

four seasons in one day –

literacies in changing climates

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Literacies in changing climates: Encouraging practitioners to become researchers

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Educational research may be viewed from a number of perspectives which include philosophical, ethical and moral dimensions. In this session, some of these issues will be addressed briefly in order to provide some background for the main topic which will focus on how research can contribute meaningfully to professional practice. It is proposed to draw on data from nationally funded research studies both in Australia and overseas as well as to explore the potential of conducting small action learning projects. In this way questions such as research ownership, access to sites and individuals, and possible methodologies will be addressed. The aims will be firstly, to show the relationships among policy, practice and research, and secondly, to encourage practitioners to participate in social research either within their communities or through critical reflection on the practices in their classrooms.

Introduction

What counts as being literate or numerate today? This is the question which has underpinned much of the research in primary education as well as adult literacy, numeracy. The answer to this question will depend on the particular point of view of whoever is asking the question: policy maker, employer, welfare organisation, teacher, practitioner and so on, and encompasses the following:

- What is understood by the terms 'being literate' and 'being numerate'?
- Who is asking the question and for what purpose?
- What are the consequences of not being literate or numerate?

Or, from a critical social perspective,

- Whose literacy or numeracy? and
- Why it is that 'being literate and numerate' are seen as social 'goods'.

The challenge for practitioners today is to be critically reflective about their teaching practice and engage with these questions in a meaningful way, thinking through their philosophical, ethical and moral dimensions. One approach might be to review recent research about these issues, another approach might be to consider 'possible futures'; what responses would be possible in an 'ideal' world. Or, an alternative could be to engage in small scale research to investigate what responses are possible within particular contexts.

Most practitioners probably wish that they could devote more time to reading and reflection on theories which inform their practice and on issues affecting the profession as a whole. However, the world of work has changed in response to the pressures of competition policy, national and international benchmarking, and the emergence of new technologies. Today's climate of corporate managerialism, continuous improvement systems with their raft of accountability and reporting mechanisms, has meant that of necessity, the practitioner's focus is usually on the day-to-day responsibilities of assessment, record-keeping, evaluation and reporting, in addition to lesson preparation and meeting students' needs.

So, with all these competing demands, why would practitioners chose to read about or undertake research?

I believe that the answer lies in the philosophical, ethical or moral dimensions of research and practice. In the introduction to her book "Playing with Time", Jane Mace (1998) quotes the voices of two women who attended adult literacy classes. Milly said "Reading and writing is something I do when everything else is done" and Iris said "I don't want to be greedy, I just want to read what's on the walls" (p.1). Mace comments that each of these women had "disqualified themselves from a literate life" (p.1) either by putting others' interests ahead of their own or by suggesting that somehow being 'fully' literate gives a certain status, a status which some believe they either cannot attain or cannot justify.

You might pause here and consider what being 'fully' literate might mean? It is possible that Iris imagines a world in which 'literate' people can read or write anything and everything without making mistakes or having to look up words. So, to her, it would be greedy to 'have' so much. Yet, you might also consider how we gain access to what Gee (1996) terms the 'goods' in society: employment, wealth, nice house, car, clothes and so on. Increasingly, access is judged in terms of particular literacies and numeracies. By 'particular', I mean literacy in standard English and knowledge of specific dominant 'ways of being in the world', what Gee calls Discourses (1996), which we often take for granted. However, if you were an Indigenous person and/or from a non-English speaking background, you would need to consider what learning and using new literacies would mean for you. If viewed in terms of assimilation it could mean loss of your culture, your community and your identity.

An alternative view would be that being literate and numerate assists the individual in achieving cognitive enhancement and economic development. It was this view which underpinned the mass literacy campaigns of the 1970s. However, as various commentators (Arnove & Graff, 1987; Luke, 1992; Limage, 1993) have asserted, many of the campaigns failed when workers realised that the functional literacy programs were aimed at making them more functional in economic terms, that is, more productive. It can be argued that it is this 'autonomous' skills (Street, 1996) view which underpins current literacy and numeracy policies in relation to Mutual Obligation and the integration of literacy and numeracy into training packages.

