

Reframing adult literacy and numeracy course outcomes: A social capital perspective— Support document

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Appendix 1

Semi-structured interview schedules for teachers and students

Interview schedule for teachers

1. Tell us a bit about this course you're teaching – the students, the type of activities?
2. How long have you been teaching these kinds of courses?
3. How many students (proportion) in this group have dropped out along the way?
4. How do you decide what to teach and how?
5. What do you think students get out of this course?
6. Do you tend to get to know much about what these students do outside this class?
7. What differences has this course made for your students? Tell us a few stories.
8. What changes have you see in the way students interact in this class?
9. Can you tell us about a group/class that really worked?
10. How do you know when you've done a good job?
11. What sort of strategies have you realised seem to work better than others?
12. What is it that you do that produces these sorts of outcomes?
13. How do you report student outcomes?
14. What do you think about this? How do you think this could be improved?

15. Specifically, what do you think should be reported on that isn't now?

Interview schedule for students

1. Why did you first come along to this course?
2. Why have you kept going with the program?
3. Were there any surprises along the way – things that you didn't expect?
4. What did you get out of the program?
5. Are you using any of this stuff outside – at home? Work? Leisure etc?
6. What are you involved in now that you weren't before?
7. Are you the same person now as you were before?
8. What do you like best about coming?
9. Why is this program important for you? How?

Appendix 2

Tables related to student sample

These four tables provide supplementary information on ways of viewing the sample of students, by site, gender, English speaking background (ESB) and Indigeneity. The tables have been labelled using letters (a) – (d) rather than numbers in order to avoid confusion with the tables contained in the main report.

Table (a): Student interviewees: Breakdown by site

Site	Males	Females	Totals
Darwin	8	5	13
Townsville	10	2	12
Sydney 1 (NESB class)	6	13	19
Sydney 2 (Youth class)	6	7	13
Totals	30	27	57

Table (b): Student interviewees: Age by gender

Age	Male	Female	Totals
15-24	10	10	20
25-44	6	6	12
45-72	14	11	25
Totals	30	27	57

Table (c): Student interviewees: Age by English speaking background

Age	NESB	ESB	Totals
15-24	0	20	20
25-44	4	8	12
45-72	17	8	25
Totals	21	36	57

Note: Most of the Indigenous students were also of ESB.

Table (d): Student interviewees: Age by Indigeneity

Age	Indigenous	Non-Indigenous	Totals
15-24	6	14	20
25-44	2	10	12
45-72	4	21	25
Totals	12	45	57

Appendix 3

Information about courses

The information here supplements the information provided in the main report for this study under the heading in the Methodology chapter titled 'Courses'.

Students and staff selected for interview were drawn from four courses in which all these students were enrolled – with the exception of one student who had recently completed his enrolment. These four courses are listed here, and greater details about the courses, some reference to the course requirements and kinds of pedagogies and other matters follow, under the respective institutions that housed the courses:

- ✧ Certificate of General Education for Adults (CGEA)
- ✧ Language, Literacy and Numeracy (LLN)(Statement of Completion)
- ✧ Certificate in Foundation Adult Vocational Education (FAVE)
- ✧ Certificate One of Vocational Access (Supplemented in one site by students enrolling in Independent Learning Plans (ILP201)

Metropolitan TAFE College in North West Sydney

Description of the adult literacy and numeracy program

Two similar but related adult literacy and numeracy courses are taught in the Adult Basic Education section of this NSW TAFE College: Language, Literacy and Numeracy (LLN), an accredited short course and the Certificate in Foundation Adult Vocational Education (FAVE). Interviews were conducted with students enrolled in either of these two courses. The LLN course involves small group tuition of 6-8 students meeting twice a week for a total of six hours. The FAVE course involves student/teacher groups of 15:1 and 15:2 with students also meeting twice a week for a total of six hours a week for core literacy/numeracy modules. In addition these FAVE students may choose elective subjects including computer skills, media studies and oral skills. The usual articulation path for students is from LLN to FAVE and from there to a range of vocational and community programs. The LLN course is usually completed in one year, and the FAVE course which incorporates several statement of attainment courses leading up to the final certificate level typically takes two years to complete. The student catchment area for this college includes high NESB migrant populations, and in particular, people from China, Hong Kong, Korea, and a range of Middle Eastern countries including Iran and Afghanistan. It is estimated that at least 90 per cent of students enrolled in the above literacy and numeracy courses at this college are NESB.

Metropolitan TAFE College in Northern Sydney

Description of the adult literacy and numeracy program

Over the past seven or eight years the Adult Foundation Education (AFE) section at this college has focused almost exclusively on a youth program which they call CGVE Flex. The CGVE

(Certificate in General and Vocational Education) is the TAFE equivalent of the School Certificate, the Year 10 school leaving certificate undertaken in all NSW schools. At this TAFE college the CGVE can be undertaken 'face-to-face' which is similar to a school-based delivery or 'flexibly' which is the mode the AFE section focuses on. CGVE Flex is the mode of delivery chosen by the majority of 'at risk' students. Additionally, all students enrolled in CGVE Flex are enrolled in the basic literacy and numeracy course FAVE (Foundation and Vocational Education) because in the experience of the AFE section, virtually all these students have difficulties with literacy and numeracy, some with quite extensive problems.

Both FAVE and CGVE Flex are self-paced. Students enrol in core literacy, numeracy and science subjects and have a wide choice of additional study modules to choose from. Thus each student has an individualised program to work through and they have a timetable indicating which days they should attend (usually two or three days/week). Students have set goals and timelines which they agree to and they are assigned a teacher as a mentor. The course is designed to be completed in one year, but because it is self paced, students complete the course at various times.

