated just enough candidates to replace Council members whose term of office was ending, with the aim of avoiding contested elections. Campbell Adamson's 'externality' to the profession was not so much the issue, as was the place that the CBI represented in British society at a time of large public disputes in which business and labour were opposed, and the lack of elections to give a say to the RSS membership (its 'Fellows'). Radical Statistics' role was first to nominate one of its women members as a candidate for RSS Council, thus forcing an election, in which she was elected and Campbell Adamson was the only candidate not to be elected!

When the new Council nonetheless proposed Adamson for President, Radical Statistics members looked for an alternative candidate, and encouraged a relatively young statistician to stand. He was not active in Radical Statistics but did believe that an election was necessary to allow RSS Fellows to express their views. They did so by convincingly electing him with 932 votes to Adamson's 614.

The presidential election may have touched a democratic nerve in many RSS members, who, even if not concerned about the political significance of the candidates, felt that Adamson's failure to be elected to Council should have ruled him out for nomination for President by Council. Council was perceived to be ignoring the membership's expressed wishes, and this was explicitly stated as the main reason not to vote for Adamson, by his opponent's proposers.

Nowadays, the RSS routinely holds elections to fill Council places. The relationship between the RSS and the many of its members who are sympathetic to the aims of RadStats is much more cordial (see below). In addition, there are generally one or more Council members who have an association with Radical Statistics, or broad support for many of its ideas.

Campaigns Against the Threats to the NHS, from the Late 1970s

The National Health Service was established in 1948 in the four countries of the UK on a 'free at the point of use' basis. This was still the situation in the 1960s, although charges had been introduced for a few elements, including dentistry, glasses and prescriptions (Radical Statistics Health Group, 1987). At the same time, countries like Canada and Australia strengthened their social provision of health care from the 1960s, through taxation and insurance schemes. In the 1970s, there were pressures for change, including moving to an insurance based service with item of service payments, increasing charges and making greater use of what was then a small private sector. The Radical Statistics Health Group (RSHG) has continually subjected the claims made in support of such changes to critical scrutiny.

RSHG produced its first pamphlet, *Whose Priorities?* in 1976. This was a critical examination of use of data in a recent government policy document. Its second pamphlet, *In defence of the NHS* (RSHG, 1977), was a critique of proposed changes to the NHS and was submitted as evidence to the Royal Commission on the NHS. The

Group continued to be active, selling 4,000 copies of *The unofficial guide to official health statistics* (RSHG, 1980). During the 1980s RSHG contributed many articles to books and magazines and brought these together in book format with *Facing the Figures: What is really happening to the National Health Service* (RSHG, 1987). A revised book version of the 1980 unofficial guide was later published commercially, but with less success (Kerrison & Macfarlane, 2000). (See the Radical Statistics website.)

Since the 1980s, Labour, coalition (Con-Lib) and Conservative governments have all made changes, such as the introduction of an internal market, outsourcing of services to the private sector and use of the private finance initiative to fund capital developments. However, in most cases, the service has remained free at the point of use (Brown, 2015). In England the Health and Social Care Act, 2012 made many changes to the structure and governance of health services. One of its consequences was to introduce barriers to accessing administrative data about health care for purposes of research and public health analysis, and members of RSHG have been active in pointing to the consequences, both directly and through other organisations.

Concerns about the Quality of UK Official Statistics Generally

Radical Statistics frequently carries critiques of official statistics, from projections of traffic and of housing, to statistics of homelessness, unemployment, food production and ethnicity.

One of the original subgroups, the Teaching Group, did not meet for long, but two of its members decided to produce an early spinoff. This was the book *Demystifying Social Statistics* (Irvine, Miles, & Evans, 1979), to which many RadStats members contributed. It had as a target audience left-leaning students and academics, and quickly became a key reference in explaining the ways in which statistics and statistical method are 'socially constructed'. The book *Statistics in Society* (Dorling & Simpson, 1998a), edited by the then co-editors of *Radical Statistics*, follows similarly broad themes and appeared on many higher education reading lists. Both of these books were critical of some aspects of official statistics in particular – but overall supportive of their careful and critical use.

Criticisms of the government's use of statistics in publications by members of RadStats in the 1980s helped to inspire the 1989 Channel 4 TV Programme Cooking the Books. The programme was a key event leading to debates in the Royal Statistical Society on the integrity of official statistics. These debates helped to spur the Labour Party to pledge to establish an independent statistical service as part of its 1997 election manifesto. This led to the establishment in 2000 of what was to become the UK Statistics Authority. This body, under a number of able Chairs and Board members, has developed its dual role in British civil society, where it is responsible for overseeing the work of the ONS (Office for National Statistics), and also for monitoring of all UK official statistics. It has made a number of powerful interventions, being periodically called on to adjudicate on a minister's use of

statistics in public policy discussions, and occasionally to ask the minister (even the Prime Minister) to amend their claims (see UK Statistics Authority website).

Concerns about Information Provision in Other Policy Areas: The Work of Other Subgroups

In the mid-1970s, a number of other areas of activity sprang up, under the auspices of a 'subgroup'. These subgroups were usually inspired by a handful of members who carried through the practical work involved. Guidelines for subgroups were published in *Radical Statistics* (Simpson, 1992), as encouragement, rather than as constitutional regulations.

A key subgroup was formed in response to the highlighting of 'immigration' as an issue by a prominent Conservative politician, Enoch Powell from 1968 and by the incoming leader of the Conservative party, Margaret Thatcher from 1975, and also to the rise of the National Front (a group with racist rhetoric and provocative street tactics) at around the same time. This subgroup aimed to challenge accepted views on these issues by providing for the first time a statistical history of immigration and immigrant demography and conditions. The Radical Statistics Race Group published *Britain's Black Population* in 1980 with the Runnymede Trust, which has aimed since the 1960s 'to promote a successful multi-ethnic Britain'. There was a second edition in 1988 that focused more on racism within Britain.

At around the same time, a number of academic publications were challenging the 'progressive' consensus in education, which included 'child-centred' teaching methods in primary schools and comprehensive (non-selective) secondary schooling. The Radical Statistics Education Group published a critique of some of these 'challenger' studies in *Reading between the numbers: A critical guide to educational research* (1982), addressed in part to education professionals – but also addressed to 'anyone who is interested in education' (p. 3). The group also published a pamphlet on educational spending in time for the 1987 general election in the UK.

In 1979, the US military announced its intention to locate nuclear 'cruise' missiles at its Greenham Common base, near London, as part of moves to counter the 'Soviet military threat'. There were a variety of responses, including many large demonstrations around the country, and the establishment of the women's peace camp at Greenham Common. Part of the response from Radical Statistics came from the Nuclear Disarmament Group, with their publication *The Nuclear Numbers Game: Understanding the statistics behind the bombs* (1982). Its stated aim was "to help people decide when and how to use, attack, or reject, data ... to help others to understand how statistics can be used to justify the possession and acquisition of nuclear weapons, and how they can be used to oppose them" (p. 8).