It is in attempting to understand not only how such policies are derived, but also in examining the literate practices of individuals such as Milly and Iris as they function in society, that practitioners can reflect on their own assumptions and practices.

So, in order to further address the original questions, firstly a brief summary of current issues and factors influencing the field of adult literacy, numeracy and basic education will be presented. This will be followed by arguments about why practitioner researchers should conduct research, how to decide on a field of study, possible research methodologies, and the value of conducting research.

Current issues affecting adult literacy and basic education

In recent years there have been at least four major changes in relation to the field of adult literacy and basic education. The first change relates to the movement from literacy as a social welfare issue, to the active promotion of literacy and numeracy as economic skills underpinning the training reform agenda of the late 1980s. Since then, they have become absorbed into the broader Vocational Education & Training (VET) agenda. Literacy and numeracy are now constructed as competencies which have economic 'value'. Thus it is convenient for governments to blame the individual for low productivity, or, as Hodgins (1994) suggests, the relatively low skill levels of society, as indicated by national surveys, are interpreted as is "an indicator of a deeper institutional malaise" (p.17). Poor literacy is linked to criminal behaviour, unemployment, poor attitudes to life and society, and so on. So, if there is a belief that a lack of literacy could trigger a national crisis, then literacy training will be used as a threat or weapon of oppression. As a result, the long-term unemployed have a mutual obligation to become 'literate and numerate' or be breached (a reduction in welfare payments).

The second major change involves the move towards a national curriculum framework which enables students to articulate into a broad range of vocational and educational contexts. It is now possible for students to choose from a range of programs from basic education, through literacy/numeracy in vocational contexts, to certificate courses leading to higher education. Accordingly, literacy provision is no longer confined to community or TAFE programs, rather there is a new range of sites and providers such as workplaces, private consultants and welfare agencies, as well as renewed debates over qualifications. At the same time, the move to competency-based training and assessment, and the introduction of industry training packages, has seen literacy-

numeracy being reported in terms of competencies and in some cases being reduced to sets of decontextualised skills.

While teaching decontextualised skills may suit some practitioners, it represents a return to what Street (1996) called an 'autonomous', deficit model of literacy which may be problematic for those educators who find it difficult to cater for individual needs within a modular, competency-based curriculum, focusing solely on vocational or employment outcomes. As Nancy Jackson (1993: 157) states "...rather than [learning] through curiosity, serendipity, experience or action... it is about policing a particular narrow mode of delivering instruction and creating a 'warrantable set of procedures'."

However, as Gee (1996:22) asserts,

Literacy is... a socially contested term. We can choose to use this word in several different ways. Each choice incorporates a tacit or overt theory about the distribution of social goods and has important moral consequences.

So, a third change has to some extent developed as a response to the 'autonomous' view of literacy. Rather than focus on individual deficit, some researchers and practitioners are looking at what people do with literacy, following Street's (1996) 'ideological' perspective. As new technologies are developed, new 'literacies' and literate practices emerge - just think of the number of young people these days who communicate through text messaging. This means that we have to reassess our own starting points and assumptions and move beyond the VET agenda to look at the broader agendas of lifelong learning, community renewal, and the introduction of new technologies.

Recently, there have been a number of research projects in the UK, South Africa, Australia and North America, which collectively come under the title 'New Literacy Studies' (for example, Prinsloo & Breier, 1996; Barton & Hamilton, 1998; Castleton & McDonald, 2001). These studies have at their core, an examination of the different varieties of literate and numerate practices across social groupings in society. They explore the nexus between what they refer to as 'public' literacies or 'institutional' literacies, and 'vernacular' literacies - personal, local literacies. For example, Milly and Iris might function well in terms of local literacies but know they have problems with public or institutional literacies. Researchers such as Barton & Hamilton also problematise the notion of 'community' in terms of the knowledges and capacities required for collaboration, networking and community development (including communicating in virtual communities). The importance of such work is that it goes beyond the economic imperative to produce functional knowledge workers, in order to investigate the links between literacy-numeracy, lifelong learning and the possibilities of developing civic responsibility or social capital within communities.

