Teaching for social capital outcomes: The case of adult literacy and numeracy courses in VET

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There is strong evidence that participation in education and training can produce social capital outcomes. There is also strong evidence that such outcomes are useful outcomes; they can enhance the development of other outcomes often called human capital and they can contribute to the social-economic wellbeing of the learners and the communities in which they live. Yet, little research has been done about the pedagogy and other conditions that produce social capital outcomes in education and training. This paper reports on a research project that investigated what teachers do to produce social capital outcomes in VET adult literacy and numeracy courses.

There is a growing body of research which indicates that learning outcomes are a function of the social capital students bring to the program or course and furthermore, that access to learning can produce additional social capital outcomes for students (e.g., Coleman, 1988; Field, 2005 ; Schuller et al, 2004). Social capital refers to the norms, networks, and trust which Robert Putnam (1995, online) identifies as the "features of social life ... that enable participants to act together more effectively to pursue shared objectives". Portes (1998, online) observes that, "[w]hereas economic capital is in people's bank accounts and human capital is inside their heads, social capital inheres in the structure of their relationships". Because social capital is comparatively intangible, its definition, let alone ways in which it can be measured, remain issues for debate. For pragmatic reasons, the study reported in this paper adopted the Australian Bureau of Statistics definition which describes social capital as the "networks, together with shared norms, values and understandings which facilitate cooperation within or amongst groups" (2004, p. 5).

Despite these ongoing difficulties, the relationship between social capital and learning in the formal education sectors, in informal learning, and in lifelong learning generally, has captured the interest of both research and government. Much of the research relating education and social capital has been conducted in the schooling sector (e.g., Dika & Singh, 2002). There is also an increasing body of literature that is exploring the relationship between social capital and adult learning (e.g., Allison et al, 2006; Falk, 2006; Field & Spence, 2000; Kearns, 2004; Kilpatrick, 2002). In the area of adult literacy, such research is limited but growing (Balatti, Black & Falk, 2006; Falk, 2001a). Evidence of its recognised relevance is the recent government evaluation of the Scottish Adult Literacy and Numeracy Strategy which included the investigation of social capital outcomes from participation in programs (Tett et al, 2006).

Because there is sufficient evidence to suggest that adult education programs including adult literacy courses can produce social capital outcomes, it is worthwhile investigating the pedagogical practices that have them come about. The assumption being made here, of

course, is that pedagogy does have an impact on the social capital outcomes that students experience. This is not to imply that pedagogy is the only factor that impacts on the production of social capital outcomes. Curriculum, context, funding, and the assets and needs that the students themselves bring to the course are just some of the factors that impact on the social capital outcomes experienced. Nevertheless, pedagogy is certainly an important factor if only for the reason that to some extent it is within the realm of the teacher's influence to modify or develop.

This paper is about identifying some of the ways in which teachers draw on the social capital that participants bring to stand alone adult literacy classes and some of the ways in which they go about providing the learning environment that fosters the development of social capital outcomes. The term 'pedagogy' however, is not unproblematic. It can be defined so narrowly as to include only a technicist description of what teachers do when teaching or so broadly as to also encompass elements of education and training that impact on what teachers actually do. For example, Hammond and Wickert (1993) defined the adjective "pedagogical" to refer to teaching practice, curriculum, professional development, theoretical considerations and policy. In the research project reported in this paper, the term, pedagogy, was limited to what teachers do with their students in delivering literacy education.

Pedagogy and social capital in Adult and Community Education

Research on the relationship between pedagogy and social capital outcomes in literacy programs or adult basic education programs is limited. One study that did begin to explore how pedagogy influenced social capital outcomes was commissioned by the Adult, Community and Further Education Board in Victoria (Falk, Golding & Balatti, 2000). It described ten Adult and Community Education programs across Victoria that produced social capital outcomes for their participants. Two of the programs, one having a strong focus on literacy for women of non-English speaking backgrounds, and the other comprising several different courses, subsequently became the case studies for two research papers (Balatti & Falk, 2002; Falk, 2001b).

