

Theoretical understandings of adult literacy:

A literature review

Niki Culligan



Massey University

DEPARTMENT OF COMMUNICATION & JOURNALISM

Theoretical understandings of adult literacy:

A literature review

Niki Culligan

Department of Communication and Journalism

Massey University

Series: Adult Literacy and Employment in Wanganui 0504

Series: Adult Literacy and Employment in Wanganui

ISSN 1176-9807

- 0501 Barriers to adult literacy: A discussion paper
- 0502 Perceptions, needs and issues: A discussion paper
- 0503 Provider survey - phase one. The provision of adult literacy services in Wanganui
- 0504 Theoretical understandings of adult literacy: A literature review

ISBN 0-9582646-3-5

Copyright © The Author, 2005

Apart from any fair dealing for the purposes of study, research, or review, as permitted by copyright law, no part of this report may be reproduced by any means without permission in writing from the copyright holder.

Published by the Massey University Department of Communication and Journalism, Wellington and Palmerston North, New Zealand.

Table of Contents

ACKNOWLEDGEMENTS	1
THEORETICAL UNDERSTANDINGS OF ADULT LITERACY	3
POSTMODERNISM	3
THE ‘KNOWLEDGE ECONOMY’ OR THE ‘NEW WORK ORDER’	4
SOCIAL CAPITAL	6
THE RELATIONSHIP BETWEEN SOCIAL CAPITAL AND EDUCATION.....	8
ROLE OF ADULT EDUCATION IN SOCIAL MOVEMENTS	9
SOCIAL CAPITAL IN COMMUNITIES OF PRACTICE	9
APPROACHES TO LIFELONG LEARNING	10
THE LINK BETWEEN WORKPLACE EDUCATION AND ECONOMICAL BENEFIT	11
POSTMODERNISM AND POSTSTRUCTURALISM APPROACHES TO LEARNING	13
CONSTRUCTIONS OF LEARNER IDENTITY.....	14
ADULT LEARNING THEORY	14
SITUATED LEARNING.....	16
WORKPLACE LEARNING	20
SOCIAL AND INDIVIDUAL INFLUENCES ON WORKPLACE LEARNING	22
VOCATIONAL EDUCATION AND TRAINING PROGRAMMES	26
COMBINING NEEDS OF INDUSTRY AND NEEDS OF INDIVIDUALS	28
CRITICISMS OF ESTABLISHMENT OF A LEARNING CULTURE	30
PARTICIPATION IN ADULT EDUCATION	30
RESISTANCE AND DECONSTRUCTION	32
ADULT LITERACY THEORY	33
CRITICAL CULTURAL (OR SOCIAL PRACTICE) VIEWS OF LITERACY	34
FREIREAN LITERACY THEORY	35
AUTONOMOUS MODEL OF LITERACY (FUNCTIONAL LITERACY)	38
CRITICISMS OF THE IALS AND FUNCTIONAL APPROACH TO ASSESSING LITERACY	40
MOVING BETWEEN DISCOURSES OF FUNCTIONAL LITERACY AND THE NEW LITERACY STUDIES (NLS)	41
LEARNING TRANSFER	47
ADULT LITERACY POLICY	48
ADULT LITERACY PROVISION	49
USE OF ASSESSMENTS WITHIN ADULT LITERACY PROVISION.....	51
EVALUATION OF ADULT LITERACY PROVISION	52
MOTIVATION	53
CONFIDENCE	55

WIDER OUTCOMES OF ADULT EDUCATION	56
CRIME	57
HEALTH.....	57
INTERGENERATIONAL EFFECTS.....	58
CONCLUSION.....	59
REFERENCES.....	60

Acknowledgements

The authors are grateful to the NZ Foundation for Research, Science and Technology for its support of this research under grant MAUX0308 Literacy and Employment.

This research programme could not have proceeded without the fullest possible involvement of the Wanganui community. In particular, the success of the research is due to the foresight of the Wanganui District Library, later joined by the Whanganui Community Foundation, Literacy Aotearoa (Wanganui) and Te Puna Mātauranga O Whanganui. Under the Library's leadership, this research programme has benefited enormously from the support of many other local and national organisations, including the Wanganui District Council, Enterprise Wanganui, Work and Income (Wanganui), the Corrections Department, the Wanganui Police, the Tertiary Education Commission, the Ministry of Education, and GoodHealth Wanganui.

Comments on pre-publication drafts of this review from Associate Professor Frank Sligo and Dr Franco Vaccarino were especially welcome. Credit for the annotated bibliography from which this review is mainly sourced rests with Ms Allyson Caseley. Many Massey colleagues also offered invaluable support, including Associate Professor Margie Comrie, Dr Su Olsson, Dr John Franklin, Lance Gray, Sharon Benson, Christine Morrison, Nicky McInnes, Nigel Lowe, and David Wallace.

I am indebted to many other friends and colleagues not named here for their insights and support to date in this research. However, all remaining errors and omissions in this paper are of course the responsibility of the author alone. Further, the points of view expressed in this paper are those of the author, and are not necessarily endorsed by the community groups which, as is normal in a diverse society, will have their own perspectives on the issues covered here.

Theoretical Understandings of Adult Literacy

This literature review covers key theoretical understandings of lifelong learning, workplace learning, adult literacy education, policy, and other related topics. It begins with an overview of the context of current thinking with a brief look at postmodernism, and the setting of discourses around the knowledge economy. This is followed by lifelong learning theory, adult learning theory, approaches to learning in the workplace, adult literacy theory and policy, provision of adult literacy in general, and the wider benefits of participating in adult education. This literature review is posited as a developing on-going document, to which further key understandings will be added as they are found. The purpose of this review is to present the understandings that different authors and researchers have found through their work in this field.

Postmodernism

Postmodernism is an approach that can be used to discuss and describe the discourses involved with the knowledge economy, lifelong learning, and adult education. Postmodernism is generally defined as a critique of the key dimensions of modern thought which argue that human nature and society can be fitted into scientific, rational categories (Hemphill, 2001). In other words, postmodernism holds that human beings and society are more complex than can be explained by rational categories, and research in the human arena needs to take into account this complexity. Postmodern researchers also must see themselves as an integral participant in their research, as how the research is structured, analysed, and interpreted could be argued to be directly affected by the researcher's complex individual and social background and current context. Fenwick (2001) also touches on this view in his outline of postmodernist views on identity. Identity is viewed by the postmodernist as a continually changing phenomenon, as opposed to a fixed construct, continually changing from one context to another (Usher, Bryant, & Johnston, 1997, cited in Fenwick, 2001).

Hemphill (2001) argues that modernist ways of thinking and knowing (generally defined as positivist, empirical approaches) may have created an overreliance for adult educators on western logic and rationality, leading to the assumption that findings can have general application across people and contexts. While it is acknowledged, that at times, this position can be helpful, at other times differing ways of knowing are more appropriate. Edwards and Usher (2001) argue that looking at adult learning from a postmodern perspective allows a space for understanding and engaging with all educational practices, without the privileging of any bodies of knowledge or goals. However, it is also important that postmodern ways of knowing are not seen as an objective approach. The postmodernist practitioner must always be explicitly aware of his/her own prior bodies of knowledge, ways of knowing, limits, and goals etc., to be able to engage fully in understanding any practice.

Hemphill (2001) further argues that universal generalisations such as 'community', 'individual' and 'motivation' operate in power relations to marginalise learners and practitioners who do not conform to the dominant interpretations of these generalisations. These concept-

alisations could be seen by the postmodernist as false constructs of reality, as they assume an ability to categorise a group of people or attributes into similar and predictable ways of behaving. Hemphill (2001) goes on to argue that these dominant universal interpretations serve only to frustrate adult education practitioners because they often do not reflect the needs of those groups marginalised from the discourse who are present within their programmes (or not present as the case may be). Hemphill also argues that it is essential that adult educators do not teach only the dominant discourse or the dominant cultural ways of knowing as this marginalises those learners whose cultural, physical, and social backgrounds and values do not reflect this 'dominant centre' (where modernist discourse that is taken-for-granted is said to reside).

Postmodernism is a potential approach for policy makers to adopt as funding decisions could likely be made based on dominant ways of knowing about adult education, and not adequately taking into account, or valuing, alternative ways of knowing. Postmodernism provides a way of thinking that can encourage this movement.

The 'Knowledge Economy' or the 'New Work Order'

Several authors discuss the evolution of a 'knowledge economy' or 'new work order' in today's society (e.g. Avis, 2002; Barrett, 1995; Bratton, 2001; Falk & Miller, 2002; Farrell, 2000; Fenwick, 2001; Gorard, 2003; Searle, 2001; Fryer, 1999; Livingstone, 2001; Sun, 2003). The knowledge economy discourse is based on an idea that today's organisational challenges differ from those of earlier eras. Barrett (1995) states that with globalisation of the economy has come increased competition, leading to organisations having to be continually innovative in their products and ideas to survive. Thus, knowledge and learning have become the new form of capital (Barrett, 1995).

The knowledge economy organisation is assumed to require high proportions of highly skilled workers (Livingstone, 2001). It is also argued that a knowledge economy organisation will strongly encourage lifelong learning as this is the only way within which people can continue to acquire the knowledge and skills to keep up with an ever-changing economy and society (Livingstone, 2001). In 1961, Burns and Stalker (cited in Avis 2002) identified two forms of organisations, the first being characterised by a formal hierarchy and bureaucratic rules, a context more suited to stability, and the second, an organisation characterised by flat, flexible structures reminiscent of team work. Searle (2001) outlines a trend in organisations where people now work in self-directed teams rather than traditional organisational hierarchies. This latter structure is more suited to changeable circumstances and is more descriptive of the current needs of the knowledge society than the traditional model.