The program operates from three small classrooms where students work individually and can get assistance at any time from teachers on duty. At any one time there could be three or four teachers available. Attendances are not strictly enforced, and thus some students may have very irregular attendance while at other times they may work through their study modules at a much accelerated pace.

Higher Education Campus, Darwin, Northern Territory

Description of the adult literacy and numeracy program

A wide range of adult literacy and numeracy courses are taught in the Adult Basic Education section of the institution from preparatory education courses (equivalent of year 10 at high school) through to Tertiary Enabling Programs designed to help students obtain a Tertiary Entrance Ranking (TER score) to meet university entry requirements.

Interviews were undertaken with participants in the Certificate I in General Education for Adults (Introductory/Level1/Level2), and the Certificate II in General Education. The courses are accredited short courses licensed for delivery in the Northern Territory. The Northern Territory has the highest proportion of Indigenous people of any jurisdiction in Australia (24%). In the LLN courses targeted for interview most participants identified as Indigenous Australians.

The LLN courses involve small group tuition of 3-8 students meeting up to four mornings per week for the eighteen week VET semester. Some participants register for participation as a component of their Newstart requirements with DEST. The courses are organised through the Casuarina Campus of the institution but delivered at a range of locations. This includes two locations negotiated with a local Indigenous organisation Darwin CDEP Inc. The CDEP program is often termed work for the dole, and aims to provide meaningful opportunities for Indigenous community members to gain skills through education, employment and training that also support the local community.

In all courses students work towards outcomes set as course benchmarks by DEST. In addition to LLN core modules students may choose elective modules including computer skills, first aid and introduction to horticulture skills. The institution is a dual sector education provider with well linked pathways to a wide range of vocational and community programs and higher education courses. The Certificate I (Level I Introductory) course is usually completed in six months and the total course which incorporates several statement of attainment courses leading up to the final certificate level typically takes two years to complete.

Barrier Reef Institute of TAFE, Townsville

Description of the adult literacy and numeracy program

The 'stand alone' literacy training is conducted in a combined class comprising students enrolled in Certificate One in Vocational Access and Certificate Two in Adult General Education. To add flexibility to the literacy training available, students can also access literacy via non-assessable modules in the Independent Learning Plan. In fact, most students are enrolled in Independent Learning Plan modules. Some Certificate Two students are enrolled in Certificate One in order to access specific literacy training via the Independent Learning Plan modules. Day and evening classes are available. The class composition is typically very diverse, ranging in age from school leavers to people in their sixties, and from a range of cultural and employment backgrounds.

Appendix 4

Extended literature review

Towards a social capital perspective

In view of the rising popularity of the concept of social capital in recent years and its new significant role within global organisations such as the OECD (2001a) and the World Bank (1999a) and also in domestic national politics (Australian Bureau of Statistics 2004; Costello 2003; McMurray 2003; Productivity Commission 2003) it is perhaps surprising that it has taken so long for this link with the field of adult literacy and numeracy. In some respects this link has still to be acknowledged as a recent overview of 'literacy in the new millennium' (Lonsdale & McCurry 2004), and a study of international trends in adult literacy policy and programs (McKenna & Fitzpatrick 2004) make no specific reference to social capital. It is the relative absence of the acknowledgement of social capital that provides the broader aim of this study, which is to explore the relevance of social capital to the field of adult literacy and numeracy, and in particular, to program outcomes.

At a policy informing level there are some encouraging signs to be gleaned from recent national adult literacy and numeracy forums and debates. The Australian Council for Adult Literacy (ACAL), for example, states literacy and numeracy capabilities are an essential resource for 'active citizenship' and 'community development and cohesion' (ACAL 2004, p.3), terms which are associated with social capital. A recent national adult literacy forum (DEST/ANTA 2004, p.3) suggests the need to address the role of literacy in developing human *and social* capital. Wickert and McGuirk (2005) indicate the role of social capital in community capacity building projects based on cross-sectoral approaches to addressing community issues. In these projects literacy and numeracy provision is embedded or 'built-in' rather than 'stand-alone'. And Falk and Guenther (2002) in relation to the work of the future, draw attention to the particular need for social capital resources (including self esteem and self efficacy) for the unemployed, the underemployed and the working poor.

For more than a decade in Australia the primary focus for adult literacy and numeracy policy and program outcomes has been the promotion of human capital (see Castleton & McDonald 2002). Flagged in *Skills for Australia* (Dawkins & Holding 1987) and implemented as federal government policy with the *Australian Language and Literacy Policy* (DEET 1991), the aim has been to develop literacy and numeracy skills for jobs and economic development, to better serve the needs of individuals, communities and the nation's competitiveness in a globalised economy. As Falk and Guenther (2002) indicate, the links between Australia's literacy and numeracy skills and human capital as they impact on individual economic wellbeing are well established. As Lee and Miller (2000, p.1) report:

One of the strongest empirical regularities in the Australian labour market is the positive association between educational attainment and labour market success. In analyses that examine the average income return to years of education, each additional year of education is associated with around eight per cent additional income.

These *links*, however, do not imply *causality*, so to argue that 'literacy=jobs' is, in a large number of cases, fallacious. In fact, human capital theory has been criticised on the grounds of lack of

evidence that it actually works in bringing about economic development (e.g. Marginson 1993, p.31; Porter 1993, p.38) and particularly in relation to the role of literacy and numeracy skills (Luke 1992, p.10; 1993).