The ten cases were very diverse in terms of participants, purpose, content, time frames and funding arrangements. The pedagogical practices, here defined broadly, were also varied. However, the study concluded that the pedagogical practices that produced social capital programs demonstrated a common principle. The principle was labelled the "principle of interconnectivity" and comprised two aspects: community connection and chronological continuity. Community connection referred to the existing and new links between the participants and networks that the programs were able to capitalise on and encourage to develop. Because all interactions and social activity are set in time, social capital building also draws on participants' historical backgrounds and expectations of future consequences. Chronological continuity referred to a temporal connection to the past and to the future that programs were able to incorporate in their design.

How the principle was operationalised differed across the studies. The table below provides some examples of how different ACE providers developed community connection and chronological continuity in their programs.

Table 1: Pedagogical approaches that draw on and build social capital

Strategies for making community connections	Strategies for establishing chronological continuity
▪ Existing community groups and networks are engaged in the implementation and delivery of programs.	▪ Programs develop in response to the life stories and aspirations of the participants.
▪ New networks are developed between program participants and community groups and organisations.	▪ Attempts are made to link short programs funded by various agencies to provide a seamless learning experience for participants.
▪ Activities and projects are co-designed to provide the context for trust building and identity transformation.	▪ Participants engage in project work that is open ended.
▪ Participants including staff form a community with agreed upon norms and purpose that encourage interactions, connections and trust building.	

While some of the programs in the study involved literacy education, none was a stand alone literacy program or course.

The study

The research reported here comes from a study titled *Reframing adult literacy and numeracy course outcomes: A social capital perspective* (Balatti, Black & Falk, 2006). It investigated the nature and usefulness of social capital outcomes of stand alone literacy courses and also attempted to identify at least some of the pedagogical practices that supported the development of social capital outcomes. Here the discussion is limited to the pedagogy.

The concept of social capital was operationalised as a set of indicators (Figure 1) based on the Australian Bureau of Statistics (ABS) social capital framework (Australian Bureau of Statistics, 2004). A point of clarification requiring immediate attention concerns the ownership of the social capital. Portes (1998, online) 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, 1986) 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 literacy courses.

The data for the qualitative study were a set of 75 interviews with 18 teaching staff and 57 students in three locations, Darwin, Townsville and Sydney. Of the 18 full-time and part-time staff, one was a tutor and another was a volunteer tutor. The teachers were chosen on the basis that they were the staff involved in teaching the students selected for interview. Of the staff interviewed, 60% had 15 or more years experience in teaching

adult literacy and numeracy. A further 22% had between 10 and 15 years experience, while the remaining 18% had more than three but fewer than ten years experience.

Figure 1: Application of ABS Social Capital Framework (ABS 2004)

Groupings	Elements	Indicators for the Study
		Does participation in adult literacy and numeracy courses result in
1. Network qualities (Including Norms & Common Purpose)	o Trust and trustworthiness o Sense of efficacy o 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 & Common Purpose)	o Size o Communication mode o 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 & Common Purpose)	o Sharing support o 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 & Common Purpose)	o Bonding o Bridging o Linking	4a. Changes in the activities undertaken with the main groups in which they interact? 4b. Changes in the activities with groups that are different from the learner? 4c. Changes in the links that the student has to institutions?

The questions asked to students were indirectly related to pedagogy because the focus with these interviews was to ascertain the outcomes that students experienced from participation in the courses. The kinds of questions that produced relevant data were:

> Why have you kept going with the program?

> What do you like best about coming?

The questions to teachers that elicited information about pedagogy were as follows:

> How do you decide what to teach and how?

> What do you think students get out of this course?

> What is it that you do that produces these sorts of outcomes?

> Do you tend to get to know much about what these students do outside this class?

> What sort of strategies seem to work better than others?

Most teachers in their responses did not refer to the term "social capital" although many did refer to aspects of social capital (e.g., networks, trust, links) without actually using the term. The link between pedagogies and social capital outcomes therefore, was sometimes explicitly made by the teachers and sometimes it was inferred by the researchers. Inferences were made when the data comprised a description of what the teacher did in a teaching learning episode that resulted in a learning experience producing outcomes that included one or more of the indicators in Figure 1.

Findings

The data reported here summarise what it is that teachers do when teaching their students that seems to be directly related to the production of social capital outcomes. The pedagogical strategies and techniques are clustered around the contexts in which they have the primary impact. The contexts are described here in terms of the three types of networks that students become members of by virtue of joining a class (Figure 2). The first network is the formal network of staff and students that operates in the classroom at designated times over a period of weeks. The second type of network that students enter is the teacher-based networks that may operate both inside and outside the formal course time. The third set of networks is the informal networks that students make with other students and that operate outside formal class time.