Finally, the fourth major change relates to the increased professionalism of the field. adult literacy, numeracy and basic education practitioners are seeking a place in the educational/VET industrial context that will provide both recognition and parity with other educators. While debates continue around how to include literacy and numeracy within the National Training and Qualifications Framework, increasingly practitioners are seeking a strong theoretical base for their practice and demanding improved and accredited pre-service and in-service training, in order to respond to changing policies and contexts. Practitioners cannot ignore the debates about language and learning theories or remain ignorant of policy matters, because both impact upon their teaching. Therefore, in order to be better informed, participate in debates, or more effectively cater for the individual needs of students, the role of the practitioner must also include that of 'practitioner-researcher'.

Immediately the practitioner-researcher is faced with a number of challenges. Why conduct research? How to decide on a field of research? How large should the research project be? Which research methodology is most appropriate? - to name but a few. Each of these issues will now be addressed.

Why conduct research?

As stated above, political, economic and educational contexts are continually changing and new theories continue to emerge, all of which to greater or lesser extents, inform practice. The concept of 'reflective practitioner' (Schon, 1987) encourages teachers to make their thinking about action more explicit, through a continuous process of reflection in, on and about experiences or practices in which they are engaged. The process involves a spiral of planning, action, observation and reflection. One way of doing this is by keeping an on-going record or learning log of your teaching practice in order to:

- record insights regarding new concepts e.g. review earlier thoughts and ideas
- record responses to individual or class activities
- record how effectively you are using particular teaching strategies ie putting theory into practice
- provide information for formative and summative reviews of student progress.

In "Reflections of a first timer", Daws (1990) demonstrates how the use of a journal or learning log, helped her reflect on her teaching practice and to interpret the significance of a particular experience. Similarly, Treloar (1990), when commenting on a tutor workshop, stated that:

It was only as I wrote about this that I was able to see a clear picture emerging.
If I had not written this I would not have made this discovery (p.13).

Later, Treloar continued:

Since we were discussing evaluation it shows the importance of taking seriously the need to reflect on lessons and workshops and the need to keep a journal or to develop some sort of discipline of reflection (p.13).

Secondly, the practitioner-researcher may choose to conduct a classroom mini-ethnography. While ethnography is a well established research method, the approach advocated by Hamilton (1999) is linked to the 'New Literacy Studies' in that it focuses on self-reflection and a close observation of literacy-numeracy practices. While the research previously referred to (Barton & Hamilton, 1998; Castleton & McDonald, 2001) concerned literate practices within the community, it is suggested that classroom ethnographies might focus either on the literate practices of students or those of the teacher-practitioner, or the communication among all participants. For example Falk (1995) asked teachers to talk about the theories and beliefs which informed their practice, then followed up by a close observation of actual classroom practice. The concern was the lack of congruence between what teachers said and what they did. An alternative study might involve the adult literacy/numeracy students themselves in becoming researchers of their home/community literacies, through collecting texts, photographs and recounts. Then comparing these literacies and practices with those practiced in the classroom. This could lead to a reflection on whose/what literacies are privileged and for what purpose?

Thirdly, the practitioner-researcher may wish to undertake action research in order to monitor her own practice as an on-going process. This may take the form of simply documenting everything which happens in the classroom, or the researcher may adopt a critical perspective. In this case the practitioner-researcher is an active agent in the classroom who is empowered to directly confront problems in context. Through action research, the teacher may critically reflect on her practice and understandings. An example of this is given by Horton & Horton (1999) in describing a project which examined an alternative curriculum for entry level students in an English as Second Language (ESL) program. The action research project resulted in the development of a Multiple Literacies Module to engage a range of learners from various backgrounds in developing oracy and literacy in English. The project involved a cycle of theoretical input, action research, data collection, reflection and the writing of resource materials.