In the globalised economy, the defining feature of a successful organisation has become the ability of that organisation to change and reinvent itself continually (Bratton, 2001). For organisations to remain successful, they must invent and maintain through continual review, evaluation and change processes, and the ability to learn faster than their competitors (Bratton, 2001). Here, flexible workers, structures, pay, and learning are assumed to ensure organisational competitiveness (Searle, 2001). Constant change is seen as the way of the future with lack

of job security in terms of stable employment for life and lack of organisational loyalty as staples of this new era (Searle, 2001). Workers are assumed to take on personal responsibility for adapting to the organisation's changing needs through ensuring the enhancement of needed skills (Searle, 2001).

This change in the way organisations structure themselves, has led to changes in the characteristics of workers within these organisations. Hammer (1996, cited in Farrell, 2000) identifies two forms of worker: the 'traditional' who works under a manager, and the 'professional independent human being', who demonstrates discipline, a characteristic style of thinking, the 'right' temperament, self-motivation, sincerity, enthusiasm, and tenacity. Education is viewed as a critical necessary element of this new worker. Indeed, Handy (1993, cited in Falk & Millar, 2002) posited the idea of the 'portfolio worker'. This worker has a multitude (portfolio) of skills which are transferable over a multitude of workplaces and contexts within workplaces (Falk & Miller, 2002). As Hamilton and Barton (2000) point out, a consequence of transferable skills is a heightened need for multiple literacies and numeracies.

The knowledge economy discourse highlights the need for a new form of human capital and for contexts within which workers can engage in lifelong learning. Fryer (1999) claims that, in response to globalisation, workers are required that can develop higher-order thinking skills, the ability to problem-solve, and the ability to learn to learn. Barrett (1995) adds that knowledge economy workers must be able to question their earlier assumptions and mental models, think systemically, and go beyond problem solving to imagining possibilities, thus, generating new ways of looking at and approaching issues.

Overall, Falk and Millar (2002) report a change in the occupational profile of the workforce, with proliferation of those occupations that require higher qualifications and further education, and a decline of occupations that require fewer skills. They go on to claim that an implication of this is that those with limited literacy and numeracy skills (thus generally less likely to hold qualifications or take part in further education) will be more likely to be unemployed. However, Livingstone (2001) cites several studies undertaken in Canada and the USA where assessment of the occupational profile of the workforce has shown that only a slight up-grading of skills needed for jobs has been needed over the past few generations, although rates of completion of post-compulsory schooling and participation in further education has greatly increased. Livingstone's analysis goes on to state that rates of underemployment, involuntary reduced employment, and educational attainments exceeding available job requirements has also grown significantly in this same period (Livingstone, 1999, cited in Livingstone, 2001). Thus, Livingstone (2001) suggests that the discourse of the knowledge economy may in fact be premature (a discourse reflective of the interests of powerful economic groups), and that we may instead live within a learning society.

Livingstone's analysis brings up some interesting questions around the power of discourse. Regardless of whether the 'knowledge economy' discourse is reflective of the current organisational economy/society or not, it is the dominant discourse currently in the field and has been adopted by many globalised economies and governments. However, it is necessary to keep these critiques of this discourse in mind.

Benefits of a knowledge economy have outlined the transformation of organisations into environments that facilitate greater team work and creativity, an approach that could be seen to enhance empowerment of workers and also the democracy of the workplace (Brown & Lauder, 2001, cited in Avis, 2002). However, there have also been criticisms of the painting of the knowledge economy as an empowering structure within organisations. Searle (2001) argues that while the knowledge economy adopts the rhetoric of worker empowerment, it is concurrently making use of traditional top-down hierarchies of control. In this study, it was found that workers had autonomy and room to be creative as long as they fitted with the company's vision of a 'core worker': those that knew the company's systems, understood the work ethic and culture, and took action to disseminate the company's values around the other workers. While the knowledge economy workplace does involve potentially empowering communities of learning (perhaps resulting as it was seen in Searle's study, in personal development, sense of purpose and fulfilment, meaningful relationships, creativity etc), these seek to conceal unchanged power structures, which ultimately constrain workers' learning and subsequent actions (Searle, 2001).

Social Capital

The concept of social capital is an important aspect of the knowledge economy as well as general learning processes. Hobbs (2000) and Uphoff (1999, cited in Hobbs, 2000) note two types of social capital: structural social capital which involves the forms of social organisations, including such things as roles, rules, precedents, procedures, and co-operative networks; and, cognitive social capital which includes norms, values, attitudes, and beliefs. Balatti, Gargano, Goldman, Wood, and Woodlock (2004) state that social capital is found in the social interactions between people.

Balatti and Falk (2002) argue that learning in a society is accessed through social capital. The skills and abilities that are theorised to make up 'human capital' (a standard definition being the "knowledge, skills, competencies, and attributes embodied in individuals that facilitate the creation of personal, social and economical well-being" (OECD, 2001, p.18)) can only be brought into being for the benefit of the collective, through social means (Balatti & Falk, 2002). An aspect fundamental to social capital theory is the concept of networks of relationships and the way that resources are distributed and accessed through these networks (Balatti & Falk, 2002). One common way of discussing these relationships are the concepts of bonding and bridging ties. These 'ties' can be resources made available within the networks, or the actual networks themselves (Balatti & Falk, 2002). Bonding ties are generally seen to be those "interactions between members of a group that build and maintain cohesion and solidarity" (Balatti & Falk, 2002, p.283). Falk (2001a) calls these strong ties as they are used on a regular basis. Bridging ties (or weak ties (Falk 2001a)) are those interactions external to the group (Gittell & Vidal, 1998, cited in Balatti & Falk, 2002). Falk (2001a) notes that weak ties are more effective than strong ties in finding employment. This may be because a lack of weak (external) ties contributes among other things to a lack of knowledge about the employment opportunities in the wider community that are on offer (Stack, 1974, cited in Falk, 2001a).

Social interactions draw on the identity and knowledge resources of the people involved at the same time as building these resources (Balatti et al, 2004). Knowledge resources include human capital and the social networks themselves (Balatti & Falk, 2002). Knowledge resources are derived where “the interactions draw on the resource of common understandings related to knowledge of community, personal, individual and collective information which is drawn from sources internal and external to the community” (Falk & Kilpatrick, 2000, p.99). Identity resources are derived where “the interactions draw on internal and external resources of common understandings related to personal, individual and collective identities – build a sense of ‘belonging’ and encourage participation, as well as providing the framework for people to re-orient their views of self and others in order to be ‘willing to act’ in new ways” (Falk & Kilpatrick, 2000, p.100). Falk and Kilpatrick (2000) created a model of social capital which outlines how the value of an interaction is determined. Firstly, the match between the desired outcome and the knowledge and identity resources on hand determines whether the interaction will be valued. The second determining factor of value is the nature of the interaction itself. This nature is altered by the knowledge and identity resources on offer, and in turn, changes these resources (Balatti & Falk, 2002). Trust is an essential part of this process if the interaction is to be valued (Balatti & Falk, 2002).

Balatti and Falk (2002) also acknowledge that knowledge and identity resources and the interactions associated with these resources are not the only things that affect the ability to draw on social capital. The capacity to draw on social capital also depends on the norms of the network within which the interactions are desired. The example is given by Balatti and Falk (2002) of African women who state that making contact with other people in current society’s norms and frames of reference is far easier than it was in past generations, where a person worked within differing norms and values. Social capital is said to be built when levels of trust within an interaction increase, the number or effectiveness of networks operating in a community of practice increase, or the size of a network increases which contribute positively to the common purpose of the group (Balatti & Falk, 2002). Drawing on and building social capital can occur simultaneously within interactions (Balatti & Falk, 2002).

Falk (2001a) argues that for employment programmes to be effective in moving people into work, developing social capital needs to be valued as much as developing human capital. As an example from within the small business world, social capital (as measured by the extent of relationships with others and the mechanisms and structures within which people combine their knowledge and skills for the benefit of others or the wider community) has been found to positively influence the success of small businesses over others (Fafchamps & Minten, 1999, cited in Kilpatrick 1999). Falk’s (2001a) study undertook interviews with 15 adult literacy programme participants, who all felt that improving their functional literacy skills (human capital) were the core need for improving their chances in life, to better themselves, and to attain employment. However, as Falk (2001a) implies, the outcome of employment is not necessarily forthcoming upon achievement of these skills, which can lead to disillusionment. He further states that the social interactions and ties between people that are built on trust, are as important for effective learning (and potentially further goal achievement) as the knowledge resources themselves. In a further paper, Falk (2001b) states that learning to trust is essential to being able to learn as it bridges a fundamental gap for adult learners. Instead of withdrawing

into themselves, they will, with trust, attend an education programme (Falk, 2001b). Therefore, aspects of social capital must be valued in importance and built into the programmes on offer, to allow for an increased chance of employment goal achievement. One such adult education programme that could be successful would include the development of trust, confidence, and supportive networks among and between the adult students, alongside the provision of learning (Falk, 2001b). Falk (2001b) argues that the development of trust and the introduction of learners to social networks of power can help develop identities that can foster growth in terms of both school and life worlds.

The relationship between social capital and education

Little is known about the relationship between education and social capital, although it is generally accepted that there is such a relationship, regardless of whether social capital is an outcome of education, a cause, or both (Green, Preston, & Sabates, 2003). Emler and Frazer (1999), Hall (1999), Nie, Junn, and Barry (1996), Putnam (1995; 2000) (all cited in Green, Preston, & Sabates, 2003) state that those people who are more educated tend to join more voluntary associations, show greater interest in politics, and take more part in politics. Further, it is stated that those with higher levels of education are more likely to express trust in others (termed social trust), and in institutions (institutional trust), and are more inclined to not condone uncivil behaviour (these effects are powerful even when controlling for wealth, income, age, and gender) (Green, Preston, & Sabates, 2003). In a related study, Feinstein, Hammond, Preston, Woods, and Bynner (2003) investigated the effect of adult learning in changes of attitude and behaviour, particularly with reference to those attitudes and/or behaviours thought to foster social capital and possibly social cohesion. It was found that those that participated in one of a possible three types of course (accredited academic, work-related, and leisure courses) were found to increase their level of civic and political participation (measured as voting behaviour now, as opposed to abstaining from voting before). The only course that did not show this same effect was that of accredited vocational courses. Furthermore, the academic accredited course, and leisure courses, were seen to be particularly important in developing those attitudes (in terms of racial tolerance) that were seen to promote social capital and cohesion. As this study worked from a longitudinal approach, all of these results were taken as increases in comparison to earlier status of the individual in question.