Figure 2:   Participant membership of course-related networks
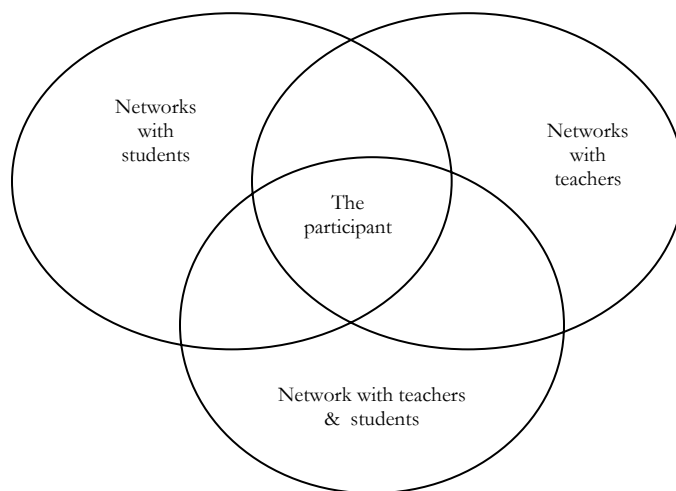
Network with teachers and students

Possibly the most visible, and certainly most formal, new network that the participant enters comprises the teacher(s) and the students collectively in the classroom. It is in this network particularly that teachers are important. The principles of adult basic education teaching are well documented (Lee & Wickert, 1995; Scheeres et al, 1993), as are adult basic education practices (Herrington & Kendall, 2005; McGuirk, 2001). While these principles could be discussed in terms of how teachers operationalise them to produce

social capital outcomes, this paper will not do so. Rather, attention is drawn to two aspects of the classroom network (important in adult education pedagogy) that appear significant in understanding how social capital outcomes are generated, namely, the norms that operate in the group and the nature of student membership in this "whole of class" network.

Network norms

Being an active and productive member of the class is integral to adult literacy and numeracy courses, regardless of whether the focus is writing, reading or speaking. Discussions led by teachers or students, buddying, peer tutoring, mentoring, pair work or small group work are just some of the ways that group work forms part of the *modus operandi*. Consequently, teachers and students alike conform to a set of norms that produce a social-emotional environment in which tolerance and good manners prevail; in which new students are welcomed; where students feel safe to take risks and share; where people listen patiently when others talk; and where being non-judgemental is paramount. Non-compliance, if persistent, is ultimately challenged.

One teacher spoke at length of a student who took two terms, and several critical incidents, to learn to comply with the required norms. The story is significant because it illustrates how norms are established and maintained by both teachers and students. After one term in which the student had adversely altered the dynamics of the class, the teacher had a lengthy private discussion with him, drawing his attention to the rights and responsibilities of the class that were displayed on a poster on the wall and to the importance of group interaction in any efforts to improve literacy skills. In a subsequent lesson and in the student's absence, the teacher explained to the rest of the class the action she had taken in recognition of the "insults, rudeness and bluntness they had suffered". The student did return to class after an absence of several weeks, this time completely withdrawing from any interaction with the group. In response, the other members of the group "were very, very good to him, they all rallied round and deliberately included him in things and deliberately spoke to him". After several more setbacks, the student made a "dramatic turnaround … listening to others and talking to them and not telling them where they are wrong".

Participant membership in the network

Student membership in the adult literacy and numeracy group is defined within the constraints of the norms described above. Providing that students do not infringe on the rights of others, they are welcomed as full members of the group. The often experienced role of the student being placed in the inferior position relative to the teacher or to other students was absent from the adult literacy and numeracy courses in the study.

Students are invited to nominate topics of interest, to bring into the classroom setting their histories, their interests and their aspirations and to even take the class out into their world of everyday interaction. In other words, in this network, students have full membership by simply being themselves.