In addition, a number of research studies have been conducted on behalf of adult literacy programs or councils, in response to a particular need. One such study arose when a

particular literacy program decided to develop a program for refugee women from the Horn of Africa (Trevino & Davids, 1999). The project centred on how best to meet the needs of these women and involved many inter-agency discussions. So the purpose in conducting research was determined by the perceived needs of a particular client group. In other recent studies, some of which were funded by the government, the 'client' group has been Aged Care workers (Wyse & Casarotto, 2002), young people (Ovens, 2002; Spierings, 2002) or people in non-standard work situations (Falk & Miller, 2002).

Finally, many practitioners find that in order to gain an understanding of changing social contexts or learning theories, formal study suits them best. This allows them some freedom to pursue their research interests, while providing the discipline of supervised study and the necessity to meet program requirements, as well as a formal qualification.

How to decide on a field of study?

The teacher as researcher or reflective practitioners cannot remain neutral as the teacher/researcher brings his or her own cultural understandings, biases and interests to the task and all of these influence the sort of questions to be asked. Daws' (1990) starting point for reflecting on practice was her observations of student behaviour and her responses to it.

The starting point for Searle (1991) was a student in an adult literacy class who was having difficulty with the communication demands of her workplace. Coincidentally, an industry trainer also asked for assistance, in his case in detailing communication issues in his workplace. So, the informing questions for the resulting ethnographic study of communication in the workplace (Searle, 1991), were:

- What is the nature of communication in this particular workplace?
- How can this information best be obtained?
- How can the information gained from this study be used to develop workplace communication programs?

More recent workplace studies have focused on similar issues but in relation to the implementation of training packages (see Kelly & Searle, 2000; Searle & Kelly, 2001; and other project reports archived at www.staff.vu.edu.au/alnarc).

However not all research projects start with a series of questions. Many studies begin with a particular interest in an area of study, for example:

It focuses on the learning needs of older rural Tasmanians and the potential of online technologies to foster local literacies and community well being (Miller & Falk, 2000).

From this broad statement of purpose, questions are later posed and the area of study redefined.

Zevenbergen & Zevenbergen (2003) were interested in the impact of technology on mathematical thinking at school and in the workplace. Using a combination of methods: survey, work shadowing and stimulated recall, they found very different perceptions of numeracy across students, teachers, job placement officers and employers. Senior people tended to "have a respect for technology and mental computation...and [be] more likely to comment on young people's [lack of] numeracy" (p.215). "In contrast, younger people did not see calculating as a key part of their work" (p.215). Thus in commenting on this apparent contradiction, Zevenbergen & Zevenbergen (2003) discuss the demathematisation of the workplace. That is, that "computers and other forms of technology [have] replaced many of the tasks that previously had been undertaken through laborious methods or through mental computation" (p.217). This was quite a large study with over 800 people being surveyed but not all research involves large numbers of participants.

How large should the research project be?

The size of the research project will be determined by a number of factors. In the role of 'teacher as reflective practitioner', this will mean having access to a class or workplace training over a period of time – a semester or short training course. It will also mean having the ability to allocate regular times to complete journal entries and reflect on practice. Action research, in which ideas or a particular theory is tested, or questions related to a particular interest area are examined, may also be a small scale project again requiring access to a community of learners. In the case of surveys or interviews, the sample size or scope of the project is likely to be determined by time constraints, costs (phone or travel, and data analysis) and the availability of informants. Finally, larger research projects may be limited by geography, time, availability of courses, programs or sites, cultural issues or funding constraints.

Remember, time is a major issue with short-term funded projects or semester projects linked to qualifications. It may take some time to identify the issue to be researched, to identify a site and gain the necessary access and authority to conduct research. Further, you may require ethical clearance and/or consent from the appropriate authorities and the individuals involved.

What research methodology is most appropriate?

The choice of whether to conduct quantitative or qualitative research depends on what questions are posed by the researcher and also what the researcher 'thinks' about the world, his or her beliefs and accompanying methods, that is, their 'paradigm' (Kuhn, 1970). Traditionally, the empirical/analytic method is favoured by the physical sciences, including psychology, and includes the testing of behaviour theories and systems theories. However, as governments become more interested in accountability, performance and international benchmarking, statistical analysis of survey and assessment data has led to a number of studies in Australia and overseas (McLennan, 1997; Skinner, 1997; IALS, 2000; Guenther, 2002; Bynner, 2002).