Green, Preston, and Sabates (2003) caution though that raising social capital levels through education, does not necessarily result in social cohesion. The development of social cohesion is viewed to be dependent on the norms and values of the particular community, as well as the context of the community at the time (Green, Preston & Sabates, 2003). The example is given by Nie et al (1996, cited in Green, Preston, & Sabates, 2003) of a community where the raising of educational levels could enhance a community's ability to effectively engage in politics, and also allow access to high status jobs and influential network positions. However, these same 'positive' outcomes can lead to competition in the form of an overflow of qualified people competing for the same static number of network positions, thus, while social capital and networking may be enhanced, it does not necessarily follow that social cohesion will be enhanced also. It is also stated that what matters for social cohesion and indeed, social trust, is not necessarily the quantity of networks or associations made, but the type and aims of the associations

(Green, Preston, & Sabates, 2003). Those associations, groups, or organisations that have a particular focus or single type of member, do not necessarily promote social cohesion and/or social trust in the larger community or within themselves to outsiders, whereas those that are 'relatively encompassing' and 'heterogeneous' pursuing 'collective public goals' are given as an example of a type of group or organisation that may enhance social cohesion and social trust within a community and the group in a reciprocal relationship (Green, Preston, & Sabates, 2003). Green, Preston, and Sabates (2003) conclude therefore that those mechanisms that promote social capital may be very different, or dependent on differing things, than those that promote social cohesion.

Role of adult education in social movements

Green, Preston, and Sabates (2003) also review the place of adult education in social movements over the centuries. Simon (1969, cited in Green, Preston, & Sabates, 2003) states that while, in the 19th century, dominant groups viewed education as a force for social order, the subordinate groups looked to education as a means of critical awareness, raising consciousness, and forging solidarity among progressive groups. Today, Green, Preston, and Sabates (2003) view the dominant policy discourse as more about 'community renewal' and 'social inclusion via the labour market' as opposed to social cohesion and social solidarity. There has also been a shift, they claim, from the view of the macro collective perspective, to that of the role of education in shaping social outcomes through the individual (Green, Preston, & Sabates, 2003).

Social capital in communities of practice

Social capital at work within a community is evidenced by a shared language, shared experiences, trust, personal development, and identification with the community, resulting in commitment, networks, and shared values all towards some common purpose(s) (Kilpatrick, Bell, & Falk, 1999, cited in Kilpatrick, 2001). Partnerships and collaborations within a community of practice draw on social capital (Kilpatrick, 2001). Participation in a community of practice is noted as costly in terms of time, labour, and resources for all involved (Hobbs, 2000; Clegg & McNulty, 2002). Within Clegg & McNulty's (2002) study of attracting women participants to an adult education course it was found that participation in groups was based on unevenly distributed social capital, in that those women with already established social networks found it easier to take part. Thus, social inclusion or exclusion in participatory practices does not necessarily operate solely at the macro level, but at the micro level as well (Clegg & McNulty, 2002).

It has been argued by some that the development of groups for a common purpose or to develop social capital for the collective good, should not be done by external agencies (Hobbs, 2000). Hobbs (2000) states that the difference between support from external agencies, and creation by those directly involved, is that support programmes typically reach the well-informed and connected only, whereas a critical awareness raised by those more directly involved can mean that the marginalised are also drawn into the process. However, this is not necessarily so. Hume (2000, cited in Hobbs, 2000) argues that 'best' practice, open and public meetings, regular elections, financial training for leaders, inclusion of women etc. does not necessarily stop the

dominance of the elite in these newly forming groups, or the creation of new elites. Thus, participatory methods must involve a critical reflection process in order to ensure that the common purpose or collective good is reflecting the reality of those in most need. Kilpatrick (1999) also cautions that closed communities (i.e. those without external links or support) run the risk of perpetuating local prejudices.

Kilpatrick (1999) cites the use of four stages in the development of social capital within a group. The first stage involves the development of self-confidence, interpersonal skills, and leadership skills on a personal level. Here, people are encouraged to acknowledge their strengths and weaknesses, improve their listening skills and empathy, and to take on various roles within the group. The second stage involves getting to know one another which is seen to occur as group members share experiences and their life histories. It is important in this stage that a safe environment is established where people are free to challenge and give constructive criticism to others. This stage allows for the development of trust in others and further confidence building. The third stage acknowledges the need for each group member to be viewed as a credible member of the team who brings specific knowledge and skills that the group can use. An important and necessary realisation in this stage is that enhanced outcomes can be achieved through combining knowledge and skills as opposed to using one group member's skills alone. Finally, there is a need for commitment to future action. It is only at this point that the group is prepared to act towards their goals.

As social capital is used or developed within interactions, the knowledge and identity resources will change (Kilpatrick, 1999). The quality of the social capital arising from the interaction is dependent on the quality of the knowledge and identity resources (which are also dependent on the other's quality), as well as the purpose of the interaction (Kilpatrick, 1999). Aspects of quality include: the extent and relevance of knowledge of skills and values of those within the community; the extent and relevance of the knowledge of skills and values of those external to the community; the degree of shared experiences, and understanding of aspects of history within the community; the extent to which shared visions of the future reconcile any historical experiences; the ease of communication in terms of geographical proximity, rules, procedures, and the degree of shared language; the extent to which norms, values, and attitudes are shared; the degree to which the group contributes to each member's self-confidence or develops a positive self-identity; and, the levels of trust and commitment within the community (Kilpatrick, 1999).

Approaches to Lifelong Learning

Based on the view that investment in education and training has benefits both for the individual and for the society and/or workplace through the combination of human and social capital, the knowledge economy era has harnessed onto the concept of the 'learning organisation'. As mentioned previously, in the knowledge economy discourse, organisations are required to become flexible and reflexive in terms of managing their knowledge, which must continually change to keep up with or keep ahead of competitors (Edwards & Usher, 2001). Life-

long learning through the establishment of a 'learning organisation' is the means by which this competitiveness can be achieved and is largely seen as an economic imperative (Gorard, 2003).

The link between workplace education and economical benefit

Berryman (1994) states that technological progress has changed the labour market in three main ways: firstly, the number of jobs in producing goods has decreased and been replaced by an emphasis on producing services; secondly, the higher skill occupations have increased in importance; and, thirdly, skill requirements within occupations have widened. It is further stated that with technological change follows a need for more educated workers and the continuous retraining of those workers. Berryman (1994) states that adult's foundation skills affect the wealth of individuals and nations. She states that workplace training depends on and builds on the foundation skills that are acquired from formal compulsory schooling. It is not a substitute for formal compulsory schooling. Berryman (1994, p.iii) states that "employers train the trainable" and mainly train their more educated employees (this was also found to be the case in an analysis of the New Zealand International Adult Literacy Survey data sample, see Culligan, Arnold, Noble, & Sligo, 2004). Berryman (1994) noted that work-sponsored training increased employee's productivity and thus, their earnings, more than training in post-compulsory education (when the effects of education were controlled for). Workplace learning also was an important way in which both employers and workers adapted to change in the work environment. However, a positive association between rates of training and rates of economic growth cannot be taken to mean that training causes economic growth. Berryman (1994) states that the training must be connected with new economic opportunities within the labour market to improve economic growth. Other mediating and moderating factors may also be important.

Because employer training is reportedly designed to build on already substantiated foundation skills, this implies difficulties for those without a solid base in foundational and problem solving skills in learning on the job (Berryman, 1994). Mincer (1987, cited in Berryman, 1994) found that those of working age who have less than 12 years of schooling are 170% more likely to be unemployed and they are 30% more likely to have unemployment spells longer than workers with more than 16 years of schooling. It should be noted that changes in economic and labour market conditions since the 1980s would likely paint a different picture. However, these findings do highlight the association between initial education and later employment opportunities during the 1980s.

Differences between large and small employers are also noted with regard to education of employees and training opportunities. Unsurprisingly, in the United States, small employers are likely to spend less on formal training programmes than large employers (Bartel, 1989, cited in Berryman, 1994). This could be due to a lack of financial means to train employees in smaller businesses, or as Berryman (1994) suggests, this could reflect a lack of a specific training department and therefore, a lack of tracking of training opportunities undertaken by employees. Berryman (1994) also claims that small firm employees must often be well versed in a variety of skills, and because small firms often hire less educated people than larger firms, the need for training interventions in these firms is heightened. In a discussion of the Future Skills Wales

Survey undertaken in 1998, Gorard (2003) states that while employers reported being aware that the skills of their employees were very important to their businesses, those employees that were part-time, of lower status, and less qualified than others, received very little training that was generalised or non task-specific. This was especially true of small to medium sized enterprises (SMEs) (Gorard, 2003).

The Future Skills Wales Survey also reported that there had been growth in Health and Safety courses over time, with decreases in the frequency of training identified by employees as enhancing their employability (i.e. their perceived usefulness to another employer) (Gorard, 2003). This suggests that perhaps training sponsored by employers is focused more on what is useful to the employer, than the individual, even though it is provided under the context or discourse of lifelong learning.