The story of the student-turned dancer illustrates the way in which this kind of membership can produce a chain of events replete with social capital outcomes for the student and for fellow students. A newspaper article discussed in class on the health

benefits of dance caught the interest of a student originally from Hong Kong. After that discussion and unbeknown to his class, he started attending classes in modern dance with four different groups in the city, four nights a week. Several months later, in a class discussion on hobbies, he let his class know of his interest and provided a demonstration. This led to a group excursion by train to one of the dance venues for a lesson. Two other students took up dancing classes as a consequence.

Particular attention is paid to new members in adult literacy and numeracy courses. Where possible, every effort is made to allocate students to groups where the teacher believes the student will feel comfortable. Student readiness to move from one-to-one to group learning is also carefully monitored and, if necessary, supported. One teacher with more than 20 years experience explained how she manages the transition of Indigenous students from a one-to-one relationship to being a group member:

> You go with the individual approach to start with and then group work; they are two different things but you need to lead one into the other. So when they first come in, you give them individual things to do and then group things. You find them a buddy, someone to do things with, even to walk around with so they know where they are even.

A feature of the student membership, evident in the adult literacy and numeracy courses and remarked upon by students and teachers alike, was agency. Students had some control over what transpired in their time together as a group and had complete control over the pace at which they wished to learn. Many students, especially the young, readily welcomed the new-found control over their own learning journey. Others, who were generally older, were sometimes wary and even initially resisted a teacher-student relationship in which the teacher refused to dictate content, process and speed.

The effect of the norms established in the group and the nature of the student membership in the group resulted in students reporting that they felt safe amongst the other students in the course. This allowed them to be open about who they were, including being open about their language and literacy skills.

Networks with teachers

The significance of the student-teacher relationship in many of the interviews warranted the need to identify the teacher networks that students access as very important in producing social capital outcomes. The students interviewed usually interacted with only one teacher, but in some courses they worked with two or more teachers and support staff. In one course in this study, students also worked with paid tutors and volunteer tutors, either in or out of the classroom. Relationships between students and staff were built in the public forum through interaction in the classroom and on outings to locations as varied as museums, wildlife parks, legal courts, restaurants and even dance venues, but also, more privately in personal conversations and, in the case of one student, through letter-writing.

For a number of students, the relationships they had with their teachers were perhaps the most significant factor affecting outcomes, including social capital outcomes. It was through these relationships that many students redefined their connection with education institutions, redefined their relationships with other adults in authority positions, and even

more significantly, redefined themselves as learners, and sometimes even as members of society.

Two of the more important aspects of the teacher-student network discussed here are the nature of the student membership in the network and the role that the teacher takes in linking students to networks outside the course context.

Student membership in the network

When referring to how students felt teachers treated them, the most frequently expressed sentiment was "with respect". The contrast with remembered school experience was commented on often, as evidenced in the following comments:

> I expected it to be more like the teachers standing there and telling you what to do … I was really surprised. They're not really judgemental. It's really changed everything for me coming to this course because the teachers are really good role models for you because they tell you, 'You can do it!' and it gives you confidence.   (Female, age 18)

> It's like chalk and cheese. No comparison. You get treated with respect, and your opinion is valued and everyone can make comments.   (Male, age 50)

An important aspect of the student membership that was noted by some students and teachers was that, in some critical respects, teachers and students were on an "equal footing". For example, both viewed themselves as learners and therefore potentially, teachers of the other. Teachers spoke of their own learning, and students observed that their teachers learnt from them. The exchange of cultural views with the student of non-English speaking background or the Indigenous student had the potential to impart new learnings to both the Anglo-Australian teacher and the student. Both student and teacher were givers and therefore takers. In this sense, memberships were alike.

One story, in which many of the key elements typical of the teacher-student relationship in adult literacy and numeracy appear, is reproduced below. This story is from a teacher who uses letter-writing with her students of non-English speaking background as a way of embedding language in social practice.

> One student in her letter last year said to me she was wanting to bring back her mother's ashes from Hong Kong and didn't know how to go about it. But that was just in her letter; she would never have said that in class. Then I wrote back to her and I said to give me a few days and that I'd find out what to do. So I got on to the government departments and gave her the telephone numbers. Eventually, months later, in one of the letters she wrote back, she said that finally her mother's ashes were on the way out, and she could have them rest in the Buddhist temple where she went. That was a really big thing for her, but without the communication in the letters that wouldn't have happened.