Two additional problems with the assumptions often made about the links between education (in this case, literacy) and the labour market are that: (a) fewer Australians are gaining access to this qualification/income scenario, due in large part to the changing nature of work – out-sourcing and casualisation of the workforce result in reduced access to workplace training where literacy and numeracy training occurs through Training Packages (Falk & Guenther 2002, p. 21); and (b) labour markets are often thin or indeed close to non-existent in a large proportion of remote and rural communities. The latter is particularly the case with the Northern Territory, where many of the rural and remote communities are predominantly Indigenous, and employment opportunities are limited and often rendered illusory through, for example, CDEP. For a large proportion of Australians, then, the question of what constitutes a ‘good outcome’ from adult literacy programs needs to be seen from a broader perspective, one where outcomes from literacy programs are seen as, and actually are, used and useful for other purposes (See, for example, Kral & Falk 2003 for research into the literacy practices used and useful in one Indigenous community, and the implications for education, training and health outcomes).

According to Falk (2001a, 2001b, 2001c) part of the answer to the conundrum about the strengths and drawbacks of a solely human capital perspective on adult literacy program outcomes lies in human capital not being sufficient by itself. Skills and qualifications may be applied sooner or later; they may be applied to getting a job; to improving someone’s health through better interpretation of printed material, or result in acquiring the confidence to undertake further study of some kind. These various outcomes of literacy programs may or may not, in turn, rely on ‘literacy’ *per se*, or on learning to learn, or on learning to *apply* existing literacy skills. All are legitimate outcomes, all important to individuals and/or society, and all are separate issues from the simple production of human capital.

What this suggests is that it would be useful to capture potential outcomes of adult literacy programs that show not only the individual skills or qualifications, but the use to which they are put. And putting skills to use involves not just human capital but social capital as well. In the case of jobseeker literacy programs, for example, Falk (2001a, 2001b, 2001c) argues that the acquisition of work-related basic skills is largely ineffective for gaining employment unless people also have the requisite social capital involving social networks. For Falk, the issue is as much about ‘learning identity’ as learning basic literacy and numeracy skills:

Through engaging the trust of learners and introducing them to meaningful and useful networks of power and influence, the learning scaffolds the growth and development of identities across educational, work, civic and life worlds (Falk 2001c, p.314).

Shifting conceptions of literacy and numeracy

Before proceeding further it is important to clarify what we mean by the terms literacy and numeracy in this study and to explore the high premium placed on being literate and numerate in contemporary Western society. Clearly, it means much more than the basic skills associated with being able to read, write and calculate (for a detailed account of adult literacy and numeracy definitions see Falk & Millar 2001). Currently there is no accepted definition of literacy. For many years literacy was defined as including:

... the integration of listening, speaking, reading, writing and critical thinking. It includes the cultural knowledge which enables a speaker, writer or reader to recognise and use language appropriate to different social situations. (DEET 1991, p.4)

But defining literacy is no easy task; the concept has broadened enormously (Hamilton & Barton 2001, p.217) and the above definition is no longer considered suitable for the new world of multiple literacies (DEST/ANTA 2004). There are now calls for a new definition of literacy but at the same time this is considered highly problematic (DEST/ANTA 2004, pp.2-3). How we define literacy depends on how we view literacy; that is, on the theoretical approach we adopt (see next section).

Adult numeracy is often seen to be included within the definition of literacy, that is, literacy ‘... also includes the recognition of number and basic mathematical signs and symbols within text ...’ (DEET 1991, p.9). This is also problematic. There is a complex interrelationship between literacy and numeracy (e.g. Baker & Street 1994; Lee & Chapman 1993) and while many studies have subsumed numeracy within literacy (see Watson et al. 2001, p.3), including to a large degree this current study, increasingly in recent years adult numeracy has gained recognition as a distinct field of study (e.g. Baker 1998; Johnston *et al.* 1997). In 2005 in Australia it commands a sufficiently significant role to have its own national conference (ACAL 2005).

In the space of little over thirty years the field of adult literacy and numeracy practice has shifted from a focus on individuals suffering the personal debilitating effects of illiteracy and requiring one-to-one tuition from volunteer tutors (e.g. Charnley & Jones 1979; Grant 1985), to a focus on literacy and numeracy as national and international imperatives for economic and social well being (e.g. DEET 1991; OECD 1995, 1997, 2001b; OECD & Statistics Canada 2000). This shift, described as ‘marginal status to centre stage’ (Black 1990), has seen adult literacy and numeracy develop into complex concepts regarded by government and business as important underpinning competencies in a whole range of contexts in the formation of what Marginson (1997, p.147) has called the ‘economic’ citizen. This is especially the case where the development of these competencies has become integrated in vocational education and training (Courtenay & Mawer 1995) and more recently, ‘built in’ to industry training packages (e.g. ANTA 1998; Falk, Smith & Guenther 2002; Fitzpatrick & Roberts 1997, Wignall 2003). In terms of provision, the economic imperative involving workplace and jobseeker programs has dominated government funding of the field since the time of the *Australian Language and Literacy Policy* (DEET 1991). At both national and international levels literacy and numeracy skills are presented as the ‘key’ to economic development (OECD 1995, p.23), and a country’s ‘literacy levels’ are now widely reported – accurately or inaccurately as causally connected – to that country’s industry productivity and national economic status (OECD & Statistics Canada 2000).

Most recently the field of literacy and numeracy is seen to be in the process of a further shift into a broader framework incorporating both lifelong learning (Hamilton 2000; OECD 2001b; Suda 2000) and social capital (e.g. Falk & Guenther 2002; OECD 2001a; Parsons & Bynner 2002). This may be viewed as part of the ‘social turn’ as Gee (2000) calls it as researchers increasingly examine literacy and numeracy as social practices embedded in the activities of everyday life and linked to socioeconomic wellbeing. This appears to be reflected in recent community capacity building projects which adopt a whole of government/community approach in addressing social and economic issues (Core Skills Development Partnership 2003; Wickert & McGuirk 2005).