The dominant discourse which encourages learning organisations is argued to largely ignore the interactions between organisational education, informal training, and untaught learning, and subsequent job performance (Livingstone, 2001). Livingstone (2001) goes further to state that the dominant discourse holds that the central challenge for organisations in the knowledge economy is to encourage workers to become learners to enhance organisational performance. As outlined above in criticisms of the lifelong learning discourse, the drive of the learning organisation is often described as an attempt at lifelong learning, whereas, in fact, it is seen in some organisations to be learning centred around organisational needs, as opposed to individual or collective worker/learner needs. NCVET (2003) have released a research report entitled 'What makes for good workplace learning?' which outlines some main issues at the heart of this question. In their analysis, they found that developing a culture of learning was very important alongside aligning the training offered specifically to the business strategy of the organisation involved. This training is usually aimed at and customised to improve the skills of the employees with the outcome of contributing to enhanced organisational performance. All forms of training, including informal training, being viewed as valid by the company was important, as well as networks and partnerships, for example, from suppliers and customers which can result in improvements to products and services. Interestingly, NCVET (2003) stated that enterprises are increasingly viewing generic skills as important in developing innovative practices, as opposed to specialised skills.

If companies in the knowledge economy are driven by the race to achieve knowledge and thus innovation in products and processes over their competitors, how is it that companies actually achieve knowledge creation? The ideas of the learning community and the learning organisation revolve around processes of learning which can be collective, individual, formal, informal, and untaught, but how are these learnings and processes actually put into action for the organisation's benefit and growth? Nonaka and Takeuchi (1995, cited in Poell & Van der Krogt, 2003) have developed a theory of knowledge creation within organisations which states that knowledge creation involves the interaction of both implicit and explicit knowledge. The individual worker/learner's knowledge forms the basis for knowledge development. However, knowledge conversion is seen as a social practice that occurs when the organisation provides the social environment within which workers/learners interact to develop knowledge further. The organisation acts as a mediator within this social practice, with its structure and manage-

ment structure influencing the knowledge development (learning) and thus, directing the development (learning) process toward that of the organisation's goals and priorities. Nonaka and Takeuchi (1995, cited in Poell & Van der Krogt, 2003) hold that because of the mediating nature of the organisation in this process, the worker/learner's knowledge development is necessarily limited. Poell (1998, cited in Poell & Van der Krogt, 2003) modifies this theory somewhat through his findings that individual factors (such as dispositions and interests) that the workers/learners bring to the learning process, also mediate what is learnt.

Postmodernism and poststructuralism approaches to learning

In the literature, lifelong learning is increasingly viewed as a postmodern concept as it is, in Edwards and Usher's (2001) perception, without boundaries. Learning can be constructed both within and outside of educational institutions and does not necessarily constitute what traditional educators would define as formal, appropriate, or worthwhile knowledge. This hints at the implication that not all forms of learning are explicit, nor considered 'learning' if looking only through the dominant discourse. For instance, it could be argued/IMPLIED from the traditional education viewpoint that learning only involves formal learning processes, or at the very least, activity that is explicitly undertaken as a learning activity, for example, learning from a mentor at work who has taken time from their tasks purely to assist in teaching a skill to another. Informal tacit learning that occurs, and learning that happens 'on the job' and is not explicitly planned, may not be considered 'learning' from the dominant centre viewpoint. In a related argument explored further below under 'Workplace Learning', Billett (2002a; 2002b) provides an argument for widening the definition of learning (and lifelong learning) to include those instances where knowledge is passed from worker to worker in informal and tacit circumstances.

Livingstone (2001) notes four forms of learning throughout the life cycle: initial formal schooling, further nonformal adult education, informal training, and nontaught informal learning. Another potential form that could be added to this list is further formal adult education. Livingstone (2001) offers a broad definition of learning as the "gaining of understanding, knowledge, or skill at any time and anywhere through individual and group processes" (p.22). This learning is seen to occur throughout life. It is also important to note the constructivist view of learning that has been very influential in the field. This view posits that learning is not something that can be taught, instead it is a process of construction by the learner (Kilpatrick, Barrett, & Jones, 2003).

Poststructuralism holds that people and identities are formed together as constructions developed through narratives and stories (discourses), which are in turn developed through experiences, that then become the individual's perceived 'reality' (Chapman, 2004). Chapman (2004) goes further to state that it is these very stories that shape the power and knowledge structures that we work in, live in, and critique, strongly refuting the idea of an underlying structure independent of construction in the mind that lies under our actions (something that can be discovered and resisted). Discourses are linguistic, cultural, and social structures with poststructuralists believing that language is the tool of construction (Chapman, 2004). It is claimed that language can be deconstructed and reconstructed to shape a more equitable world

(Chapman, 2004). From the poststructuralist perspective, Brookfield (2000, cited in Chapman, 2004) calls for a challenging of reality (the dominant discourse) as a construct of the powerful, with the intent to uncover the power dynamics inherent around practices undertaken in our communities that people accept as commonsense. Here, Brookfield is assuming a hegemonic power that is oppressing people through a dominant discourse that is perpetuated by those who benefit from it, and calls for people to become engaged in critically reflecting on this discourse so as they may begin to resist that structure and bring about social change which better reflects their needs (Chapman, 2004). For practical work within the classroom, Chapman (2004) suggests the use of a critical personal narrative (CPN). CPN is designed to allow learners within a classroom to reflect on what they would normally take for granted about their work and interactions with other learners. Chapman (2004, p.101) gives the example of an exercise where an identical phrase "When it comes to talking out in this class, I think..." is written on a separate piece of paper by each learner. Each learner writes their thoughts on a separate piece of paper in response to this phrase, and at a signal, passes their paper to the next student on their right. That student then writes their thoughts on what the previous person has written and so on. These sorts of exercises can allow power dynamics and how they are working within a classroom to surface, as well as cultural differences and what kinds of knowledge and discourses are valued and being constructed (Chapman, 2004). This type of reflection and the ensuing discussion can begin to allow both teachers and learners to critically reflect on those discourses (social, cultural, and economical) that they take for granted.

Constructions of learner identity

MacLachlan and Cloonan (2003) argue that the identity of a person and that of that person as a learner is located in their social participation as much as the individual. They argue that it is the social relationships that the individual has participated in that shape their identity as a learner. MacLachlan and Cloonan (2003) found that while for a large number of adult education participants, formal schooling was perceived as a 'disabling experience', it was the continuance of an internalised belief that the person was not capable of being a learner that had held them back from participating. Crowther (2000) also acknowledges that if the way that an individual perceives the world is changed, this will have an effect on their perception of themselves. He states that knowing, doing, and being cannot be separated from one another (Crowther, 2000). This could also work within a reciprocal relationship. If a person's perception of themselves is changed (i.e. their identity is changed), then their perception of the world (and the opportunities available to them) may change also. In MacLachlan and Cloonan's (2003) study, the individual identity that did not allow them to see themselves as capable learners, held them back from participating in a course, and also from seeing their literacy practices as valid in contrast to the dominant discourse.

Adult Learning Theory

Differing theories of adult learning abound in the literature. In general, four types of learning became apparent throughout much of the literature reviewed here, with most emphasis being had on transformative (or expansive) learning. This type of learning implies changes

in an individual's identity, brought about by an interaction of changes in attainment of knowledge and skills, changes in emotion (such as motivational and attitudinal attributes), and changes in social dimensions that the person moves within (Illeris, 2003). The three other types of learning identified were mechanistic (or cumulative) learning where use of knowledge is context-specific to those situations similar to where it was learned; additive (or assimilative) learning where new knowledge is linked to understandings already gained; and accommodative (or exceeding) learning, where existing understandings are modified so that new understandings can be added. This last form of learning is very difficult to achieve, however, it is very resistant once attained. A fifth form of learning is experiential learning, a form of knowledge based on experience as opposed to formal training/education (Johnston & Usher, 1997). While in traditional formal education, experiential knowledge has tended to be given less weight than formal knowledge, a postmodern perspective reconstructs experiential knowledge from a way, through experience, of which knowledge is derived, to a form of knowledge itself (Johnston & Usher, 1997). This knowledge is constructed as local, specific, and partial (Johnston & Usher, 1997). In a similar vein, Billett (2001b) argues that "rather than being a process of internalisation of externally derived knowledge, individuals construct knowledge through conscious adaptive and interpretative processes" (p.30). He goes on to state that learners are "active, discerning and interpretative participants in construction of meaning - coming to know - even when strongly enculturating circumstances prevail" (p.30). In other words, Billett argues that people construct their own perception of situations and learn from these constructions, as opposed to passively accepting and valuing an external construction of thought on the topic.

Three main components of expertise are put forward as important by Collin and Tynjala (2003). These are formal (theoretical) knowledge, practical knowledge, and self-regulative knowledge (which includes metacognitive and reflective abilities) (Bereiter, 2002; Bereiter & Scardamalia, 1993; Eraut, 1994; and, Etelapelto & Light, 1999, all cited in Collin & Tynjala, 2003). All of these forms of knowledge need to be integrated for optimum problem solving ability either collectively or individually in the workplace (Collin & Tynjala, 2003). Collin and Tynjala (2003) interviewed employees and students around their perceptions of the importance of differing types of knowledge. They found that there was a perceptual distinction between theoretical and practical knowledge, with the employees stating that practical on-the-job learning was where most of their competence at work came from, instead of from earlier schooling. Students stated that knowledge from school (formal/theoretical) and work learning (practical knowledge) were distinct from each other. However, some students also stated that it was only through the practical application of knowledge that the theoretical understanding became intelligible. (This could suggest that theoretical knowledge is an implicitly held understanding, as opposed to an explicit type of knowledge). While some of the employees and students agreed that school knowledge gave a general or basic basis for on-the-job learning, school knowledge was perceived as difficult to transfer to the work setting. Collin and Tynjala (2003) suggest that the best model of workplace learning could constitute one in which theory and practice alternate in learning tasks. Generally however, while theoretical and practical knowledge were viewed as complementary and often integrated components of competence in an area, with theory viewed as a foundation for the practical knowledge built while on-the-job, theoretical knowledge was perceived to be replaced by practical knowledge over time at work (Collin & Tynjala, 2003).