A brief analysis identifies important features of the teacher-student relationship. The story reveals the authentic engagement of both teacher and student in the interaction. It also illustrates that it is the student who controls the interaction rather than the teacher. In writing about her personal problem in the letter, the student shows trust in her relationship with the teacher; informing the teacher of the outcome indicates respect. The teacher follows suit and also responds in writing, accepting the appeal, explicitly or implicitly made, to assist in any way possible. To do this, the teacher needs information in an area about which she knows nothing. She then gives the student the contacts

necessary and waits for the student to tell her the final outcome of the exercise, if and when she chooses. The story also illustrates the connections that teachers can help students make with other groups and networks outside their own personal sphere of interactions.

Teacher as connector/link to other networks

Teachers interviewed drew on their own human and social capital to connect students with other groups, organisations and institutions in society. The individual student needs, aspirations and capabilities informed the advice teachers gave, and the degree of intervention applied to facilitating the links.

In some instances, teachers physically took the student to the appropriate destination. In one case, a teacher took a student to the city library and helped with the membership application process. In another, a tutor drove the student to the transport department to enable him to undertake an oral driver's licence test she had specially arranged for him. More commonly, the link took the form of teachers explaining how to access the necessary information, for example, phone numbers, addresses or websites of support services, volunteer organisations and government agencies. Most common of all was teacher encouragement to pursue a particular goal or to contemplate possibilities hitherto unconsidered, which led students to form new links or connections.

Linking students to other education and training opportunities was a common practice. For example, a teacher recalled a student from a recent class:

> There was one person who loved fishing so we arranged for them to do an aquaculture unit and yes, their confidence just grew.

Teachers drew on their own networks for specialist skills to help students achieve their goals. For example, an Indigenous man who wished to give his elderly father a photographic record of his trip to his place of birth called upon assistance from a person skilled in scrap-booking who was a friend of his teacher.

Teachers helped students connect with community support and other services they were not currently accessing. A teacher explained how a combination of encouragement and increased self-confidence from the course experience can lead an adult in need of such services to make the contact:

> I think they now have the confidence to open up and communicate some of those things. And I encourage them to get some support and counselling about this, so supporting them in that decision … So I'm encouraging them to take on new ideas and to think about new possibilities and not to feel embarrassed or ashamed.

The links that teachers provide can be less tangible than those described so far, but nonetheless significant. Sometimes the link between the student and institutions can be indirectly and tentatively forged through adult literacy and numeracy teacher intervention. One example concerned a parent of a school age child whose fear of being found out as illiterate prevented her from attending any school functions or meetings. In this case, the student felt sufficiently confident to bring a letter she had received from school to the literacy teacher to read to her. In this way, she was connected with the school, albeit from a distance.

That some students remain in contact with their teachers well after their participation ends suggests that the relationship can be particularly significant. One 17-year-old young man who drops in now and again to visit his teachers viewed the relationship as a friendship. His teachers' encouragement to maintain his membership of a drama group and their attendance at his performances seemed to have been an important legacy of the course. Another teacher spoke of an ex-student in her thirties and now employed, who visits her teachers just to "keep in touch". Other past students draw on the teacher-student network when the need arises. For example, an ex-student recontacted her teacher when she wanted assistance in writing a letter of complaint to the city council. A numeracy teacher told of students who have moved on to other courses, including university, but who still contact her for advice.

This study has shown that the teacher can be a very rich resource for students in a number of ways, apart from their expertise in teaching literacy courses. For many students, the teacher may be the only person they get to know well, who is educated, relatively knowledgeable in areas that are important to the student, and who is a member of networks that could be useful to them. For many more, the teacher is a person of authority or of some standing who treats them with respect; this can be a new experience for students. Developing a relationship with the teacher that can be called on is building social capital.

Networks with students

The informal networks that students make with other students in adult literacy courses present other sites for social capital production. The membership provides opportunities for new attachments and new ways of interaction.

Different classes produced different kinds of networks. Many commented on the course participation having provided them with the opportunity to meet new people and make new friends. For some, this led to socialising in their free time, including visiting one another's homes and joining clubs together.

There were some non-English speaking background classes, for example, that seemed to produce rich student networks. Information on a variety of topics relating to their everyday lives, such as health, food, customs, education and holiday destinations, was exchanged and group outings were planned. In contrast, other groups seemed to have less cohesion, but nevertheless still provided an information network for jobs, further training, services or general knowledge.