Theoretical approaches to adult literacy and numeracy

While the various shifts affecting the field of adult literacy and numeracy have been briefly outlined here in a chronological or linear fashion, what it means to be literate and numerate in contemporary Western society remains contentious and depends on how we view literacy and numeracy, on the theoretical approach we adopt. Four main approaches have been identified: basic skills and functional, growth and heritage, critical cultural, and learning literacies through social capital (see Falk & Guenther 2002, pp.4-8; Falk & Millar p.17). The following section draws directly on these sources.

Basic skills and functional approach

This traditional approach views reading and writing as perceptual and/or cognitive skills. There is an emphasis on how sight word recognition and phonics affect the acquisition of literacy.

Literacy is seen to comprise a neutral and discrete set of skills to be learnt, usually at school, and then applied to other situations in life requiring reading and writing, that is, literacy is seen to be 'autonomous' of social context (see Street 1984, 1993). This is the most common understanding of literacy and invites use of its corollary term, illiteracy, to describe the failure of people to acquire requisite literacy skills. In particular it is the most commonly reported meaning of literacy in the popular media and leads to discussion of 'problems' associated with a 'deficit' in basic skills and dominant negative constructions of 'illiterate' people (see Wickert 1993). This approach has perpetuated understandings of literacy (or illiteracy) crises with calls for 'back to basics' for the past few decades (e.g. Luke 1988; Welch & Freebody 1993). In human capital theory these 'basic skills' are perceived to be linked to benefits to industry and economic development (e.g. Temple 2002; World Bank 1999b). Numeracy similarly is commonly interpreted within this approach as basic skills, arithmetic and computational work (Cumming 1996).

Functional literacy refers to those literacy skills required to perform certain 'functional' tasks, such as those related to managing one's domestic, work or public life (for a critique see Levine 1982). Using a contemporary example, operating an automatic teller machine illustrates the way in which literacy (e.g. read 'Enter Pin number') is seen to incorporate numeracy (entering digits) in a 'functional' task. However, the literacy and numeracy required for 'functional literacy' tasks are often taught as 'basic skills', that is, they are abstracted from real life integrated tasks for the purpose of skills acquisition.

Growth and heritage approach: 'Whole language', 'language experience'

The 'growth and heritage approach' focuses on the processes of literacy acquisition as part of the 'whole' social context in which it occurs, and that comprehension should develop alongside skills (e.g. Cambourne 1988; Goodman 1986). The emphasis is not so much on the text or the product but on the relationship among comprehension, sight words, grapho-phonics cues and the context in which they are used. The primary principles of whole language are that learners are actively constructing meaning the whole time (e.g. Edelsky 1991). The focus is on the whole texts as the primary unit of meaning rather than words or graphemes (Campbell & Green 2000, p.130).

'Language experience' is a teaching approach based on the 'whole' experience of the learner (e.g. Ashton-Warner 1963; Bird & Falk 1977). The experiences of the learner are drawn upon before the language activity begins. They form the basis for language activities, and required sight words and phonic elements are covered in the context of the whole experience.

Critical-cultural, new literacy studies, integrated literacy, multiliteracies

Literacy is seen here as social practice and is socio-culturally situated (Barton, Hamilton & Ivanic 2000; Baynham 1995; Gee 1996). This is the view of 'critical literacy' as a set of socially organised practices in which basic skills for decoding, encoding and fluency connect to all aspects of an individual's and community's sense of social identity and capacity (Fairclough 1989; Gee 1996, 1999; Lankshear & McLaren 1993; Muspratt, Luke & Freebody 1997). The purpose of literacy in this case is to gain command over social resources, often framed within terms of discourses (Fairclough 1989, 1992; Gee 1999) and sometimes referred to as 'empowerment' (Freire 1985).

Because of the dynamic nature of language and society, people continually have to embrace new and specific social practices, which in turn form a specific literacy (Lankshear et al. 1997). In fact, the multiplicity of literacies for different purposes in different contexts has come to be known as 'multiliteracies' (Cope & Kalantzis 2000; New London Group 1996). Once again, perceptions of numeracy parallel those of literacy, with the concepts of numeracy as social practice (Baker 1998;

Cumming 1996; Johnston et al. 1997) and numeracies (Street, Baker & Tomlin forthcoming). Literacy and numeracy, therefore, both have social, political and educational implications. They are often seen to be involved with ideology, with power and control of social resources of one group or individual in society over another (Black 1995, 2004; Searle 1999). It is the important place of literacy and numeracy in this control over social resources that leads to consideration of literacy, numeracy and vocational education and training (VET) in connection with that social resource known as social capital (Putnam 1993).

As with multiliteracies and critical literacy, researchers of the New Literacy Studies argue that literacy practices are embedded in different social practices, and that these practices represent a multiple concept of literacy, or more accurately, 'literacies' (e.g. Barton 1994; Barton & Hamilton 1998; Baynham 1995; Gee 1996, 2000; Prinsloo & Breier 1996; Street 1995). It makes sense then, that the learning of 'literacy' is instead treated as learning multiple literacies or multiliteracies. Within this approach literacy and numeracy skills are integrated within a wide range of tasks/events and practices in everyday life; they are embedded in social contexts and are inescapably linked to ideology and power relations (i.e. the 'ideological model' see Street 1984, 1993).