Situated learning

One theory of learning that is gaining ground is situated learning theory. This theory focuses on learning as a practice embedded in cultural, social, and organisational contexts, as well as within power relations (Contu & Willmott, 2003). This is in stark contrast to other understandings of learning which focus on the cognitive processes which are ongoing within an individual's mind. Within the cognitive approach, learners are thought to possess a relatively fixed proclivity for learning, alongside fixed preferences, learning styles, and personal traits that are resistant to change (Bloomer & Hodgkinson, 2000). This latter theory of learning holds that once knowledge has been learnt, it can then be transferred to other sites and contexts, whereas situated learning theory holds that knowledge is constantly transformed (and thus learning occurs) through involvement in differing social practices (Contu & Willmott, 2003). Power relations within the community of practice, are seen to mediate the acquisition, maintenance, and transformation of meaning, including what is deemed to be legitimate knowledge or learning (Contu & Willmott, 2003).

Situated views of learning within the workplace are held to be rooted within the situation within which the learner participates, rather than within the mind of the person themselves (Fenwick, 2001). Knowledge and learning are seen as growing from participation in a community of practice, as opposed to an individual focus of the individual alone reflecting on the actions that they or others have undertaken (Fenwick, 2001). Schon (1983, cited in Fenwick, 2001) argues the counter side stating that workplace learning develops through reflection on workplace practice. Reflection processes are considered to be required important mental processes whereby experience is transformed into knowledge, which can then move on within the learner to inform and explain other contexts (Fenwick, 2001). Critics of this approach argue that experience and knowledge should be seen as determinants of each other, and that the idea of reflection ignores this while at the same time emphasising the notion of rational thought over constructed experience (Fenwick, 2001). Therefore, while situated learning theory within the workplace holds that learning is constructed from the actual practice, rather than a reflection on that practice, it does have its limits. Fenwick (2001) outlines that because of the theory's focus on practical and social aspects of situations, abstract and complex work activities do not necessarily lend themselves well to explanation via this theory.

Fenwick (2001) states that learning is also a cultural practice within the workplace, influenced by the power structures of these practices. She argues that workplace learning has become a tool of cultural control, constructing particular types of workers who suit the enterprises' needs through the use of various discourses and texts that influence particular workplace ways of knowing (Fenwick, 2001). These discourses include the ideas of what constitutes appropriate training, what is worthwhile knowledge to have in a particular workplace, the idea that human capital (i.e. an increase in skills) will increase the human capital of the organisation, experiential and expertise discourse (the belief that mastery can be attained), and the generic skills discourse (the idea that skills can have a general basis that is flexible and transferable across tasks and contexts) (Fenwick, 2001). These discourses and the texts that reflect them serve to ensure a dominant culture that reflects the enterprises' needs in the workplace.

With regard to the discourse of 'mastery', Edwards and Usher (2001) posit that there is no such thing as 'mastery', only the continual striving towards it. Lifelong learning, by its very name and nature, outlines that there is no body of knowledge that can be 'mastered' by attainment of knowledge to a particular level (Edwards and Usher, 2001).

Fenwick (2001) further argues that equity within working learning is a myth. Butler (2000, cited in Fenwick, 2001) defines equity within a social justice framework as "wherever substantial differences in power are correctable by a collective effort or social policy" (p.13). This implies that workplaces that work from an equitable power base will do whatever is possible to ensure that differences between groups are minimised, if not removed. However, the current work climate, it is argued, actually seeks to emphasise differences, while concurrently making them invisible. For example, by targeting 'disadvantaged' groups, encouraging a climate of competition for recognition and resources, endorsing policies that constrict learning within the workplace in order to avoid litigation, and the focus on managing diversity, the purpose of diverting attention from problematic workplace structures and enhancing organisational gain is served (Fenwick, 2001). At the same time, the workplace is seen as working to help disadvantaged or marginalised portions of the workforce, when it is argued by Fenwick (2001) above that the workplace could be imposing its own cultural practices and values under a guise of learning.

However, it is also important to acknowledge that individuals are not just passive, oppressed beings (Fenwick, 2001). Fenwick (2001) makes the point that individuals choose to learn, and can resist and deceive in relation to cultural and other discourses that may be presented to them. Hodkinson, Hodkinson, Evans, Kersh, Fuller, Unwin, & Senker (2004) also argue that situated learning theory runs the risk of allowing only the social construction of the individual to be seen, rather than the role of the individual within that, interacting with the social world as well. Hodkinson et al (2004) outline that workers as individuals bring differing as well as similar values, histories, dispositions, and practices to the workplace, and therefore, the individual and social should be seen as separate, but yet interacting elements within a theory of learning.

The importance of the social context in learning is also emphasised by Bloomer and Hodkinson (2000), who claim that learning is a participatory act, where, within social practices, knowledge, skill, and meaning are created and transformed (akin to situated learning theory). Thus, situated learning theory outlines an ongoing process whereby social interactions and practices lead to a new conceptualisation or transformation of knowledge (learning). However, it is argued that learning is not purely a reaction to external situations, nor a construction of an individual's mind, but an interaction of the two. Bordieu's notion of 'habitus' is very important here as a mediating factor on the meaning making process from social practice (Bordieu & Passeron, 1990, cited in Bloomer & Hodkinson, 2000). Habitus refers to a collection of dispositions that a person holds, largely tacitly, which strongly influence that person's actions in any situation. The habitus in turn is shaped by the individual themselves (i.e. their genetic makeup, societal position, social interactions, etc.). The dispositions a person holds in regard to learning are believed to be founded on their ideas of what knowledge is, what learning entails, and their

intrinsic and extrinsic belief or nonbelief in the relevance of what is to be learned (Bloomer & Hodkinson, 2000).

Learning can also affect the shaping of an individual's dispositions. One example of this is in Preston and Feinstein's (2004) study of the effect of learning on attitude formation. These authors state that the "mechanisms through which adult education affects one attitude may be different from those which affect another" (p.6). These mechanisms are based on social and individual characteristics. Bynner, Romney, and Emler (2003, cited in Preston & Feinstein, 2004) proposed a sequential model linking attitude formation with eventual behaviour change. Each stage within this model however, does not continue on unproblematically to the next stage. Differing factors interact at each stage to determine whether the sequence continues to the end or not. The first stage in this model is 'interest' (derived from individual and social background factors) and the example of an interest in politics is given. From here, interest may lead to more attention to political stimuli, thus encouraging the formation of political knowledge. Through social interactions, this knowledge may form into political opinions, which can become the basis of a set of beliefs. Finally, these beliefs could lead to engagement in political behaviours for example, voting or joining a political party.

Bloomer and Hodkinson (2000) posit the idea of a 'learning career' as a response to life-long learning policies. They argue that if lifelong learning is a central concern for policy makers, then understanding how learning changes throughout the life span is important. Learning career is defined here as "a career of events, activities and meanings, and the making and remaking of meanings through those activities and events, and it is a career of relationships and the constant making and remaking of relationships, including relationships between position and disposition" (p.590). There is a temporal element at the heart of this. Bloomer and Hodkinson (2000) outline that changes to dispositions within the learning career of an individual, are also changes to personal identity, and that transformations in learning careers can take many forms which are influenced not only by the habitus and the contexts within which the habitus has developed, but the contexts within which the person is located at the time of the transformation. Several interesting findings from Bloomer and Hodkinson's (2000) study of the learning careers of young people between the ages of 15-19 included: many of the learning careers were unpredictable in their pathway and were never simply the products of rational choice (the definition of rational being left up to the individual to decide rather than the dominant centre); learning careers are largely linked with other life experiences and, significantly, by learning that occurs outside of formal education/training settings (again, this highlights the importance of informal education); between the ages of 15-19 personal identities were significantly transformed and transformations in learning careers were tightly bound to these (this could mean that either they removed themselves from further education or engaged with further education); and finally, that the transformatory processes of learning careers are complex in that they rest on the individual's perceptions of contexts, values, beliefs, and meanings. Bloomer and Hodkinson's (2000) study emphasises that learning is not simply a skill divorced from cultural, social, and individual constructs, contexts, priorities, and dispositions.

Tusting and Barton (2003) also advocate for the acknowledgment of learning as a situated practice. These authors argue that the learner's contexts, purposes, and practices must be taken

account of first and foremost in the learning situation, as engagement in learning is contingent upon that learning fitting into the participant's purposes. Tusting and Barton (2003) claim that because adults have a drive toward self-direction and towards being autonomous learners, the purposes of learning must address the learners' concerns and priorities. Illeris (2003) goes further to claim that learning is desire based. He claims that adults will learn what is meaningful for them to learn, that they will draw on resources they already have for their learning, and that (if allowed) they will take as much responsibility for their learning as they wish to take (Illeris, 2002, cited in Illeris, 2003). Illeris (2003) further states that adults will typically learn in a partially distorted way or with a lack of motivation that makes what is learned vulnerable to loss if they are not interested, or believe the topic is irrelevant. It is stated that difficulty in learning for adults could be enhanced by courses that are designed with curricula largely centred around the needs of others, as opposed to the individuals in the course (Illeris, 2003).

It has been argued that concepts of situated learning and communities of practice, can overemphasise the role of social and cultural contexts and minimise the role of the individual in the learning process (Illeris, 2003). Illeris (2003) argues that in practice, the issue of learning becomes a question of what will get through to the individual, and under what circumstances. The concept of 'everyday consciousness' (Leithauser, 1976, cited in Illeris, 2003) is invoked to explain an individual's conceptualisation of learning. Within this concept, an individual attributes general pre-understandings to certain areas, and when differing understandings come to the individual's notice, the new information is either rejected or modified so that it will fit with previous understandings or be discarded. Therefore, it is argued, the individual controls their own learning (either consciously or otherwise) through a sophisticated filter system that protects previous understandings and the individual identity that has been constructed from these (Illeris, 2003). It could also be argued that there is a third option with the new information, in that it could change previous understandings, and therefore alter the individual's construction of identity, perhaps through a process of transformative learning.