Since 1990, the subgroups have been less active, with the exception of the Health Group. A short-lived Population Studies Group formed in 2011 to write a critique of

the Optimum Population Trust (Radical Statistics Population Studies Group, 2011). The Reduced Statistics Group formed the same year to review the impact of reduced public expenditure on official statistics.

Attempts to Provide No-Cost Statistical Support to Campaigns: The 'Fire Brigade' and Other Initiatives

From the start of the Group's existence, there were requests for assistance from various professional and community groups, often responding to publications or contributions to the news media, for example, from a person identified with Radical Statistics Health Group.



Figure 2. Educational research aims to persuade

Early on, we thought of such responses as relating to the idea of a 'fire brigade'. This also recalled the Science Information Centres set up by the radical science movement at universities (especially in North America). The 'fire brigade' approach has had mixed success for several reasons. First, we quickly experienced political tensions that such initiatives can produce and that could not be resolved by consensus. For example, a member brought forward the request from a group of home-owners in their own locale – to help produce statistics for a campaign *against* the local

authority's decision to build social housing in the 'backyard' of these owner-occupiers! Second, as we soon found, most requests for help came via one or other particular RadStats member, already known to the local campaigning group, perhaps because the member was already involved in the campaign as an activist. The needs were often for immediate and specific support which we could not reliably find in the timescale, or at all.

Successful support was often from a member involved in the campaign, without requiring Radical Statistics help in any other formal sense, although accounts of the work might be published in the newsletter. For example, a series of statistical analyses of school catchment areas informed debates about proposed school closures (Mar Molinero, 1987).

Over the decades, other forms of non-profit research support have been developed outside Radical Statistics but with the key support of Radical Statistics members. The Community Operational Research Unit was funded for several years, developing a variety of strategies to support and strengthen community organisations with appropriate management and research skills (Ritchie, Taket, & Bryant, 1994). Sheffield Polytechnic (now Sheffield Hallam University) developed a consulting unit for social surveys, often working with local organisations (see e.g. Evans, 1993).

One member in a local authority gained substantial European Regional Development Fund support for an early online neighbourhood statistics system, in parallel with community training. The Bradford Statistics Community Project offered courses in official statistics to local government staff and members of the community (Quiggin, 2001; Reeve, Thomasson, Scott, & Simpson, 2008; Simpson, 2000); the Project also held regular advice sessions. Those who attended more often than not were motivated partly by central government agendas for local information as evidence to support bids for the local work they funded, or for required reports of such work.

From these experiences, it is worth noting that statistical work with community and other non-governmental organisations may vary a good deal on several different dimensions: *applying* statistical analyses; *educating* a broader community in statistical techniques and strategies; and *developing* a community agenda for statistics independently of established policies and priorities. These last two, in particular, are examples of the ways that RadStats promotes statistical literacy and numeracy; see also Evans, Wedege and Yasukawa (2013).

More recently, the American Statistical Association has supported Statistics without Borders, which offers no-cost support to organisations without sufficient funding to buy statistical support. The UK's Royal Statistical Society now has a policy to encourage its members to volunteer support to charities and other non-profit organisations. At present it directs members to Statistics without Borders, and to DataKind, a North American organisation with a UK chapter that links community organisations with computing expertise.

ONGOING ISSUES FOR THE GROUP

Unusual Longevity?

As already indicated, in the 1960s and especially the 1970s, there was a proliferation of 'radical science' groups across the English-speaking world, attempting to democratise and broaden the focus of specific professions in the natural and social sciences and the health, educational and other fields. We discussed above the pivotal role played by BSSRS within the radical science movement, and also its support for Radical Statistics, especially in the early days. Nevertheless, by the turn of the century, BSSRS and most of these other groups in the UK had ceased to function (Wellcome Trust, 2015). Indeed, Radical Statistics is one of the few groups that still survive from that time.

This prompts the question: How has the Radical Statistics Group managed to remain active for so long? The following factors seem to us to be important:

- The Group has been fortunate in the skills, generosity, and commitment of many members, including a number of its long-term leaders; in particular, the Health Group has been energetic and successful in formulating and working on problems within their own relatively well-resourced field, which also attracts considerable public interest because of its focus on health.
- The Group has made a number of contributions to official consultations that have been well-received. These have been around the need for independence in the structures for official statistics when the post-1997 government was preparing a Statistics Act, and also in defence of the national health service and other issues.
- Thus RadStats has been accepted by established statistical organisations including the RSS but others too as having a point of view worth listening to. Far from turning away from RadStats, sufficient of those who have contributed to RadStats have also recommended its relevance within other organisations.
- Statisticians have had relatively good employment prospects, since their
 professional (methodological) knowledge is in many ways 'transferable' from
 one area of application to another. Having steady employment is in many cases
 a helpful pre-condition for being able to support RadStats-type efforts outside of
 one's day job.
- Statisticians, in research at least, typically learn to work in teams where a fruitful division of labour and an ability to get along with others from different academic disciplines, are valued and necessary skills.
- The Group has tended to develop an inclusive identity, as a 'broad church': neither 'splits' nor 'principled resignations' have been sought or encouraged. Perhaps more importantly, the Group is perceived as more friendly than many other 'radical' organisations. Thus the Group has been able to maintain a community or network of applied researchers and statisticians with radical politics (understood, we think, in the sense of left-of-centre politics and a concern with universal rights).

- The Group has been able to deal firmly with any tendencies towards intemperate language or behaviour, notably on its electronic mailing list.
- The Group has managed to continue an unbroken series of annual conferences over 40 years with a 'cumulative attendance' of over one thousand.
- The Group has been able to produce a readable journal running without a break for 40 years containing an estimated annual average of 100 pages.

There are no doubt other factors, one of which has been the crucial ability to renew its membership with younger recruits, so that the Group is able to change with the times.

Changing Methods of Communication

For a group like ours, methods of communication are crucial. We have developed several different channels. Perhaps the most important, and certainly the most used over the whole calendar year, is the electronic mailing list (for details on how to join, see http://www.radstats.org.uk/jiscmail.htm). Relevant items in the day's news are commented on by members, and more long-term issues are raised to attract a breadth of comments. Topics raised in the first six months of 2015 included notices of meetings, publications and consultations, and discussions of a range of queries and issues. Examples include: how to do a community profile audit in the voluntary or community sector; how to measure the 'size of an effect' in statistical analysis; where to find a plain account of quality control in UK official statistics; the selling of a health data analytic company part owned by government; the aims and performance of 'Q-step' (a new programme to bring quantitative methods to undergraduate students in non-quantitative degree courses such as politics and health studies); a proposal for a new Radical Statistics book on big data; where to find statistics of healthy life expectancy.