This integrated concept of literacy and numeracy skills was first promoted in vocational education and training in Australia in the early 1990s (Courtenay & Mawer 1995). It has since been extended to the development of training packages in each industry sector (e.g. Haines & Bickmore-Brand 2000; Kelly & Searle 2000; McGuirk 2000; Millar & Falk 2000; Sanguinetti 2000; Trener 2000).

Learning, literacies and social capital approach

This approach emphasises the importance of three aspects of literacy and treats each aspect as equally important to successful learning. The aspects are literacy resources, learning and social capital. The approach stresses the idea that learning is not simply a warm and fuzzy 'process', but has outcomes and impacts which are facilitated by the simultaneous development of social capital resources (Castleton & McDonald 2001; Falk 2001a, 2001b, 2001c). Social capital resources are the appropriate networks, trust and common values brought to the (learning) task in hand and they are made explicit in this theory of learning. Social capital resources are found to facilitate the application (transfer) of learning outcomes.

It is through this kind of learning (wherein social capital resources are developed explicitly) that the Freebody and Luke (1990) four aspects of a successful 'literate' learner are adopted: that of code breaker, text participant, text user and text analyst. Social capital makes the connection to the wider society's socioeconomic framework in a way that is not made in previous theories. The research literature reports that there is now wide recognition that purely economic strategy is insufficient for socioeconomic wellbeing (e.g. Rifkin 1999; Saul 1996). Currently Western society, along with its education and training systems, is promoting the idea of lifelong learning, with the associated concepts of a learning society (Young 1995) and learning communities (Alheit & Kammler 1998; Falk 1999; Holford, Jarvis & Griffin 1998). Effective engagement with these concepts requires that traditional forms of education and training be combined with social capital (Putnam 1993; Schuller 1996; Schuller & Field 1998).

The *learning literacies through social capital* approach also enables the transfer of literacy learning to other life settings. Falk (2001a), for example, demonstrates how purposeful and appropriate social networks may enable jobseeker literacy programs to lead to employment-related outcomes, and how trust in self and in the tutor provides the first step in the transfer of informal learning to formal learning processes (Falk 2001b).

Literacy and numeracy programs

In addressing the issue of adult literacy and numeracy program outcomes in this research study it is important to be aware of the wide range of existing programs. McGuirk (2001) in a 'national snapshot' of adult literacy and numeracy provision provides a useful framework. Three main types of provision are outlined:

- ✧ Nationally funded programs including Workplace English Language and Literacy (WELL) and jobseeker programs previously referred to as Literacy and Numeracy Training (LANT) and now referred to as the Language, Literacy and Numeracy Program (LLNP)
- ✧ Major accredited programs in general education and adult literacy and numeracy stand alone courses
- ✧ Provision offering literacy and numeracy support for vocational programs, including training packages

Within these provision types however, there is considerable overlap and diversity. WELL and LLNP for example both include accredited programs provided in 'stand-alone' courses. And in the case of WELL, training packages feature extensively. There are also many informal, non-accredited programs conducted in local community settings.

It is very difficult to generalise these programs. WELL programs, for example, are conducted nationally and are almost always provided in the workplace but they may take many forms. They may include one-to-one provision or small group or both, and the curriculum could include 'stand-alone' literacy/numeracy courses or vocational support (known in New South Wales TAFE as tutorial support), in which literacy and numeracy assistance is provided for students/workers undertaking vocational qualifications. In these programs literacy and numeracy are 'integrated' within vocational courses based on industry training packages. Jobseeker programs are also national. They tend to be 'stand-alone' accredited literacy and numeracy programs in group tuition ranging from student/teacher ratios of 6:1 to 15:1.

As McGuirk (2001, pp.24-5) indicates there is a wide range of accredited literacy and numeracy programs which are classroom based and 'stand-alone'. Public provider programs in TAFE and community colleges are more extensive in some states, and in particular in NSW and Victoria, and in other states and territories there is greater reliance on community and volunteer programs. Typically, stand alone literacy and numeracy programs feature small group tuition of 6:1 or 8:1, and rising to 15:1.

Many programs include integrated literacy and numeracy skills, as with many 'youth at risk' programs and, as indicated earlier, vocational programs based on training packages. In many such programs the literacy/numeracy teacher provides support in the form of team teaching with vocational teachers (Black 1996).

Literacy and numeracy program outcomes

By program outcomes we mean 'changes in learners that occur as a result of their participation in adult literacy education' (Beder 1999, p.4). A useful distinction can be made with the term 'impacts' which can be seen to refer to 'changes that occur in the family, community, and larger society as a consequence of participation' (Beder 1999, p.4). In light of the literature cited so far, in considering outcomes (and impacts) from adult literacy and numeracy programs we need to be aware of both the range and type of programs referred to and the theoretical approach that we adopt.

In the literature on adult literacy and numeracy programs, and in particular in relation to outcomes, the beginning of the 1990s heralded a marked change. Up to 1990 there appeared to be a high degree of consistency in the finding that adult literacy programs resulted in personal

growth for students, expressed mainly in terms of self confidence and self esteem. Charnley and Jones (1979) in their well known British study *The concept of success in adult literacy*, referred to 'affective personal achievement' to describe this confidence factor. Interestingly for this current study, they also related confidence to socioeconomic achievement, seen in terms of better relationships and participation in civic duties (Charnley & Jones 1979, pp.153-156). Australian studies similarly reported outcomes largely in terms of personal growth in self confidence (e.g. Black & Sim 1990; Brennan et al. 1990; Grant 1987). Almost invariably, these programs were small group or one-to-one community literacy programs, conducted within the teaching principle of the 'primacy of the individual' (Lee & Wickert 1995, p.139-140; White 1983). Most of this provision would fit the 'growth and heritage' approach outlined earlier.