Illeris (2003) argues for a more all-encompassing definition of learning based on a structure of learning which involves two integrated processes and three dimensions: The two processes are:

1. Interaction processes between the learner and their surroundings (both social and cultural) which are dependent on time and locality factors.
2. Inner mental acquisition and elaboration processes. These processes are mostly genetic in nature and include the cognitive (knowledge and skills) aspect as well as an emotional aspect (motivation and attitude).

The three integrated dimensions of this model include:

1. Cognitive – where knowledge, skills, understandings, meanings, and functionality are developed.
2. Emotional – where patterns of emotion, motivation, attitudes, sensitivity, and mental balance are developed.
3. Social-societal – where potentials for empathy, communication, and co-operation are developed.

This structure of learning is put forward as a way of bringing together both the individual and social processes of learning, across all forms of learning (e.g. formal, informal, and tacit etc.).

A further practical model of learning is the concept of the zone of proximal development (ZPD), developed by Vygotsky (Taylor, King, Pinsent-Johnson, & Lothian, 2003). This concept holds that learning develops from initial guided learning to later independent learning over time. While this model of learning is based on childhood learning strategies, the concept can also be generally relevant with regard to adult learners. This model holds that there are two developmental levels in a learner: the actual level of development (defined by the level of achievement during independent problem solving); and the potential level of development (defined as the level of achievement if given support during the problem-solving task). The gap between these two levels is the ZPD. Within the ZPD, Bruner (1986, cited in Taylor et al, 2003) outlines a concept known as scaffolding, where a teacher/facilitator behaves in a way which allows the student to engage in learning which is beyond his or her actual level of development. Scaffolding can occur in a variety of ways. One of these is through 'cognitive apprenticeships' (Taylor et al, 2003). Here, behavioural techniques such as modelling, approximating, fading, and generalising are used in conjunction with peer collaboration. Another method that enhances scaffolding is a shift from a directive approach to teaching to a more enabling, facilitative approach (Taylor et al, 2003). This can take the form of subjects being taught that are meaningful to learners, or taught in a way that is relevant and characterised by collaborative practices and authentic materials (Taylor et al, 2003).

It is important to note however, that practices that may be facilitative for some learners' learning, may not be for others. Kegan, Broderick, Drago-Severson, Helsing, Popp, and Portnow (2001, cited in Taylor et al, 2003) found that there were three ways in which adult learners made sense of their learning: the 'instrumental' group learnt best when the teacher/facilitator provided clear explanations, corrections, and step-by-step procedures to help build the skills necessary for assignments; the 'socialising' learner learnt best when interpersonal connections with the teacher/facilitator were built and the teacher/facilitator was viewed as a role model; the 'self-authoring' learner viewed teachers/facilitators as authoritative sources of knowledge, alongside others. While membership within either of these groups is not stringent, it is necessary to note that people will respond differently to differing types of teaching/facilitating. There is no one 'correct' way to teach/facilitate a topic.

A final means by which to possibly achieve scaffolding is the development of self-directed learning. Hiemstra (1994, cited in Taylor et al, 2003) notes that self-directed learning is not necessarily an individual activity. Collaborative practices are still important and can be found within self-directed learning practices. This collaboration can take place between teacher/facilitator and learner where the learner is assisted to plan, implement, and evaluate their learning (Merriam & Caffarella, 1999, cited in Taylor et al, 2003), or through the learner assisting other learners in this process (Taylor et al, 2003).

Workplace Learning

Around the time the discourses of 'the knowledge economy' and 'the learning organisation' were emerging, the idea of a 'learning community' began to take form. A typical definition of a learning community is a community that "addresses the learning needs of its locality

through partnership" (Kilpatrick, Barrett, & Jones, 2003, p.2). Learning communities can apply to communities of common interest, as well as those that are located within a similar geographical space, and they generally share the common themes of a common or shared purpose, respect for diversity, the aim to enhance collective potential and wanted outcomes, and are operationalised through collaboration and partnership (Kilpatrick, Barrett, & Jones, 2003). Kilpatrick, Barrett, and Jones (2003) state that these communities not only serve to facilitate the sharing of knowledge, but have the potential to create new knowledge that can be used for the benefit of not only the learning community, but the wider society as a whole. Knowledge within these learning communities is socially and collectively constructed, brought about via dialogues and challenges from differing perspectives (Pea, 1993, cited in Kilpatrick, Barrett, & Jones, 2003). Interactions with others in a learning community foster social capital (Falk & Kilpatrick, 2000), which in turn fosters trust, shared values, personal development, sense of identity, and access to others' knowledge (Kilpatrick, Barrett, & Jones, 2003). Learning communities are also not closed systems and ideally, should be open to external information and knowledge flowing into the community, as well as being willing and open to change, all prerequisites of community development and learning (Kilpatrick, Barrett, & Jones, 2003).

The workplace is described as a type of learning community by Davis and Sumara (2001). Within this analysis, the workplace is described in terms of complexity theory, where the learner is reconceptualised in terms of the collective, as opposed to the individual (Davis & Sumara, 2001). In complexity theory, a complex learning system is made up of several interacting complex systems, which are always participating in several different systems. Therefore, a complex system is described as 'nested' in that, while it is a collection of different units, it is also simultaneously, part of a larger system. The system is more than the sum of its parts, and cannot be minimised to its smallest units. For example, in Davis and Sumara's (2001) study of teachers participating in a learning community, while individual differences in teaching did not seem much different over the course of a year, collectively the teacher community had taken on a different character.

Complex learning systems are very flexible and open, in that as they modify themselves (i.e. as they learn) they affect other systems (Davis & Sumara, 2001). Any learning on behalf of an individual, affects the collective character. To be healthy, complex systems do not operate at an equilibrium. It is in fact the disequilibrium of the wider society within which they are nested, that creates the diversity of circumstances to which a learning system must respond (Davis & Sumara, 2001). Therefore, the idea of flexibility promotes learning to deal with change, key aspects of the knowledge economy discourse.

In terms of learning, the workplace and educational institutions are often described in terms of the former being involved mainly with informal learning, and the latter with formal (Billett, 2002a; Boud & Solomon, 2003). Workplaces are often seen as a place to contextualise what has been learned in an educational institution (Billett, 2002b). However, Billett (2002a) states that this is an unhelpful distinction as learning within the two settings is actually situated around two different foci: workplaces are likely to emphasise the vocational practice including the interests of particular groups within this, while educational institutions are more likely to emphasise learning in general. Therefore, it is argued that while learning in educational institu-

tions may be the dominant mode for 'formal' learning, claiming that workplace learning practices are 'informal' underestimates their impact, effectiveness, and importance. Informal learning implies ad hoc, unstructured, incidental learning, which goes against the finding that workplace activities are often highly structured where goals, practices, and learning are often central to the progress of the workplace (Billett, 2002a). Further, Billett (2002a) claims that workplace practices are often specifically structured to allow workers to access the knowledge they need to learn to carry out the task at hand. (However, there are limits to these structures in place for learning, which will be discussed later in this review). Billett (2002b) also argues that conceptual and symbolic knowledge can also be attained through workplace learning, and is not purely the domain of the educational institution. However, he outlines that most workplace learning at present is focused around a narrow view of task-specific learning, and does not perhaps fully realise its potential emancipatory uses at present (Billett, 2002b).

Further, the naming of an individual as a 'learner' in the workplace also has its own issues. Boud and Solomon (2003) argue that being called a 'learner' brings up issues of position, recognition, and power. In their analyses, they found that to name oneself a learner within the workplace suggested a lack of expertise or incompetence at the tasks at hand. Boud and Solomon (2003) suggest that while learning in the workplace can be seen as a process by which workplace practice is enhanced, identifying oneself as a learner suggests a not yet fully-functioning individual. This understanding has implications for those in the workplace who actively and intentionally make it known that they would like to learn from others, as while learning within the workplace may be an accepted practice, acknowledging that an individual needs to learn may not be.

Social and individual influences on workplace learning

Guided learning strategies are offered by Billett (2001a) as a means by which to achieve vocational knowledge in workplaces. Guided learning at work takes place through engagement in everyday work tasks, the direct guidance of co-workers, and also indirect guidance from co-workers and the workplace itself. These strategies are claimed to enhance both the individual's autonomy and progression, as well as their ability to conduct routine as well as novel workplace tasks. Guidance of co-workers can mean direct on-the-job teaching of specific tasks, and indirect guidance can mean observation of co-workers, mentoring, etc. Scribner (1985, cited in Billett, 2001a) claims that vocational knowledge is part of social and cultural practices. Both direct and indirect guidance assists learners to access and construct socially developed vocational practices (Billett, 2001a).

Billett (2001a) proposes three levels of guided learning to enhance learning at work, which could form a structure for workplaces to use to develop vocational learning with their new employees. The first of these is to ensure that access to direct and indirect guidance is intentionally organised around everyday activities. Also, a pathway plan that incorporates activities of increasing complexity and a means of evaluating progress is suggested to provide a structured means to worker vocational knowledge development. Secondly, guided learning through more experienced co-workers should take the form of modelling, coaching, questioning, and other strategies, and this should be combined with the proposed third level, guided

learning for transfer, not just across tasks in the workplace, but also across settings (Billett, 1999, cited in Billett, 2001a). This is congruent with the knowledge economy theory of requiring more flexibility in workers. Intentionally ensuring that the knowledge is transferable is suggested to be achieved through questioning dialogues, group interactions, and reflective practices (Billett, 2001a). Billett (2001a) proposes that all three of these levels should occur simultaneously. These three levels of guided learning also combine both individual and social practice models of learning.