Issues of *Radical Statistics* (originally called the 'Newsletter', more recently termed the 'Journal') always contain original articles of a length and quality more usual in academic journals; an author's article will be peer-reviewed, if they request it. The Journal reached Number 112 in 2015. Each copy is sent to members (and subscribing libraries) in hard copy, while all issues previous to the current one are available to read on the website (http://www.radstats.org.uk/journal/). An impressive set of articles on a wide range of topics have been published over the years, including the winning entries in the Radical Statistics essay competition every two years.

The Annual Conference takes place each February or March, in different places across the UK: the last three have been in London, Manchester and York. The size of the UK means that most members can attend Saturday's programme on a day trip; this facilitates continuity of participation. Friday evenings usually involve a social event, and Sunday may include a cultural event, such as a guided walk around the locale. These conferences involve the chance to reconnect with old friends and also to make new contacts. For the Programme and the Local Organising Committees,

the Conference involves the opportunity to work together on a worthwhile and enjoyable initiative.

Working groups provided valuable channels of communication in the early days, but are less important now, because they are fewer, and perhaps because of the availability of alternative channels, such as the mailing list and, increasingly, social media. Even groups that are now practically defunct, have established collegial ties and shared knowledge through previous projects, which provide a basis for ongoing communication.

As for social media, Radical Statistics has a Facebook page and a Twitter account. Information about these is given on the Group's website.

DISCUSSION: WHAT THE FUTURE MAY HOLD - SOME LARGER TRENDS

In conclusion we review some of the challenges for those involved in Radical Statistics. In spite of improvements in the UK's official statistical system referred to above, there remain large roles for developing statistical literacy, for a statistical agenda for non-government organisations, and for further improvements in the freedom of official statistics from government interference.

Changes in the Group's 'Publications'

Public products will need to continue to develop new ways of communication, dependent on the audience. Above we have given examples of RadStats publications that have been addressed to academic/professional audiences, and/or to community groups and active citizens more generally. Examples would include, in the first category, *Demystifying Social Statistics* (Irvine et al., 1979), *Statistics in Society* (Dorling & Simpson, 1998a), and *The Unofficial Guide to Official Health Statistics* (Kerrison & Macfarlane, 2000). An example of the second would be *The Nuclear Numbers Game: Understanding the statistics behind the bombs* (Radical Statistics Nuclear Disarmament Group, 1982).

An example of a publication that aimed to speak both to academic/professional audiences and citizens at large is *Reading between the Numbers: a critical guide to educational research* (Radical Statistics Education Group, 1982), addressed in part to education professionals, and also to 'anyone who is interested in education' (p. 3). The original paper edition had to be printed by the Group as hard copies, and then moved around the country to bookshops, or posted individually to those who sent a (nominal) fee. It was not easy for academic libraries to order. However, in 2012, it was scanned and put up on the Radical Statistics website for interested readers, wherever they are based, to download easily and freely.

It is likely that reviews of methods and critical guides to official statistics will continue to have a place, even if in digital more than printed form. Social media and email lists will cope with more immediate demands. Online resources are likely to increasingly link with useful experience in other countries.

New Allies and Changing Trends

At a time when it is archiving its first 40 years of papers from the past in the Wellcome Library, Radical Statistics has a future enhanced by the activity of a range of allies.

The Royal Statistical Society produces outward-looking publications and hosts web-based discussion groups – and is making available free web-based courses on Statistics for Journalists – though it would also be of interest to citizens more generally (see 'Resources' on the RSS-Statslife website). Other independent bodies such as Sense about Science and Full Fact offer related help and facilities. Full Fact, for example, maintained a fact-checking service to comment on politicians' and media claims during the 2015 general election campaign.

In addition, in recent years, many official national and transnational organisations have seen the value of making available some of 'their' data for ordinary citizens to analyse, especially if the production of that data relies on the cooperation of the public in the first place. The UK government has set up a web site (see its website) to enable access to official statistics it produces; many other governments provide a similar service. We see this trend also in the active facilitation of access to results of international surveys produced by organisations like the Organisation for Economic Co-operation and Development (OECD) (see e.g. Evans, this volume). In recent times the Open Data Institute has established a number of 'nodes' around the world, in order to promote its work internationally; see the Open Data Institute website.

A less complex and more positive example is provided by 'Constituency Explorer', produced by Durham University and the House of Commons Library (e.g. Ridgway, Nicholson, Sutherland, & Hedger, 2015); see the Constituency Explorer website. This makes available in a very accessible way data on over 150 variables for each of the 650 parliamentary constituencies in the UK. The website allows the user to quiz themselves about key features of a chosen constituency, including voter behaviour at the 2010 election.

Big Data: Information Windfall, or Merely Hot Air?

At the time of writing, trends towards the availability of exceedingly large and continuously produced datasets have caught the imagination of a number of pundits and entrepreneurs. This sort of data, which requires ever larger storage facilities (previously unavailable or highly expensive), is produced by a range of sources: for example, monitoring devices operating continuously, such as CCTV security cameras or speed cameras; social media devices offering ample information on interpersonal networks, and attitudinal and behavioural data ('likes'); and consumption patterns, produced by 'loyalty cards' for particular retailers.

Such data pose a number of challenges to which members of Radical Statistics and their allies must face up:

- Epistemological: (a) a need to reassert the traditional methodological concerns of data structure, quality, validity and bias, often played down by Big Data enthusiasts, in the belief that possessing a 'big' sample overrides such concerns, ignoring the fact that the sample may often be opportunistically selected (a striking example of the problem is given by the Literary Digest poll published before the 1932 US Presidential election [Marsh, 1979]); (b) the need for continuing critique of the 'inductivist' belief that data alone can somehow generate dependable, general theories; (c) reasserting the fact that 'big data' are often by-products of administrative systems and therefore both more affected by temporal changes of policy and procedure, and less revealing of social issues and tensions that current policy and procedures do not recognise.
- Political-economic: (a) challenging the monopolies of production and ownership
 of the facilities needed to produce 'big data'; (b) ensuring democratic control over
 the resources and methods of analysis for public policy.
- Professional: (a) developing skills in using the high quality computing facilities
 which are clearly going to become even more important in future; (b) ensuring
 that the data analyst employees of big data owners gain and retain their key
 professional functions of quality control, independently of their employers'
 particular interests.

What Radical Statistics and Similar Organisations Can Offer in Terms of Numeracy and Statistical Literacy

There is naturally distance between key corporate and government priorities for statistical work, and the statistical literacy required to make that work accessible and of use to non-government communities. Even when governments and corporations support broad purposes of statistics, the continuing need for research skills to address non-expert audiences with a variety of specific interests will ensure a future for radical statistics.