Post 1990 the situation changed dramatically with the effects of greater public accountability requirements imposed through government economic rationalism (Pusey 1991), and the 'new vocationalism' resulting from the National Training Reform Agenda. From an accountability point of view, the federal government shifted from 'funding inputs to purchasing outputs' (Hazell 1998, p.1), and the development of the National Reporting System (Coates et al. 1996) was a direct consequence of the need for 'performance accountability' in relation to the substantial funding of workplace and jobseeker programs from 1991 (DEET 1991).

The National Reporting System (NRS) is a comprehensive reporting framework incorporating five levels and covering six aspects of communication, and the macro skills of reading, writing, oral communications, numeracy and learning strategies. According to McKenna & Fitzpatrick (2004, p.23), it was informed by an eclectic set of linguistic, education and assessment theories and practices, including work which underpinned the International Adult Literacy Survey methodology. Use of the NRS is mandatory in federal government funded workplace and jobseeker literacy and numeracy programs (WELL and LLNP). In jobseeker programs for example, a successful outcome for a 'client' is based on gains made in one of the NRS macro skills or obtaining a job (Rahmani & Crosier 2002).

The NRS is one significant element affecting program outcomes for students, and it affects mainly federal funded literacy and numeracy programs. But the broader 'new vocationalism', which has included competency-based training, national accreditation, the Australian Qualifications Framework (AQF) and training packages has also changed outcomes. Hazell (1998) explains how competency-based curriculum has influenced the adult literacy and numeracy field as teachers need to report student outcomes in more formalised ways linked to module purpose and to students passing courses. Competency-based curriculum in this formal sense has shifted the focus of outcomes from individual student needs to module/course completion rates (see Access Division 2004) with concerns over student assessment and course moderation and validation. But in an informal sense, Hazell (1998, p.81) indicates teachers can be flexible and look for 'spaces' in the curriculum to allow individual learner needs to be met. There is some evidence that nationally, adult literacy and numeracy teachers hold to the belief that the predominant program outcome for students is 'increased confidence and heightened self esteem, which are deemed necessary before other outcomes are possible' (McGuirk 2001, p.4).

In large measure the post 1990 changes outlined above have been informed by a 'basic skills and functional' approach to literacy and numeracy (e.g. Australian Bureau of Statistics 1997; DEET 1991), while there appears some evidence indicated above that many teachers cling to a 'growth and heritage' approach associated with some enablers of 'social capital' (self confidence, self esteem, see p.13 of this review). The issue of theoretical approaches is crucial. A group of people can be defined as 'deficient' in literacy skills according to one approach ('basic skills'), but competent as workers according to another (e.g. by adopting a 'critical-cultural' approach. See Black 2002; Gowen 1992; Hull 1997).

Since 1990 the focus of literacy studies has been largely on economic 'impacts' rather than 'outcomes' according to Beder's (1999) understanding, and framed within a 'basic

skills/functional' approach. Workplace programs for example, are reported primarily in terms of cost savings and workplace efficiencies resulting from workers increasing their basic literacy skills (Pearson et al. 1996). What has been largely absent from recent studies of literacy and numeracy program outcomes are the views of the students and workers themselves using ethnographic research methods. More than a decade ago Freebody (1992) indicated the need for principled ethnographic studies of how literacy is used and valued in everyday contexts in order to inform policy (see also Hamilton 1999, 2000).

A recent 'scoping exercise' suggests possible expansion of the NRS framework (Perkins 2005), and currently the NRS is being reviewed. Currently also national adult literacy and numeracy forums recommend new definitions for literacy (and by implication, numeracy) with suggestions for a flexible model involving multiple literacies and collaborative approaches to community capacity building (DEST/ANTA 2004). The role of social capital and importantly the perspectives of students in relation to literacy and numeracy program outcomes would appear to be essential in informing these debates.

Social capital and learning

There is an extensive body of research that indicates that learning outcomes are a function of the social capital that students bring to the program or course and moreover, that learning can produce additional social capital outcomes. Much of this research has been conducted in the schooling sector (e.g. Dika & Singh, 2002). In the adult literacy area, as indicated earlier, such research is scant.

What is social capital?

For several reasons, this study adopts the OECD (2001a, p. 41) definition of social capital which states that social capital is the 'networks together with shared norms, values and understandings that facilitate cooperation within or among groups'. This definition has been adopted because it has 'networks' as its focus and the importance of networks is acknowledged by most, if not all, definitions of social capital. Furthermore, it is the definition that the Australian Bureau of Statistics (ABS 2004) has used in developing a framework of social capital indicators from which this study will draw on to identify outcomes of adult literacy and numeracy courses that may be defined as social capital outcomes.

A point of clarification requiring immediate attention concerns the ownership of the social capital. Portes (1998, p.3) notes that 'studies have stretched the concept from a property of individuals and families to a feature of communities, cities and even nations'. Social capital therefore can be viewed as a private good (Coleman 1988), that is, an asset owned by individuals, and it can also be considered a public good (Bourdieu 1991) that is owned by a group and beneficial to members of that group. This study is based on the premise that social capital outcomes can be identified as a private good, that is, social capital outcomes, if they exist, are experienced by the individual learners in adult literacy and numeracy programs.

Given this premise and that the study is a small qualitative research project, some of the elements of the ABS social capital framework are more pertinent than others. Here, we list the elements of the framework that are the more relevant to the context (see following table). This selection of elements determined the kinds of indicators applicable to the study and hence the social capital outcomes that the interview questions will seek to identify from participation in adult literacy and numeracy programs.