Opportunities to engage with tasks and guidance in the workplace are not equally distributed however. Billett (2001a) outlines some limits to learning in the workplace which include: learning (either knowledge or practices) that is inappropriate but still reinforced by the workplace; barriers to access and guidance for developing workplace practice; having to learn knowledge that is not accessible in the workplace and the lack of expertise or experience required to develop this knowledge (this could link in with the previously discussed idea that employer-sponsored training builds on already assumed developed fundamental skills); and the reluctance of workers to participate in learning in the workplace. Billett (2001a) claims that the ability to engage in workplace activities and access the guidance on offer is mediated by the interaction between the individual and the social sources of knowledge. Billett (2001a) discusses the concept of workplace affordances, which are the opportunities given to learn and perform tasks alongside the invitational qualities of the workplace. Affordances are argued to be shaped by workplace hierarchies, group affiliations, personal relationships, cliques, and cultural practices (Billett, 2001a, p.67). It is suggested that these interpersonal relationships determine how individuals are not only treated and afforded tasks, but also how their performance in workplace tasks is perceived (Billett, 2001b). Further, while individual workers react to the workplace affordances and opportunities that are offered to them (or not offered as the case may be), it is also important to acknowledge that individual workers are also contributing to the construction of these affordances and opportunities (Gorard, 2003), which are likely a product of dominant workplace discourses or ways of reacting to them by more experienced workers. Gorard (2003) goes further to state that it is not constructive to define the worker as an individual only and the workplace as providing the structure or context, as both individual and workplace construct, and are constructed by, each other.

It is also suggested that values about the way the work should proceed also influences what workplace knowledge is shared, and how it is shared (Billett, 2001b). There is also the opportunity here for values to influence knowledge that is shared based on other workers' perceptions, which are not necessarily the appropriate perceptions or values that the employers would endorse in the workplace. Opportunities to participate are also based on decisions made in regard to race (Hull, 1997, cited in Billett, 2001a), gender (Tam, 1997, cited in Billett, 2001a), worker status (Darrah, 1996, cited in Billett, 2001a), affiliations among and with others (Billett, 1999, cited in Billett, 2001a), language, willingness to learn from others, and acceptability (Billett, 2001a). Billett (2001b) also outlines that peripheral work practices such as part-time work, or working from home can negatively influence affordances and opportunities for learning in the workplace. These interrelationships can occur between co-workers, managers, and workers (Billett, 2001b). Billett (2001a) argues that these affordances and opportunities have significant effects on what is learned and what guidance is accessed.

However, it is important to note that the individual is again not just a passive participant in a social practice. Learning is the result of the interaction of the individual's agency and personal history with the social vocational practice of the workplace (Billett, 2001a). An individual's interests and the value that they place upon the learning task at hand are important factors in determining the level of engagement, and thus the effort they expend, with the learning task (Valsiner, 1994, cited in Billett, 2001a). Cultural values and their congruence with workplace practices are also seen to be important to the level of engagement of an individual (Billett, 2001b). Therefore, knowledge is viewed by Billett (2002a) to be co-constructed between the individual and the social world of the workplace, making learning a process that is unique to each individual.

The interaction between the individual and the social world can be of the kind that aims for a shared understanding between the learner and the person giving the guided direction, or it can comprise the social suggestion inherent within norms and practices in a workplace (Billett & Somerville, 2004). As outlined above, each individual will approach these workplace learnings in their own unique way, either electing to take on board these teachings, transform/change their ways of thinking to accommodate the new knowledge, or ignore it completely (Billett & Somerville, 2004). There are other options as Illeris (2003) outlines, which are that the information could be altered or modified to make it fit with pre-understandings (its meaning thus, could be transformed to something completely different from what was unintended, therefore, inappropriate learning in the eyes and priorities of the workplace could occur), or alternatively, transformative learning could occur.

Billett and Somerville (2004) outline that thinking, acting, and learning are a simultaneous process. They argue that engaging an activity that uses knowledge, also implies that knowledge is learnt from that activity in a reciprocal process. Learning that results from this process is argued to not only be the product of an individual's identity, but to also continually shape the individual's identity. In other words, the identity of a person outlines how they will approach learning, and also is continually shaped by new learning itself. An individual's identity is also believed to contribute to intentional thought, monitor existing learning processes, and mediate an individual's engagement with social suggestion at work (Billett & Somerville, 2004).

The individual identity is viewed by Leontyev (1981, cited in Billett and Somerville, 2004) as a product of the social world used by individuals "in particular ways and for particular purposes" (p.311). The argument around individual identity and how it is constructed is very important for educational theory, as it outlines that there is no unitary or generic identity. An individual's predispositions, ways of knowing, and ways of learning are unique to the individual (Billett & Somerville, 2004). Social suggestion, therefore, is described by Valsiner (1998, cited in Billett & Somerville, 2004) as not being capable of a uniform effect. Edwards and Boreham (2003, cited in Billett & Somerville, 2004) argue that individuals go through life constantly renegotiating meaning, and the meaning they construct will reflect their individual priorities and ways of knowing. Thus, similar situations will have differing effects and differing outcomes for different individuals.

Billett (2001a) proposes that workplace curricula built around guided learning theory need to take note of the differing socially constructed affordances and, therefore, differing opportunities that are part of the learning process within workplaces. Further, he states that importance needs to be placed on how individuals themselves elect to engage with those opportunities and guidance afforded to them. If an understanding of this process, as well as the affordances within the workplace, is acquired, strategies could then perhaps be put in place to ensure that full bodied engagement of all workers can be aimed for. At this point in time, Billett (2001b) argues that it is unrealistic for lifelong learning policy to put the onus of learning for work on the individual, when social practices within the workplace are constructed to either assist or marginalise particular learners.

In a discussion of learning in the workplace, Illeris (2003) identifies three types of worker learner. The first of these includes those who have a more or less secure job but need to update their skills to keep up with development of the organisation. This group is characterised as generally having a positive attitude to offered training, however, the training must be perceived to be relevant to their position and, as a group, they are generally not interested in learning based around more general or theoretical material within which they cannot see the meaning. This group tends to have an assimilative approach to learning. The second group incorporates those who have been 'cut out' of their field of work by development and do not have the resources to keep up. This group tends to engage with transformative learning processes, attributing more importance to the general and personally oriented parts of the course content. Illeris et al (1994, cited in Illeris, 2003) hypothesise that this may be so as these general understandings may heighten the possibility of obtaining new work. This group must work the hardest, as with transformative learning processes, new learning replaces and/or modifies old learning, constructing a new identity along the way. People who are out of work with qualifications and experience that no longer reflect the market demand, can, it is proposed by Illeris (2003), enter a degradation process where their work identity is no longer valid. Thus, transformative learning allows for a new identity to be born. The final group comprises young adults and people who are on their way into working life and need more general professional and personal qualifications. It is hypothesised that this group would perhaps not need to engage in as much/if any transformative learning as the previous group, as work identities and work learning are yet to be constructed or at least, constructed concretely.

Because of these three groupings, and because, as is the nature with human beings, diversity will always be inherent within these groupings, Illeris (2003) makes the point that workplace learning programmes should never be firmly based around one particular qualification or skill, as he argues, in the best case scenario, this skill or qualification will only be applicable to some limited group of learners. While he states that a certain degree of structure and clarity in training is essential, there generally should be variation in the training on offer (Illeris, 2003). James (1997) also argues that while the workplace environment may be conducive to learning particular skills, the curriculum should not be too tight, focusing on the outcomes at the expense of the process. James (1997) states that skills such as critical reflection are important to develop and use within the workplace, something she claims is not adequately emphasised. It can be argued that a focus on the outcomes primarily benefits the organisation, while a focus on

process could primarily benefit the worker/learner, especially in terms of transferable skills or lifelong learning.

Some of the future research questions that are raised in response to work training opportunities include: How do educational opportunities benefit workers? Is the claim that workers are empowered because of workplace training real? If so, to what extent do workers have a meaningful influence on organisational affairs? Are the gains equitably distributed? (Spencer, 2001). Spencer (2001) claims that by critically reflecting on workplace learning, we can ensure that workplace training and research into workplace training does not become a new form of oppression and control in the workplace.

Vocational Education and Training Programmes

In a related vein, Billett (2000) claims that vocational education and training programmes (VET) provision in Australia has been largely based around and on industry needs, rather than taking into account the three other aspects of what is termed the 'demand market' by listening to individuals, regions, and enterprise as well. Interviews were carried out with enterprises, regional representatives, community members, and industry groups, as well as focus groups with individual learners to identify their needs and how the existing provision structure met those needs (Billett, 2000). Existing data from another survey were also taken account of.

Industry representatives stated that they would like flexibility within VET provision, meaning that the course should meet requirements of enterprises, with input and decision making occurring at the local, rather than at the national level (a form of decentralisation) (Billett, 2000). However, local level management would need to be audited by those external to the area to ensure that national standards and accreditation processes (which would be the product of consultation with industry) were adhered to (Billett, 2000). Industry representatives also commented on their need for: competent teaching staff within VET programmes; the infrastructure to provide quality delivery of programmes; and outcomes that included skilled workers, defined as those who are flexible, safe, self-directed, and productive (Billett, 2000).

Enterprise representatives stated that their key need with regard to VET was access to local flexible provision (Billett, 2000). Also wanted were training programmes that were highly relevant to the enterprise, and teachers with up-to-date content knowledge who also had an intimate knowledge of the enterprise (Billett, 2000). The need for a high level of customisation was emphasised. This need could, to some degree, be at odds with the industry representatives, who while calling for more local involvement in decision making, still envisioned a more centralised and nation-wide audited approach to training provision. The enterprise representatives also acknowledged the need for a competitive training market so quality of training programmes on offer could be improved (Billett, 2000). Outcomes needed included individuals with not only organisational and technical skills, but also job-specific attitudinal and personal skills (Billett, 2000).