Some students developed leadership capacity in the student networks, both formally and informally. In one group of Indigenous students, an 18-year-old participant who had been attending courses for two years saw himself as a mediator in the group when required, but also as the go-between for people who were new to the city when they wished to communicate with people in authority at the TAFE. He explained:

> Some of the students are from … very remote communities, they're really shy, so if they get knocked back [when they have approached somebody], well they just don't ask … There are lots of people to talk to, but you have to take them, like, to the coordinator. After a while, they lose their shyness … but it takes a while, coming to big city like this …

> If they are wanting to borrow money, they could get into problems there so I tell them about student equity and how they can get a loan from them and pay it back. It comes out each fortnight. They would get to the door and turn away otherwise.

In another group, a 33-year-old man developed, with the assistance of the teacher, a common project for the group. He organised the group to produce displays and activities for Literacy Day. His teacher explained that he had wanted to develop himself as a leader for a long time and had found the opportunity to do so in the course.

The teachers interviewed were cognisant of the importance of the student networks formed among the students. One teacher of an adult literacy and numeracy class of mainly young people who were disenchanted with the school system observed that "if they don't form a friendship almost straight away then they are not going to last".

Learner networks break down the insularity experienced by many adults caused by any number of factors concerned with health, education, employment, family circumstances and other socio-cultural issues. A teacher who works with classes of mainly Indigenous students described the benefits of the networks:

> It's about mixing with other people, people they would not normally meet, so the benefits are usually social. Unless they are in this situation this would not be happening.

For some students of non-English speaking background who live and circulate almost entirely with people of similar backgrounds, the class actually forms the only social group in which they can practise their English. An observation made of one student typifies these kinds of participants:

> There's an older woman in my group who is Korean, and she said that if she didn't come here she would feel very cut off because she doesn't speak very much English outside of here.

Changes over time in student networks are evidence of social capital outcomes being realised. A teacher of mainly Indigenous students noted the network-building occurring between her two classes:

> After a while, groups form. For example, the two different groups I have are starting to meet up at smoko and to walk around the campus. They grow and link and form friends in other classes.

Within a class comprising many different ethnic backgrounds, a teacher observed that six months after joining the course, a student originally from Hong Kong welcomed people of different cultures into his network:

> And it was a real turn around. He invited the guys from the Middle East to come and sit with him because they all sort of sit in groups and he sort of said, 'Come and sit here and we can discuss this together'. Big smile, very positive, open arm movements and very open body language. That was really, really encouraging to see … It's only just recently starting to occur. So he's feeling more confident within himself and more able to be more welcoming.

Such networks may seem independent of any teacher intervention but this is not the case. Interaction and trust build within the group in great measure due to teacher strategies. Opportunities in terms of space, time and motive, for example, have to be created as the starting point for these networks of informal interaction to occur.

Discussion

Locating course-related networks within students' lifeworlds

The findings in this study suggest that the literacy and numeracy courses students experienced serve two functions in social capital building. Firstly, the course-related networks serve as a "practice field" in which students experience the conditions conducive to acquiring new identity and knowledge resources. Secondly, the students are able to bridge or make connections between the learnings from their course and the rest of their lives.

The term "practice field" is borrowed from Edgar Schein (1993, 1995) who used it in the completely different context of organisations to describe a way of bringing about organisational change. Because the processes involved in making the transition to new ways of thinking or doing, and firmly establishing them in one's repertoire, take time and practice, a practice field is necessary. It is a space, literal and metaphorical, separate from the rest of the organisation in which a group of employees is able to learn new ways of doing and thinking and be free to make mistakes without fear of penalties. Schein (1993) states that individual learning, especially habit and skill learning, is best supported in a group situation where there is the psychological safety to experiment and make mistakes. This may require temporarily moving employees out of the normal everyday work structure into a learning space where new norms can become established. Such a space comprises a group of people who come together to support and learn from one another. Essential elements of a psychologically safe environment include opportunities for training and practice, and effective norms that legitimise making errors and that reward innovative thinking and experimentation. Once they're ready, the employees re-enter the mainstream of the organisation.