Qualitative studies, or forms of naturalistic inquiry, are often associated with research in the social sciences which focus on situational/interpretive methods such as: ethnomethodology (the study of people in society, for example Searle, 1991), phenomenology (detailed account of lived experiences, see Campbell, no date), language/discourse analysis (of classroom, workplace, policy, media, other texts, for example Castleton, 1999; Farrell, 2000), and hermeneutics (levels of interpretation or explanation, often associated with religious texts and policy analysis).

A third area of inquiry is that of critical inquiry which involves reflecting on the position of the individual (in terms of power or status) in relation to the world, or the social construction of reality. In these studies, the focus is often research which leads to social action or to the empowerment of the individual or community and includes the areas of critical theory, critical cultural studies and critical social theory (Marxism and Feminism). This particular paradigm has had a major impact on adult literacy theory and practice largely through the work and writings of Freire & Macedo (1987).

But while paradigms are enabling, they are also constraining. Lincoln & Guba (2000) discuss the differences and contradictions among paradigms, however four main areas serve to highlight the different approaches.

Firstly, each paradigm presents a different view of the social world. Quantitative research assumes that there are social facts which can be objectively analysed separate from social contexts or individual beliefs, for example some literacy and numeracy surveys and tests. Qualitative research is socially and culturally constructed through individual or collective accounts of the situation, for example seminal studies by Heath (1983) and Gowen (1995). Viewed from a critical literacy perspective this means that literacy can only be understood in terms of its social and political context (Gee & Lankshear, 1997).

Secondly, the purpose of the research is viewed differently by each paradigm. Quantitative research seeks to explain the causes of changes in social or educational facts through objective measurement and quantitative analysis; studying 'how' and 'why' things happen. Qualitative research is more concerned with understanding the social phenomenon from the actor's perspective through participation in the life of those actors. For example, participant observation may be seen as a systematic attempt to discover the knowledge a group of people have learned and are using to organise their behaviour (Spradley, 1979). Alternatively, critical theory would suggest that 'literacy' is a powerful tool which may be used as a weapon of oppression, in order to maintain the power of the elite/dominant group, whether cultural, social, economic or political.

The third area is that of the differing approaches to research methodology. Quantitative research employs empirical, experimental or correlational designs in order to reduce error, bias and other extraneous information which may affect the data. Often the researcher starts with a null hypothesis which the researcher attempts to prove. Qualitative research is naturalistic in design and often uses prolonged observations and ethnographic interviews, including narratives and oral histories which allow the reader to 'hear' the voices of the actors and become immersed in the social situation being studied. This method of research may also include action research, mining archives, analysing talk, policy documents or records, as well as allowing for the affective domain, in which the context has a bearing on the actor, the language and practices, the non-verbal cues, and interpretation of these (see Denzin & Lincoln, 2000, for further explanation of a range of methods; Searle, 1998 for oral history and Searle, 1996, 1997 for workplace examples). If a critical ethnological approach is taken then the researcher is interested in, for example, being explicit about the distribution of power in a classroom (Baker, 1991) or the ways in which texts construct reality i.e. how the language of texts is determined by particular ideologies, systems of power, knowledge or institutions (Fairclough, 2001).

Finally, the role of the researcher differs depending on the form of research. In quantitative research, the researcher employs 'scientific' methods to remain objective and detached to avoid bias. However the researcher in qualitative research becomes a participant or an observer within the social situation and becomes immersed in the culture being studied. The researcher looks for patterns of behaviour, how the patterns interrelate and how meaning is derived from within the culture (Saville-Troike, 1982). If a critical approach is adopted, then the researcher will be examining the patterns of behaviour in terms of how the practices are based in, or function as part of broader social institutions and political ideologies.