Application of ABS Social Capital Framework

Groupings	Elements	Indicators for the study
<i>Does participation in adult literacy and numeracy courses result in</i>		
1. Network qualities (including norms and common purpose)	<ul style="list-style-type: none"> ○ Trust and trustworthiness ○ Sense of efficacy ○ Acceptance of diversity and inclusiveness 	1a. changes in trust levels? 1b. changes in beliefs about personal influence on his/her own life and that of others? 1c. action to solve problems in one's own life or that of others? 1d. changed beliefs and interaction with people who are different from the student?
2. Network structure (including norms and common purpose)	<ul style="list-style-type: none"> ○ Size ○ Communication mode ○ Power relationships 	2a. change in the number and nature of attachments to existing and new networks? 2b. change in the number or nature of the ways that student keeps in touch with others in their networks? 2c. change in the nature of memberships?
3. Network transactions (including norms and common purpose)	<ul style="list-style-type: none"> ○ Sharing support ○ Sharing knowledge, information and introductions 	3a. change in the support sought, received or given in the networks to which the student is attached? 3b. change in the ways the student shares information and skills and can negotiate?
4. Network types (including norms and common purpose)	<ul style="list-style-type: none"> ○ Bonding ○ Bridging ○ Linking 	4a. changes in the activities undertaken with the main groups with which they interact? 4b. changes in the activities with groups that are different from the student? 4c. changes in the links that the student has to institutions?

Source: ABS (2004)

While it is useful to adopt the ABS and hence the OECD interpretation of social capital for the sake of consistency, it also produces a difficulty. This concerns the exclusion of elements from the framework such as self-confidence and self-esteem that are considered social capital resources in other interpretations of social capital (e.g. Falk & Kilpatrick 2000). What is retained in the ABS social capital framework, however, is the notion of efficacy, including self-efficacy.

Other self constructs such as self-management, self-motivation and self-knowledge are also absent. In the ABS framework, these qualities are defined as intrapersonal skills and together with interpersonal skills such as teamwork and leadership are included in the human capital category.

The literature on outcomes from adult literacy programs suggests that some programs have produced changes in such beliefs and skills. These are variously labelled as social benefits (e.g., Abadzi 2003), wider benefits (e.g. Bensenman & Tobias 2003), and outcomes to do with self image (e.g Barker 1999; Beder 1999). In general, these outcomes are presented with the qualifier that unlike other more knowledge and skill related outcomes, they are self-reported and almost always with no baseline data. In other words while they may exist, they fall in the 'too hard' basket because they cannot be measured in the same way as other kinds of outcomes.

Interestingly, none of these studies refers to the term social capital yet some of the benefits cited, whether they be labelled human capital or otherwise, could easily be linked to social capital outcomes. The large New Zealand study (Bensenman & Tobias 2003, pp.129-150) on outcomes experienced by adult literacy students from two training providers for example, identified a number of cases of increased self-confidence and self-esteem which led students to increasing the

number of groups with which they interacted or to changing the nature of their interaction with people in their existing networks.

It is not clear in the Bensenman and Tobias study whether these “wider benefits” are always associated with an increased expertise in literacy skills. In fact, in a review of adult literacy program evaluations for the World Bank, Abadzi (2003, p. 68) notes that “learners may get the empowerment and other social benefits without necessarily becoming literate”.

Nevertheless, the literature does suggest that the presence of qualities such as increased self-confidence and self-esteem may lead to social capital outcomes. If and when such changes in self constructs lead to social capital outcomes, they may be referred to as “enabling outcomes” or “enablers” (Spady, 1988, p.4).

Schuller, Bynner and Feinstein (2004) develop the notion of certain learning outcomes being precursors or prerequisites to the experiencing of social capital outcomes through the concept of “capabilities”. They argue that the acquisition of the three capitals, human capital, social capital and identity capital is dependent on the presence of capabilities such as self-concept, attitudes and values, and plans and goals.

Given the evidence from empirical studies on outcomes of adult literacy programs other than direct literacy outcomes and the conceptual frameworks already available, this study will include in its investigation outcomes that enable social capital outcomes. Such outcomes could include self-esteem and self-confidence.

Pedagogical determinants of social capital outcomes

For the adult literacy and numeracy programs where social capital outcomes are evident, this study intends to identify the pedagogical practices that facilitate such outcomes. Notwithstanding the appeal for education and training to take into account social capital in the learning process (e.g., Castleton & McDonald 2001, Falk 2001c), research on the relationship between pedagogy and social capital outcomes in literacy programs or even adult basic education programs more generally, is very limited.

One study that did investigate how social capital was implicated in pedagogy was commissioned by the Adult, Community and Further Education Board in Victoria (Falk, Golding & Balatti, 2000). It described and analysed ten programs that either drew on the existing social capital of participants and the community to produce learning outcomes and/or produced social capital outcomes for the learners and/or the community. None of the ten cases was a stand alone literacy program. Two of the programs, one comprising several different courses and the other having a strong focus on literacy for women of non-English speaking backgrounds, subsequently became the case studies for further research (Balatti & Falk 2002). The extent to which social capital is implicated in stand alone literacy and numeracy programs, the programs that are the subjects of this study, is not known.