Looking to the future, Radical Statistics can offer a number of means of support to organisations – such as professional associations, community groups, or active citizens more generally – who face a barrage of numerical information that is claimed to be relevant to their work, or their daily lives. These might include providing resources, such as some of the publications produced over the years (see the RadStats website). In some cases, these resources may serve basically as models for work that might be done in other countries, or in changing circumstances. Conversely, Evans and Rappaport (1998) considered whether the 'barefoot doctors' practising earlier in some Asian countries might provide a model for the way statisticians could work with community groups in 'northern' societies.

In other cases, a group or individual might wish to address the mailing list directly; see the 'Activity' page on the RadStats website or information on how to join. (Though the list has subscribers in a number of countries around the world, the majority are in the UK.). The list receives one or more enquiries of this sort every



- 15 THE ANALYSIS CONDUCTED AT THE RIGHT LEVEL -

Figure 3. The level of analysis problem in social research

week. Sometimes they lead to several responses to the query made; on occasion, one member can enter into extended communication with the activist or researcher involved. In addition, many actions in support of progressive causes are undertaken by RadStats members as individual citizens in their community or trade union. In this way, the organisation itself acts as support to the individuals in it, allowing us to do things outside RadStats that we wouldn't do otherwise.

In illustrating the possibilities, we might cite a recent case of the use of these and similar ideas in a campaign by academic colleagues in adult mathematics education (or adult numeracy), drawing on ideas from a kindred movement to Radical Statistics, namely Critical Mathematics Education (e.g. Skovsmose & Greer, 2013). This relates to a case study of informal learning in a trade union campaign for better pay and conditions of 'casually-employed' academics.

Collective learning emerged through the academics deciding to organize around shared experiences of discontent, and working with union delegates as "barefoot mathematicians", which they relate to the "barefoot statisticians" described by Evans and Rappaport (1998). The workers learned how the relevant complex pay formula worked, and documented evidence that led to a dispute, which ultimately resulted in a win for workers. Through this campaign, the casually-employed academics came to understood at first hand the relationship between "membership density" of casual academics and strength in the union. (Yasukawa & Brown, 2013, pp. 255–256)

This educative role of 'radical statisticians' contrasts with other valuable but more professionally restricted approaches such as Statistics without Borders (see above). Nevertheless, the Royal Statistical Society has recently expanded an 'outreach' programme; see RSS-StatsLife website. The BBC has an ongoing radio series 'More or less', which like *Demystifying Social Statistics* and *Statistics in Society*, aims both to clarify the use and meaning of statistics in policy debates, and also to take

a critical look at the social role of statistics in society (see also Blastland & Dilnot, 2008).

As we write in 2015, it is clear that much of the world is in a crisis of multiple dimensions. But perhaps we can take heart from historical and biographical writings from previous periods of crisis; see for example, Kingsley Martin (1969), former editor of the *New Statesman*, on the 1930s in Europe and the UK. Such accounts teach us that, whatever name we give to groups that support the development of workers' and citizens' knowledge, such groups are vital in providing support for those that need to resist the most insidious developments and acts promoted by what is now called 'the one percent', and to develop knowledge and action that support the needs of the 99 percent.

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Wellcome Trust: http://www.wellcome.ac.uk/

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14. CRITICAL RE-VISIONING

The Construction of Practitioners in Aotearoa New Zealand's Literacy Campaign

Aotearoa New Zealand's adult literacy and numeracy education reforms, begun in 2001, have echoed those in other Organisation for Economic Co-operation and Development (OECD) nations. In New Zealand, they have resulted in two cornerstone developments: the Progressions and the Assessment Tool, both based on the international adult literacy surveys. The Progressions provide a set of itemised progressive benchmark documents for reading, writing, speaking and listening skills. The Assessment Tool provides a standardised skills-based means of charting and ranking progress across the country. Literacy and numeracy teachers are required to align their programmes with the Progressions, and the Tool has become a high-stakes test. The policy implementation of these documents serves to circumscribe the work of literacy practitioners and construct them as technicians. However, the reforms also mandated the development of tertiary-level professional qualifications, which at the same time, can offer alternative visions of adult literacy and numeracy work.

NEW ZEALAND LITERACY REFORMS

Like other western nations, New Zealand responded strongly to the literacy crises identified in the results of the OECD international literacy surveys. In 2001 The Ministry of Education published *More than words*, which outlined a three-pronged national adult literacy strategy: increasing opportunities for learning, improving the quality of provision, and developing the capability of literacy educators. The Tertiary Education Commission (TEC) has since closely directed the implementation of the strategy, with an emphasis on literacy and numeracy as essential to the economy. Several key developments were designed to guide educators' provision of literacy and numeracy (L&N) education: namely a pathway of tertiary educator qualifications; literacy and numeracy Progressions – a set of documents identifying and benchmarking an expected order of skills and language development; the standardised OECD survey-modelled National Assessment Tool; a requirement to embed L&N in vocational and workplace education; and the establishment of a National Centre for Literacy and Numeracy for Adults. These achievements

have involved large amounts of coordinated development and dissemination of pedagogical information, outreach, and teaching support documents. They have lifted the field, created recognition for L&N, mobilised and energised the sector. But as we will see, L&N practitioners' professionalism has been narrowly circumscribed in a climate of tight regulation and accountability. As Hamilton and Tett put it in describing notions of literacy in the UK, the field is now dominated by "the discourse of human resource development" (2012, p. 45). A small number of tertiary-level programmes in adult L&N education, however, have been developed to present an alternative research-based vision.

CORNERSTONES OF LITERACY POLICY

The Progressions

The underlying notions of L&N are represented in the cornerstone documents of the TEC's policy, namely the Progressions. First, it is important to recognise the advantages of progressions: They give inexperienced practitioners a sense of where to go next in terms of language and text teaching. That is, they offer an overall sense of direction and progress. They also break down literacy into linguistic and communicative descriptors that appear concrete and tangible, making them easy to identify, focus on and manage. Further, they are text-based and progress from simple to complex forms, from frequently used everyday language to specialised forms, and from short to long stretches of text. For example, they move from simple phrases to longer paragraphs. These features enable both learners and tutors to have a relatively clear sense of what they are learning, although not how they are learning. They especially benefit practitioners who might be new to the field.