When the notion of "practice field" is applied here, the practice field is the course related networks that exist within the larger "organisation" of the participant's lifeworld. Resources may be new skills, new attitudes and beliefs about self and others, new ways of interaction and new links and connections. For many, the networks are a new and safe environment in which to play out new aspects of identity and practise new skills. Within these networks, social capital outcomes are experienced.

However, there is an important difference between the two contexts of the organisation and the literacy and numeracy course. Unlike the organisational setting where participants move from the practice field to the wider setting of the organisation once they are ready, literacy and numeracy students participate in both the practice field and in the rest of their world, at the same time. This allows for multiple opportunities to bridge the two sets of experiences.

The analogy of the bridge is used here to describe the second function that literacy and numeracy courses have in producing social capital. A bridge suggests a means by which there is a two-way flow. For example, in the context of roads, a bridge allows traffic to flow both ways, often simultaneously but not necessarily. In this context of learning, the two way flow refers to the flows of identity and knowledge resources developed in the interactions in the course-related networks, and of those developed in the other networks to which the students belong. The networks external to the course may include family,

friendship groups, workplaces, faith groups and special interest groups. The "bridges" that encourage this flow to happen are the "bridges of confidence" that the students ultimately build. The bridges are those new interactions that learners are prepared to engage in; new because they are drawing on new resources or new because they are drawing on existing resources in new ways or contexts. It is these new interactions outside the practice field that are able to produce changes in the nature of the memberships that the students have in their networks.

The two-way flow occurs in a variety of ways. It occurs when resources such as skills or confidence generated within the relatively safe environment of the practice field are applied, deployed or transferred to new or existing networks outside the course. It occurs very obviously when contacts made in class lead to other contacts in networks that learners had not accessed previously. Just as importantly, the two-way flow also occurs when students draw on their out-of-class lives in their interaction with teachers and peers in the course.

The choice of pedagogical practices that teachers make impacts on the nature of the practice field and on the extent to which students risk new kinds of interaction in the networks that comprise their lives. The pedagogical practices influence the nature of the networks formed not only in providing the conditions for them to grow but also by influencing the nature of the memberships and interactions of their participants. Despite the limitations of this study, it is evident that the interactions that teachers have with students are critical in having students develop the confidence and the know-how to redefine themselves in the networks in which they find themselves.

Conclusion: Future directions

The teaching staff interviewed in this study employed practices that came out of a commonly held set of beliefs about what it means to teach adult literacy and numeracy from a socio-cultural perspective in which the individual is the focus. Whether a social capital perspective is merely a "dressing up" of a pedagogy that is true and tried into something new or whether it actually signals the need to review the desired outcomes from literacy and numeracy courses, and therefore to revisit the pedagogy, remains to be seen. Even if it is the former, exploring the teaching/learning adult literacy and numeracy experience from a social capital perspective still offers tremendous value. It is a way of reinvigorating a set of pedagogical practices that were established 15 to 20 years ago (e.g., Grant, 1987; Lee & Wickert, 1995; Scheeres et al, 1993) and that need critique in the light of the developments that have occurred in adult learning research since then. It is particularly worthwhile, at a time when many of the teachers in adult literacy and numeracy are approaching retirement, and new teachers are taking their place but in a whole new policy environment in which teaching literacy and numeracy is often fragmented into short courses and subject to the single focus of immediate job outcomes. If, on the other hand, it is the latter, and a pedagogy designed for social capital outcomes as well as for the traditional outcomes of skills, knowledge and self-confidence is warranted, then constructing the learner as a member of networks is a start. Either way, more research, especially practitioner led research, on pedagogical practice is needed.

One more step towards understanding the relationship between pedagogy and social capital outcomes is being taken by the authors in a new project funded by the Centre for

Vocational Education and Research. In this project, tentatively titled *Adult literacy and numeracy development in partnership: Social capital approaches*, the focus is literacy and numeracy programs conducted in partnerships between literacy education providers and other agencies from sectors including health, community development, welfare, finance and justice. After identifying the practices that produce social capital outcomes for participants in these kinds of programs, the study will employ an action research approach in a number of sites to trial a suite of pedagogical practices aimed at producing social capital outcomes. Unlike our previous studies, in which pedagogy was one of many research questions and therefore its investigation was limited, this will be our first study that is entirely focussed on pedagogical issues. Studies such as these should produce a clearer understanding of the pedagogical practices that are effective in building social capital.

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