Effects of social capital outcomes

The final aspect of social capital to be covered here is the relevance of social capital outcomes, should they exist. One issue that remains debatable about social capital is its intrinsic goodness. Despite most literature focusing on the positive aspects of social capital, researchers note that the same social relations that contribute positively to the well-being of individuals, communities, and organizations may also have unfavourable outcomes. Portes (1998) speaks of negative social capital and describes a number of situations where one can argue that social capital has negative consequences. For example, the same strong ties within a group that generate group bonding and coherence may also restrict individual freedoms or cause members of the group to make

excessive claims on other members. They can also prevent members from making strong ties with people outside of the group which can lead to downward leveling norms within the group. Portes notes that strong ties within a group can even exclude new members from joining and thus making it impossible for them to benefit from the resources that the group's social capital generates. In other words, social relations that generate social capital for one purpose may have a high social or individual cost attached or they may not be useful and even be detrimental for another purpose. These examples of how a set of social relations that constitute social capital for one purpose can be a liability for another suggest the possibility that social capital outcomes may or may not contribute to socioeconomic wellbeing.

In this study, both benefits and drawbacks of social capital outcomes will be sought.

They will be categorised using the OECD (1982) eight areas of social concern (see next section), a framework taken up by the Australian Bureau of Statistics (2001).

OECD categories of socioeconomic wellbeing

The purpose of this project is to investigate the social capital outcomes of adult literacy and numeracy pedagogical practices that occur in and from courses and programs. By relating these social capital outcomes to the eight OECD categories of socioeconomic wellbeing (OECD 1982), the study then provides a rationale for a potential re-framing of adult literacy and numeracy program outcomes. Social capital in part can be seen as an enabler for 'turning' the human capital of literacy and numeracy courses into impacts that can be seen to occur on various domains of our socioeconomic lives. The remaining task to be addressed in this section, then, is to outline the framework of socioeconomic wellbeing against which the impacts that social capital outcomes (potentially) have will be categorised.

There are several precedents for using the OECD indicator bands for the task in this project. For example the Centre for Research and Learning in Regional Australia (CRLRA 2000, 2001a & 2001b) used the OECD (1982) eight indicator bands of socioeconomic wellbeing to evaluate the impact of vocational education and training on society. Falk, Golding and Balatti (2000) use these same indicator bands to gauge the impact of adult and community education programs, including literacy programs, on their communities. Balatti and Falk (2001; 2002) report the detail of an adult and community education program on society, showing that there is the capacity for these programs to impact on a wide range of the OECD indicator bands. The OECD (1982) eight indicator bands therefore provide an established and comprehensive means of reporting impact on socioeconomic well-being.

The OECD (1982) report on Social Indicators, finalised after an exhaustive developmental and research process established the eight categories of socioeconomic wellbeing, and it is a framework taken up by the Australian Bureau of Statistics (2001). The eight areas are:

- ✧ Health
- ✧ Education and learning
- ✧ Employment and the quality of working life
- ✧ Time and leisure
- ✧ Command over goods and services
- ✧ Physical environment
- ✧ Social environment
- ✧ Personal safety.

Links between outcomes of literacy and numeracy courses and at least some of the areas comprising socioeconomic wellbeing have been made. There is research in areas related to Occupational Health and Safety (OHS), capacity to read and interpret medical information (ABS 1997), workplace issues (Shohet 2002; Wyse & Casarotto 2002) or benefits to health flowing from greater participation in society. Balatti and Falk (2001) and Freebody & Freiberg (1997) show the links between literacy and health. Research finds that participants in literacy and numeracy courses perceive that literacy and numeracy contributes to their employment outcomes (Falk 2001a). Literacy and numeracy gained in vocational education and training is also perceived to contribute to wealth and income creation in the direct way that a change in status from unemployment to employment demonstrates (CRLRA 2000, 2001b). On-the-job and in-house VET learning, facilitated by skilled literacy and numeracy trainers has the potential to provide career enhancement (Falk, Smith & Guenther 2002).

Literacy and numeracy courses assist people to be discriminating consumers, to write letters of complaint and enquiry, and to manage their personal lives in difficult circumstances and on tight budgets (Hajaj 2002). Many English as a Second Language and first language adult literacy and numeracy courses fall into this group. Adult literacy courses are perceived to empower participants, increasing their propensity to contribute to household income through paid work (CRLRA 2001b) and through job enhancement (Bynner 2002).

Lowe (2002) suggests that commitment to environmental literacy will 'lead to a better educational preparation for the complex, rapidly-changing world of the future'. Literacy and numeracy has particular relevance to this band of social need in the 'knowledge economy'. Access to services is increasingly dependent on ability to use Information and Communications Technology. While it has been noted that generally, there has been a strong uptake of this technology in Australia, the problem faced by many people is how to use it. ACE and Adult Literacy programs have been shown to contribute to the multiple new literacies required by people, and are particularly relevant to people living in remote and regional areas of Australia (CRLRA 2001b). Literacy and numeracy have been successfully incorporated into many VET programs that have intended social outcomes such as suicide prevention. Funding constraints in some states of Australia, dictate the need to subsume literacy into VET programs, but research suggests that VET is more effective when social needs (often directly related to literacy needs) are the primary focus of training (CRLRA 2001b).

Summary and concluding comments

There is sufficient evidence from existing research to show that adult literacy and numeracy programs can have social capital outcomes. However, these outcomes have not so far been included as indicators of the worth or value of these programs. It is the purpose of this research to provide some further insights and evidence for the potential nature of social capital outcomes, make some judgements about their worth or otherwise, and suggest how they might link with the OECD indicators of socioeconomic wellbeing and current outcomes reporting, and in particular the National Reporting System. Further, in light of the available research reviewed here, and the established national need for a new look at a definition of literacy (see DEST/ANTA 2004), we perceive that the data from this research could provide the basis for a tentative reframing of a number of important aspects of the field of adult literacy and numeracy, including a new definition.

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