The Progressions are purposefully designed to have a universalised scope, to be context-free and thus applicable in any educational setting. For example, the progressions make assumptions that longer passages of text are universally more difficult to understand and produce than shorter passages, and that specialised language items represent 'higher' levels of literacy than everyday language. The Literacy Progressions include level descriptors for the four skills, "read to understand", "write to communicate", "listen to understand", and "speak to communicate". Language and text feature descriptors (referred to as steps) in the speaking progressions, for example, range from learners' ability to "take part in short spoken conversations and speak by themselves using formulaic phrases and simple structures" (step one) to the ability to "use complex sentence structures and extend their use of language features to achieve particular purposes" (step four) (Tertiary Education Commission, 2008a, p. 14). In the reading progression, vocabulary begins with "a reading vocabulary of everyday words, signs, and symbols", advancing to "a large reading vocabulary that includes some general academic words and some specialised words" (2008a, p. 18).

One clear drawback of the Progressions, however, is the underpinning focus on decontextualised language, text, and skills, which does not take into account variability across settings, individuals, and domains in terms of how people make sense of texts; i.e. their meanings in use. In everyday communication, context carries as much of the meaning as the language itself. In fact shared understanding of context is crucial for meaning in indirect speech, metaphor, humour, and irony. A student cafeteria poster in a former workplace illustrates this: "Your mother doesn't work here. Use the bins." Despite the everyday language, many students were mystified by the implied clean-up message from the cafeteria staff. For readers with little relevant background knowledge, longer texts may include important information for comprehension, whereas shorter texts may rely excessively on presupposition. Workplaces typically use specialised jargon, which employees learn as they participate on the job, whether or not they have a broad range of other vocabulary. For most people, lexical repertoires may vary considerably according to their experiences and memberships in different Discourses.

Contraditions emerge as one works through the Progressions. Although the Progressions are context-free, the TEC intends for practitioners to design learner and context-responsive L&N programmes, and in that way considers them to be flexible and adaptable. In fact the TEC policy also requires vocational and workplace L&N instruction to be embedded in the demands of the particular work sector. The individual skills resources in the Progressions delineate tutors' responsibilities as threefold: 1) knowing task demands, 2) knowing the learner, and 3) knowing what to do (Tertiary Education Commission, 2008a). These are operationalised in the Progressions documents. Knowing the learner can be ascertained through a literacy attitude survey provided at the end of each skill progression document. Knowing what to do is guided by skills-based learning goals as outlined in the Progressions. Tutors are to employ learning activities that support the Progressions.

Task demands of different domains need to be 'mapped' according to the levels in the Progressions. This considerable responsibility means that practitioners' work is largely reduced to identifying and 'mapping' domain-related vocabulary, language items, and text-based skills to levels in the Progressions. One tutor at a national L&N symposium searched the documents of his trade materials, correlated them with general and academic word lists, and aligned them with the Progression levels to then introduce them in his curriculum. While his work was exemplary from the TEC perspective, one could argue that vocabulary practices in the trades work would have more closely reflected learner needs, rather than frequency word lists compiled from more distant sources and other contexts.

To the TEC, "knowing the learner" means knowing the learner's competence, regular engagement with, and attitudes toward literacy skill areas. This can be ascertained through a literacy attitude survey provided at the end of each skill progression document, samples of the learner's work, or a diagnostic process based on the Progressions (Tertiary Education Commission, 2008c). But the policy

regulations do not take into account learners' life circumstances, such as their work and family obligations, physical and mental health, or material resources. British research has shown the importance of embedding L&N education in learners' lives (Barton, Appleby, Hodge, Tusting, & Ivanič, 2006; Bynner, 2008). Barton et al.'s 2006 report on the extensive study of learners' lives identifies engagement, which is related to learners' purposes in attending L&N programmes, and participation, related to learners' engagements in life outside the formal learning setting. The authors outline the ways that learners' life histories, their current circumstances and identities, and their imagined futures affect their learning. For example, in addition to L&N programmes, learners may have multiple responsibilities, variable basic resources or unstable employment; they may need to "dip in and out" of programmes; they may need to find an optimal time for learning to align with their needs. Dennis (2010) elaborates on the need for practitioners to respond appropriately to learners' identities and purposes:

What it means to be a professional does not easily translate from one context to another. Working with a group of homeless adults in a large city may require a very different approach to working with primary school parents attending a family literacy class, which may be very different to offering study skills support for students working towards a National Vocational Qualification (NVQ) in construction. (p. 29)

To be effective, L&N practitioners need to be responsive to learners as whole people, as well as to the knowledge of learning and teaching, skills and language, which is partially identified in the TEC L&N documents. Barton, Ivanič, Appleby, Hodge and Tusting (2007) refer to two professionalisms, responsive professionalism to the learners themselves and curriculum and institutional professionalism. They see both as essential. Yet for the TEC, only the latter professionalism counts. The effect further solidifies the construction of L&N practitioners as technicians.

Aside from a stated emphasis on learning "embedded" in context, there is little guidance or information on how learning takes place, how it may be enhanced, or how the many dimensions of context affect literacy practices and literacy learning. In other words, the notion of context appears limited to language and text variation within particular domains. As a result, there may be a focus on the vocabulary of horticulture work documents, for example. This approach aligns with Functional Context instruction, developed for the US military after World War II. The approach emphasises the importance of context, but operationalises context largely as domain specific texts, from which skills and language can be extrapolated. Thus practitioner work is well-established as teaching from a compilation of language items and inferred L&N skills from domain-based texts. Moreover, the TEC has asserted the Progressions' continuing centrality in L&N provision across the country: "It is important that the Learning Progressions remain the single definitive framework for adult literacy and numeracy competence" (Tertiary Education Commission, 2012, p. 13).

Atractive though this may seem, there is a counter-argument to consider. Gowen (1992) argues in her critique of the functional context approach to workplace literacy, typical L&N needs analysis "assumes that employees and supervisors know and can explain in step-by-step sequence what skills are needed to perform a job well ... and that the [L&N] auditor will be able to recognise and describe literate behaviours in the same ways employees and supervisors do" (1992, p. 16). To counter these assumptions, Gowen cites research establishing the prevalence of tacit knowledge about work processes, the equivocal occurrence of transfer across contexts, and the variability of linear and nonlinear conceptualisations of workplace processes. Research on L&N practices at work supports this critique (for example, Belfiore, Defoe, Folinsbee, Hunter, & Jackson, 2004; Hull, 1999; Hunter, 2007).

The Assessment Tool

The National Assessment Tool was developed in 2010–2011 and subsequently made available across government-funded L&N programmes. Promoters of the Tool maintain that it "helps learners and their tutors/educators know where their literacy and numeracy competencies align with the Learning Progressions" (Tertiary Education Commission, 2012, p. 13). In other words, it reinforces a concept of language as a generic set of skills and universally useful language items as outlined in the Progressions. The Tool is mandatory for learners at the beginning of their L&N programmes, and for 90 percent of learners on course completion.