Research in adult literacy

Most of the early research in adult literacy used an empirical approach. This included the analysis of data from the U.S. Bureau of the Census, the U.S. Army and early readability studies (cited in Levine, 1982; Kirsch and Guthrie, 1977-78). These studies were built upon in the 1980s with the workplace literacy studies of Sticht (1975, 1977) and Mikulecky (1981, 1982, 1984, 1986) in America. In Australia, similar studies were conducted in relation to literacy in the army as reported by Dymock (1993). The first adult literacy survey conducted in Australia took place in Sydney (Goyen, 1976) but of far greater importance was that undertaken by Wickert (1989). This national study *No Single Measure* had a much larger sample size and was used to inform the government of the day as to the extent of literacy/numeracy abilities in the population. As the title suggests, it also challenged the previous view of literacy as a unitary concept. Wickert adapted the items used by Kirsch and Jungeblut (1986) in a survey of American youth, in order to identify three types of literacy: document, prose and quantitative with an emphasis on what people could or could not do in relation to real tasks. More recently, similar methods have been used in a number of OECD countries to map the literacy and numeracy skills of the adult population (IALS, 2000). In Australia, the Australian Bureau of Statistics conducted research using a national sample survey method to report on a number of issues including what people reported about their literacy and numeracy

abilities (Skinner, 1997) and their assessed abilities (McLennan, 1997). The findings for each literacy type or dimension were reported as well as reasons for variation in performance, literacy in English and non-English speaking born, workplace implications, and the role and influence of literacy practices and attitudes.

Additional research in adult literacy and numeracy has also been funded by government departments or agencies, in order to provide evidence for policy development or to evaluate the effect of government policies or strategies. Such research often draws on both quantitative and qualitative methodologies and may take the form of extended literature/research reviews, case studies or investigating practice (see the National Centre for Vocational Education Research website www.ncver.edu.au).

Naturalistic research in literacy has largely drawn on the work of Heath (1980, 1982), Scribner (1983), Taylor and Dorsey-Gaines (1988) in the United States, and Barton, Hamilton, Ivanic and others in the England, Prinsloo & Breier in South Africa, and work of the Adult literacy & Numeracy Australian Research Consortium (ALNARC) in Australia (see www.staff.vu.edu.au/alnarc). Increasingly, researchers in adult literacy, numeracy and basic education have become interested in documenting literacy and numeracy practices as well as presenting individual voices: of workers, women, practitioners or students. For example, Shore, Trenerry & Coombe (2001) have edited a collection of reports which resulted from a number of small scale practitioner-researcher projects. The projects explore that intersections of literacy provision across different contexts meeting a range of needs from women moving on from domestic violence, to women writing for performance. Specifically the accounts

...point to the importance of stories about teaching and learning that will provide a counterbalance to the line of reasoning that 'one size fits all' ... and, at the same time, unsettle our notion of what 'doing literacy' and doing literacy research' can be. (Shore, Trenerry & Coombe, 2001, p.3)

What is the value of conducting research?

So what is the point of doing research? What is the value of 'teacher as reflective practitioner' or 'teacher as researcher'? Firstly, reflection enables the teacher to interpret the significance of a particular experience. Secondly, reflection through writing in a learning log or journal enables the practitioner to record and interpret experiences and integrate these into classroom practice.

Teachers/practitioners are in the best position to observe what goes on in the classroom, the workplace or in the community and to conduct action research, in other words to learn the 'culture' of these sites. Through observation it is possible to analyse: who the people are (actors), what people do (actions, behaviour), what people use (artefacts) and what people say/write (texts/genres). Using a critical ethnographic approach it is possible to evaluate:

- group participation and responsiveness
- individual behaviour within a group
- individual and group attitudes
- peer dynamics
- classroom/workplace/other structures and organisation
- teaching methods and materials
- teaching style
- learning environment
- student-teacher interactions
- development of the learner (history of success)

Peer consultations or collaborative research may serve as a process of review. This may take the form of inviting a colleague to conduct classroom observations in order to document teaching practice and validate previous observations. Or a colleague may be willing to trial and evaluate new teaching materials or strategies.

Although conducting research, whether quantitative or qualitative may seem like a lot of hard work it is really worth while. The practitioner as researcher gains valuable insights into what people are doing and the language and texts they use. In addition, you also gain a valuable piece of research which can be shared with other literacy workers.

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