The Assessment Tool's assumption of universality exhibits the same kinds of inconsistencies as the Progressions relating to context and meaning. Take a past sample question on the writing section, the "barking dog" question, where students are asked to write a note to a neighbour, complaining about a barking dog. Audience is important in this question. In this kind of situation, involving requests, demands and complaints, judgments are socio-linguistically very tricky. Relationships can easily go wrong, and when messages are written down they are even more salient. What is appropriate here is not immediately clear; there is not one obvious approach. Awareness of purpose and audience depends on people's experiences, but L&N learners' experiences are often very different to those of their tutors. L&N learners are not necessarily part of the dominant culture, and tutors may have less exposure to and knowledge of learners' lives than learners have of the dominant culture, even if only through the popular media. Experiences may vary individually as well, and the scenarios of neighbourhood experiences may drive test responses. For example, neighbours may write notes because they may not be on speaking terms; they may have opposing daily work schedules; they may be too busy to talk face-to-face. Or neighbours might be on friendly terms, and a written note would seem officious. Consequently, evaluations of appropriateness and purpose on test questions like this are tacitly subjective, while promoting an image of reliability and objectivity.

Such concerns do not appear troubling to the TEC. On the contrary, as a result of what the TEC saw as "challenges" (resistance) to use of the Tool, the agency

has linked test implementation to programme funding, in order to "increase student engagement with the Assessment Tool, ensure full and proper usage of the Assessment Tool, and ensure full and proper embedding of literacy and numeracy" (2012, p. 15). That is, for L&N programmes to receive funding, programme managers must administer the Tool as required. What is more, in also requiring "full and proper embedding", the policy exacerbates the pressure on practitioners to focus their work on mapping the Progressions to the L&N demands of their teaching context and risk doing so at the expense of meeting the real needs of learners.

Particularly troubling though, for both practitioners and learners, is the policy implementation of the Tool: it has become a high stakes test, intended "to inform investment decisions [i.e. educational funding], because it will provide an insight into the effectiveness of literacy and numeracy courses" (Tertiary Education Commission, 2012, p. 21). This use of standardised testing as accountability measures for educators and educational institutions follows the current global emphasis on ends rather than means in the education sector. It aligns with the coercive, enforcing aspects of the UK and US policy models, which have been widely criticised by educators. Among a number of negative outcomes, the policy is seen to narrow instruction to a focus on the test (Au, 2007; Lobascher, 2011; Smith, 2009; Supovitz, 2009). Moreover, in general, high stakes testing is considered an economical way for governments to institute system-wide educational change, exert top-down control, reduce the authority of teachers, and signal system-wide accountability to stakeholders, namely taxpayers and voters (Au, 2007; Lobascher, 2011; Supovitz, 2009). While high stakes testing may be useful as an albeit narrow measure of system-wide progress, like the Progressions, it lacks instructional guidance and fails in leading to educational improvement (Supovitz, 2009).

The New Zealand policy, however, not only entrenches the role of L&N practitioners as technicians, whose responsibility is to produce skills-based outputs; it denies the professionalism that is essential for integrity in education.

ADULT LITERACY AND NUMERACY EDUCATOR: POSTGRADUATE QUALIFICATIONS

Among the measures initiated to build professional capacity, three universities, including the University of Waikato, developed university-level qualifications in literacy and numeracy education for in-service L&N practitioners. The TEC provided partial fee grants for a limited number of applicants. Waikato provides an undergraduate diploma and a postgraduate diploma/MEd programme. At the postgraduate level, in addition to skills-based courses in reading, writing and numeracy pedagogy, Waikato offers analytical, critical courses in literacy at work, community and family literacy and a required course, The Contexts of Adult Literacy and Numeracy (L&N) Learning, ALED 525. According to the course description, the course:

supports adult literacy educators to critically evaluate current approaches and policies in adult literacy in New Zealand/Aotearoa and internationally, with a view to becoming a reflective practitioner and change agent in their institutions.

The course introduction elaborates on the scope of the content; it:

aims to give students an overview of changing patterns of L&N in the worlds of work, community, and family life for New Zealand adults. It looks at teaching and learning through the lens of theory and research. Further, it analyses L&N education policy and practices in light of current research on situated literacy.

Overall, the course aims to develop practitioners' confidence and competence to engage alternative perspectives on literacy and numeracy education work, to articulate and enact them as possible within their current working structures. It is expressly designed to take into account the students' starting points as practicing professionals. Many are L&N programme leaders and trainers in their workplaces. Some have extensive teaching experience in unstable work environments and would like to enhance their employability through qualifications. On the whole, the popular discourse of deficit, need, and economic imperative has influenced their outlook on the importance of L&N skills. Those in leadership positions generally adhere to the L&N views expressed in the Progressions, not surprisingly, for they owe their positions to the TEC policy. They tend to see context as a domain, container or a situation that might influence L&N but that is peripheral to the centrality of skills. The courses in adult numeracy and literacy skills education may align more closely with their expectations. Thus, the context course presents a number of challenges in terms of students' perspectives and knowledge.

DOMINANT DISCOURSES AMONG PRACTITIONER/STUDENTS

The shift in thinking from L&N as skills to L&N as social practice is a formidable reconceptualisation for many. One obstacle is the policy documents that paradoxically acknowledge the role of context and social practices in L&N learning. The Progressions background material, for example, explicitly describes adult learning "as a form of participation in social practices" (Tertiary Education Commission, 2008b, p. 8), but the Progressions are underpinned by a generic skills and knowledge base. As discussed earlier, government policy promotes embedding L&N in the context of use, and the prevalent notion of context is largely based on the Functional Context Approach. In other words, it is framed by curriculum designers' interpretation of generic skills required for managing specific literacy tasks. To illustrate, one large provider, Workbase, has prepared job profiles in a number of sectors and links them to Progressions-based skills and competencies. These constitute a popular resource in workplace L&N programmes. For example, with regard to hairdressers, the most basic writing tasks involve:

Write short notes

- Enter appointment details (1)
- Write a client appointment card (1)
- Acknowledge arrival by ticking book or entering on computer (1)
- To help remember details (1)
- To inform/remind others (2) (Workbase, n.d.).

Accompanying skills are presented as:

Write simple correct text in appropriate places and in appropriate formats on job sheets and forms e.g.

- · stay on the line
- · use recognisable spelling and abbreviations
- use legible lettering (Workbase, n.d.).

This reductionist view tends to be the dominant conception among students who are L&N practitioners. That is, they see the relevance of context as involving generic skills predetermined as underlying sector-specific oral and written texts and the linguistic features in those texts. They see social practice as limited to L&N tasks in particular domains.

Students are also influenced by the broader societal discourses. Literacy as demonstrable and measurable skills is not just a TEC construct. This perspective is ubiquitous in the press and public discourse. What is more, low literacy skills are widely associated with poverty, crime, poor health, educational failure, inability to cope in the modern knowledge society, and national concerns about low productivity and economic competitiveness.

Thus the literacy-as-skills and knowledge approach offers a concrete, widely accepted approach to adult L&N education. A social practice view does not. It does not speak to learners' difficulties encoding or decoding words and sentences. The intangible characteristics of literacy practices are not easily translatable into teaching items at progressing levels. A social practice approach is viewed as "the general cultural ways of utilising written language that people draw on in their lives ... [including] values, attitudes, and social relationships" (Barton & Hamilton, 2000, p. 7). Practitioners are often challenged to see how to apply this knowledge to their teaching. Purcell-Gates, Jacobson, and Degener (2004), in promoting a model of literacy and numeracy that includes the social, have pointed out the failure of social practice theorists to systematically address issues of language, coding and decoding, and how they are implicated in social practices. This means that practitioners who see context as background information also tend not to recognise its application to what they see as core (skills) educational work.

Well-known pedagogical practices in language and L&N programmes contribute to a tacit deficit outlook toward learners. Particularly salient is the needs analysis, or individual learning plan. Learning plans typically diagnose learners' L&N needs at the start of a programme. Although many include assessments of learners'

capabilities, they tend to identify goals based on difficulties that learners need to overcome. Their focus is on deficit rather than strengths that might be built on. Along these lines, Waterhouse and Virgona, reporting on an Australian survey of practitioners, write:

adult literacy educators *may be unaware* of their departure from the espoused empowerment values of adult education. Their preoccupation with meeting administrative and bureaucratic obligations meant that the initial encounter with their prospective client/learner was dominated by explanations about the centre and its offerings, rather than a focus on the potential learner and his/her aspirations or concerns.

Teachers questioned interviewees about their past learning experiences, but strength-based discussions were not on the agenda ... The teachers were intent upon *classifying* the learners' skills and allocating them to classes. (2008, p. 20)

Waterhouse and Virgona attribute this lack of awareness, and even resistance to becoming "counsellors", to recent policy and development emphases on assessment and accountability schemes, along with the energy and time demands of the audit culture. They advocate a more relational, strengths-based stance from practitioners toward learners.

At the same time, experienced L&N practitioners in the Waikato course, particularly those who began teaching before the ministry reforms, tend to be aware of contradictions in the policies. They became teachers when a more humanist, liberating, community-oriented paradigm was dominant, and they understand the personal and social ramifications for adults with low literacy. They are often ready to elaborate the tensions of what Barton et al. (2007) refer to as competing professionalisms in their own workplaces. Barton et al. maintain that practitioners' traditional ability to support their learners, their "responsive professionalism", tends to be crowded out by the new professionalism of performativity demands. As well, in evidence from the Australian experience, practitioners in Black's 2010 interview and focus group study of adult basic education teachers reported concerns about colleagues new to the profession who would not share a historical, relational approach to learners.

Research in Australia and the UK has investigated L&N practitioner resistance to the performativity culture (e.g. Black, 2010; Hamilton, 2008; Tusting, 2009). Black reports increased negative emotions – "resentment, anger, disillusionment" (2010, p. 17) and a loss of trust – among the teachers he interviewed. He found a continuum of responses to the policy regime, which ranged from full compliance, to "ticking the box". He characterised these latter responses as allowing teachers to "work the interstices", working in the spaces available for teacher agency.

The practitioner perspectives described above are the starting points for ALED 525, the context course at Waikato. Those who see L&N practice as itemised skills and knowledge alone, or context as texts within domains, may be significantly

challenged to see the value of a social practice approach. At the same time, those who are stressed, resentful, or disillusioned, whose agency is tightly regimented, need to be able to articulate their dissatisfaction beyond what can be easily labelled personal complaint, unwillingness to change, or resistance to authority. They need to know that their response is, in Tusting's words, "a principled response of resistance" (2009, p. 21) and then look to creating alternative responses.

ALED 525: ESTABLISHING THE ROLE OF CONTEXT IN MEANING MAKING

ALED 525, The Context of Adult Literacy and Numeracy Learning, was conceived by Margaret Franken in 2009 and approved by the University Academic Programmes body with the following description, on which I based the course development:

Governments across the western world are responding to global changes in technology, business and industry by implementing national literacy policies. These policies aim to upskill workers to meet the demands of the new workplace, contribute to economic growth, and advantage nations competitively. At the same time, educational research has emphasised the importance of context in language and literacy development. Moreover, for adults, literacy and numeracy practices are *not* just an aspect of workplace participation. Many adults are unemployed. Others are recent migrants to New Zealand. The enhancement of literacy and numeracy practices for more successful participation in family, neighbourhood, and community and civic life is also a pressing concern. In this course we will critically investigate these issues.

The course begins by introducing the notion of context, its importance in text comprehension and production, and the ways literacy practices change over time and space. It challenges the widely-held view of context as a container and posits literacy contexts as dynamic configurations that both shape and are shaped in literate activities. The first part of the course looks at various aspects of context in health care, in workplaces, Māori literacies, and prisons, for example. The focus is not just to characterise the distinctiveness of each domain, but also to identify the different ways that context is implicated in the meanings of texts in use. The second part of the course looks specifically at L&N policy in light of the concepts introduced in Part 1. Weekly discussion forums are designed for students to reflect on regular research readings, assess how issues relate to their own professional experience and post their responses to a group forum. Two further assignments ask students to analyse the affordances and limitations of a teaching and learning context, and prepare a final presentation for colleagues that argues for the importance and value of context in L&N education. I consider the course delivery and content to be work in progress. At this point the online course is largely asynchronous and print-based, and while constrained in a number of ways, these features allow students flexible time to read, reflect and respond.

The importance of context in literacy and numeracy is introduced partly through photos such as the New Zealand Tui beer billboards that are based on the irony of current social issues and news. These two-part ads feature a reassuring statement based on a current event followed by the exclamation, "Yeah, right", reinforcing the disingenuousness of the first statement and drawing on shared knowledge and popular attitudes toward the issue. For example, a Christmas time billboard displayed the comment: "Don't worry, Santa will come through the heat pump." To appreciate the message, decoding skills are inadequate. Knowledge of current national issues (restrictions on open fireplaces for home heating), of the traditional Santa Claus story, of the Tui billboard format, scepticism about authorities' attempts to manipulate public perceptions, and wide visibility are key to readers' positive response to the billboards.

Social practice theory is introduced initially through Uta Papen's article (2009) on health literacy as a social practice. Papen's article shows how literacy practices are socially situated in contexts of health literacy 'episodes' that unfold over time. She argues that patients' health literacy practices are influenced by an array of complex factors, such as their relationships with and expectations of their health practitioners, their knowledge, emotions, and family relationships. The moodle introduction to the Papen reading provides background. It includes excerpts from the REALM health literacy test, which assesses patients' ability to pronounce printed medical terms; and then a sample health literacy question on reading medicine labels from the 2006 ALL Survey, along with a similar aspirin label analysis by James Gee (1991). Further reading from Pahl and Rowsell's opening chapter to the current edition of *Literacy and Education* (2012) is included. This chapter is an accessible overview to the theories of the new literacy studies. Papen's discussion of literacy practices in health care settings is straightforward and relevant to students' lives, but at the same time, social practice concepts are reinforced throughout the subsequent weeks.

The weekly discussion forums are based on one or two research readings accompanied by my introduction to each topic, with hyperlinks to additional resources. I pose a question for discussion that requires students to reflect on aspects of the reading and assess how it applies to their own professional contexts and experience.

The issues of prison contexts further illustrate the course design and student responses. The key prison reading is Kathy Boudin's (1993) poignant ethnography about her development of a participatory prison literacy programme. Boudin, an inmate in an American maximum security prison, had previously worked as a community educator, obtained her Masters in adult education while in prison, and began her prison teaching role as an aide. Her article tells the story of her work in prison to design and teach a participatory, meaningful, strengths-based literacy course. She introduces the story by describing the complex, contradictory contexts of women prisoners both before prison and during their stay. She describes the intellectually deadening but secure reading skills programme and the liberating, but

at times ambivalent, engagement with meaningful literacy work. Boudin described her fortuitous decision to focus on Acquired Immune Deficiency Syndrome (AIDS) education when the prisoners were watching a video on AIDS:

The stigma that AIDS carried reinforced a sense of guilt and shame that the women already felt as prisoners pronounced 'guilty' by the courts and society. There was a fear of just being associated with AIDS. This fear created both a collective silence and a desperate need to talk. (p. 217)

Boudin took up that need, describing "a new sense of urgency [that] entered the classroom" (p. 218). She worked with the learners to develop a multimedia programme that included individual writing on personal experiences, wide reading of AIDS materials, and most notably, a play written and performed by prisoners. Throughout, Boudin's narrative highlights contextual, often contentious issues of relationships, ideologies of individualism and collectivism, dominant conceptions of education, power, control and emotion figured as important elements.

The discussion forum in the Waikato course asked students to focus on educational affordances and constraints in the prison context, with reference to the expansive and restrictive model of workplace learning developed by Helen Rainbird and her colleagues (Teaching and Learning Research Programme, 2004). The expansive/ restrictive model identifies contextual features in workplaces that promote or constrain workplace learning. The forum questions followed up by requesting that students discuss how the kinds of contextual issues Boudin was looking at related to their own past or present teaching situation and approach to L&N teaching. Responses to Boudin ranged from "inspiring" and "intriguing" to "a middle class universityeducated woman wanting attention". They identified a variety of contextual factors, for example, how affordances could easily become constraints, as Boudin's prior experience and Freirean approach could become an imposition of her own views of education. Some commented on the paradox of ample time to study and learn in an environment of demeaning and diminished personal control, acknowledging that context is not just "black or white". Students found many links to their own teaching experiences in Boudin's writing. They reported L&N teaching that lacked meaning and relevance to learners' lives, such as nursing students' academic literacy programmes not preparing them for clinical placements, or writing programmes for corrections officers that focused primarily on letter and memo writing. One student who taught prisoners in a distance programme discussed continuing current-day constraints on prisoners' access to digital communication.

In general, the end-of-course student evaluations are very positive. Some find it transformative, stating that every L&N tutor should take the course. Some have commented that it enabled them to articulate clearly what they previously knew only intuitively as teachers. The important question for me though, is whether the course concepts have changed their thinking and their approach to L&N teaching. I can only comment anecdotally, and here the message is mixed. At a recent conference I met a former student who was a programme manager and materials writer. She

was excited by her current research identifying critical thinking skills required in the workplace. I was disappointed to hear her ambition to develop a catalogue of generic critical thinking skills required in the workplace, which she hoped to market internationally. Another student, who taught for a private education provider, described to me a "social practice" approach to workplace literacy that focused on correct form filling in the workplace – she saw it as social practice because it took place on site with authentic documents. Both of these practitioners were immersed in skills paradigms, from which they benefited in terms of employment. On the other hand, I was surprised to meet another former student at a culturally responsive education conference; she told me she had not known about culturally responsive pedagogical approaches before the course and, as a result of it, was now interested in learning more. Whereas this mixed outcome might imply a more rigorous research follow up on the impacts of the course, we need to keep in mind that when the course is finished, practitioners return to the constraining performativity culture of their teaching contexts. Moreover, new ways of thinking about literacy and numeracy may develop over time as affordances become apparent.

LOOKING FORWARD

The past decades of research and theoretical work have established the legitimacy of the new literacy studies and social practice as a key force in literacy studies. It informs situated meaning making of literacy and numeracy in use. At the same time, the social practice approaches to literacy have had little impact on education policy, both in Aotearoa New Zealand and internationally (Hamilton & Tett, 2012; Papen, 2009; Purcell-Gates et al., 2004). The absence of social practice in literacy pedagogy has allowed policy makers to construct professionalism as technical performance (Barton et al., 2007). Although much of the current policy direction is politically driven, it is also partly related to researchers' lack of attention to the ways the new literacy studies can inform teaching and learning. This absence has begun to receive attention, though, from a number of researchers. Yasukawa (2010) calls for "breaking out of the package" that constrains literacy and numeracy teacher education. Ackland and Wallace (2006) have presented a L&N teacher education plan based on social practice theories. Now that the concept of literacy as a social practice is well-established in research, we need to turn our attention to social practice in pedagogy as well.

We might draw on the words of Henry Giroux, the critical educator, who calls for:

treating students as critical agents; making knowledge problematic and open to debate; engaging in critical and thoughtful dialogue; and making the case for a qualitatively better world for all people. In part, this suggests that teachers as public intellectuals take seriously the need to give students an active voice in their learning experiences. It also means developing a critical vernacular that is attentive to problems experienced at the level of everyday life, particularly

as they are related to pedagogical experiences connected to classroom practice. As such, the pedagogical starting point for such intellectuals is not the isolated student removed from the historical and cultural forces that bear down on their lives but individuals in their various cultural, class, racial and historical contexts, along with the particularity of their diverse problems, hopes, and dreams. (2012, "Teachers as Public Intellectuals," para. 9)

To my mind, Giroux's call applies not only to L&N teachers of adult learners, but particularly to those of us who are teacher educators of practitioner/students. Indeed, from the privileged position of university teachers and researchers, our academic freedom gives us the responsibility to speak out as the "critic and conscience of society", in the words of the New Zealand Education Act.

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