Regional representatives discussed their need for consultation and interaction between all the client 'demand side' groups and the providers of VET services (Billett, 2000). Again, the

competence of teaching staff was seen as very important (Billett, 2000). However, as Billett (2000) points out, this consultation between industry, enterprises, individuals, and providers needs to be reciprocal, in that, particularly industries and enterprises need to take into account the constraints placed on providers of VET services in the design and implementation of the desired programmes. Desired outcomes mentioned by the regional representatives were higher levels of sponsorship of training by small businesses and apprenticeship type schemes on behalf of the local enterprises (Billett, 2000). A further desired outcome was for programmes to not only focus on employment outcomes, but on career progression also (Billett, 2000). Billett (2000) notes that a concern of the regional representatives was that while the courses needed to be accredited, they also needed to be current, relevant, and applicable to local enterprises with prospects of career pathways. The career pathway focus was emphasised to potentially counteract young people participating in training and then leaving the area in search of employment or career progression.

Billett (2000) found when interviewing individuals about their needs of VET provision that practical skills for the job, alongside 'good' teachers were those factors most desired by students. Flexibility was also desired in terms of the convenience of the mode or time-tabling of study, and available time for extra practice on the skills that were taught (Billett, 2000). The desired outcomes from VET reported by the individuals were mainly employment-related, with some focusing on career progression or self-employment options, and also the desirability of transferable skills (Billett, 2000). Interestingly, the students who were employed were critical of the enterprise focus of the programmes, as they stated they had aspirations outside of employment that they would like to explore (Billett, 2000). This brings in the idea of learning for personal benefit, or for leisure.

In drawing together the needs of these four groups, Billett (2000) suggests a change in focus from 'industry' to 'occupation'. Billett (2000) states that a focus on occupation would meet the needs of local enterprises, as well as certification needs, and the needs of the individual in terms of career pathways or progression. It is further recommended that while national centralised processes should still be a part of the process, they should be so only in terms of outlining broad aims and goals for VET provision, which are then refined further at each specific regional level (Billett, 2000). Billett (2000) also notes that strategies should be built into VET programmes to ensure/enhance transferability of the knowledge learned. It is noted that learning transfer may be difficult from region to region if the learning is highly specific to current environmental circumstances, but Billett (2000) states that the focus should primarily be on 'transferable occupational knowledge' that also meets the 'needs of local enterprises and certification/career pathways'. For small businesses, Billett (2000) proposes that regional VET initiatives are needed that seek to address the needs of clusters of small businesses that offer the same vocational practice.

For small businesses, four reasons are offered by Billett, Herson-Tinning, and Ehrlich (2003) as to why VET courses may seem unattractive. Firstly, it is claimed that they often reflect large enterprise or wider industry needs, as opposed to the needs of a smaller workplace. Related to this is the idea that what constitutes effective practice within a workplace is very specific to the workplace in question (Billett, 2001a, cited in Billett, Herson-Tinning, and Ehrlich,

2003). Therefore, small businesses could potentially benefit more from localised-based training programmes (Billett, Hernon-Tinning, & Ehrich, 2003). Thirdly, it is claimed that the qualities preferred in training courses by small businesses are not often offered. Coopers and Lybrand (1994, cited in Billett, Hernon-Tinning, and Ehrich, 2003), identified preferred qualities of a course for small businesses: short, sharp, specific, available locally, flexible timing, interactive delivery, related to specific problems and opportunities, pitched at an appropriate level, linked to the participants' environments, and the tutors have first hand experience. As Billett, Hernon-Tinning, and Ehrich (2003) note, this produces difficulties for providers whose reporting mechanisms may privilege uniformity of outcomes and operation, and performance measures. Finally, pressures are brought to bear on VET providers to secure business from enterprises with large numbers of employees who can be engaged in the same courses/modules (Billett, Hernon-Tinning, & Ehrich, 2003), therefore, the resources necessary to make VET courses relevant to small businesses is not generally cost-efficient for the provider. However, despite these perceptions of the utility of VET provision for small businesses, it was found that when small business employees/owners/employers actually attended these courses, they found them to be of greater utility than was originally perceived (Billett, Hernon-Tinning, & Ehrich, 2003).

However, local networks that resulted in localised support through external networks of experts, family members, and other small businesses also contributed to learning processes within small business (Billett, Hernon-Tinning, & Ehrich, 2003). Also, learning based on problem solving and trial and error processes was important (Billett, Hernon-Tinning, & Ehrich, 2003). Informal localised support is seen as something that should be encouraged in terms of learning and training for small business needs (Billett, Hernon-Tinning, & Ehrich, 2003).

Combining needs of industry and needs of individuals

Within the workplace, Edwards and Usher (2001) argue that lifelong learning becomes the means by which knowledge and skills needed by the dominant globalising processes are produced. It also becomes the means of attaining and maintaining the flexibility necessary for the change required. The structure of educational providers changes in response to changing industry and enterprise needs and concerns (Edwards & Usher, 2001). In a study undertaken by Thursfield and Henderson (2004), the closing down of an organisation resulted in the offering of educational programmes to displaced workers in order to retrain them for the skills required to continue to work within another organisation. While packaged by the company as a means of engaging in lifelong learning, the authors found that the needs of the workers were not of primary concern, rather the needs of the companies were. The definition of learning applied in this context was a narrow, job-related training exercise specifically designed to address the economic and growth concerns of the organisations in question. While the workers were fully prepared to take part in this training in order to maintain their employment, the authors argue that to truly be involved with lifelong learning, variations in aspirations for the future and thus, a flexible approach to training, should be taken into account.

Billett and Somerville (2004) also argue that both the organisation and the individual's needs within learning need to be taken into account for both to prosper. Du Gay (1996, cited in Billett & Somerville, 2004) states that lifelong learning policies are focused upon a particular

kind of worker identity, that of the 'enterprising worker'. This worker is constructed within policy as being one who is compliant to the needs of industry and society, and thus, aims their ambitions for learning towards achieving what is best for economic and societal progression (Du Gay, 1996, cited in Billett & Somerville, 2004). However, in contrast, the Deweyian notion of vocation (Dewey, 1916, cited in Billett & Somerville, 2004) claims that an individual's energies are more likely to be focused on their own interests, needs, and ambitions. Billett and Somerville (2004) outline that, taking both these views into account, learning that takes place in the workplace cannot be predetermined. The worker is not an empty vessel who is filled with knowledge from a more experienced peer. Instead, they argue that learning in the workplace is a product of negotiation between the worker and the workplace and involves consideration of context, energy, and individual dispositions and interests. The worker constructs their own interpretation of the knowledge offered to them, placing it within their own knowledge and value structures, potentially therefore learning something quite different from what was intended by the workplace. Billett and Somerville (2004) conclude by arguing that individual workers should be invited to participate in assisting changing practices within the workplace, so as to engage the individual's own constructions of the workplace in confronting challenges, as opposed to assuming a shared understanding. It is argued that in this way the localised requirements of the workplace will be met as well as the individual requirements of the individual, and thus, will allow for ongoing development of both the organisation's and individual's learning processes.

The OECD (1996, cited in Fryer, 1999) states that "lifelong learning cannot be imposed but, rather, must depend and thrive on a great variety of initiatives taken up by many actors in many different spheres" (p.11). To address this, Fryer argues that learning cultures based on the circumstances, needs, priorities, and differences of both individuals and organisations/institutions, need to be created. In addition, learning for pleasure or leisure reasons should also be valued as much as learning for economic or societal reasons. Fryer (1999) calls for incentives in the welfare system for those who wish to take part in learning and return to work without loss of support. Fryer (1999) claims that a growing emphasis on the success of family learning as a means of supporting family members to learn and fostering a positive familial attitude to learning are two ways to encourage the growth of a learning culture. Outcomes from the creation of a learning culture are hypothesised to include increased civic participation and community capacity building. Fryer (1999) discusses lifelong learning as an approach that can help individuals to develop skills, confidence, to participate in society, and to take advantage of social change. However, he argues that these benefits often go unnoticed due to a lack of a learning culture in society (Fryer argues this with respect to the United Kingdom). Consistent with Billett's notion of workplace affordances, Fryer (1999) claims that especially those that would most benefit from general learning opportunities are often excluded from, unaware of, or lack the self-confidence or opportunity to become involved. Other proposed barriers with regard to learning in the workplace and other spheres include people's preference to make use of their free time in other ways, time, home and work pressures, inconvenient location, financial issues, responsibilities for dependent others, and unhappy memories of school (Fryer, 1999). He goes further to claim that too many in the UK are 'locked' in a culture which regards lifelong learning as unnecessary, unappealing, uninteresting, or unavailable.

Criticisms of establishment of a learning culture

It should also be noted however, that there are criticisms to a learning culture emphasis. Clegg and McNulty (2002) point out that views that put non-participation down purely to a number of barriers or lack of opportunity simplify the issue and validate the dominant discourse that non-participation in lifelong learning is irrational. Clegg and McNulty (2002) cite Bowman et al (2000) and Coffield (2000) as examples of studies that suggest that those who are not engaged in adult education, do not perceive this as a 'lack' or a 'deficit'. Understandings that the unemployed are socially excluded are challenged by Levitas (1998) and Watts (2001, both cited in Clegg & McNulty, 2002) who state that many of those interviewed in their respective studies, who do not participate in adult education, did not perceive themselves to be socially excluded. Ecclestone (1999) and Coffield (2000, both cited in Clegg & McNulty, 2002) outline that any attempts to enforce the social desirability of learning onto anyone else are immoral, and essentially are doomed to failure as the potential participant will, most likely, not engage fully with the process. This raises issues of the ethics around the construction of formal learning as something that people should aspire to participate in, which can devalue those ways of knowing which view formal learning as inessential to their society, culture, or individual way of being.

Participation in Adult Education

Crowther (2000) opens his discussion of participation in adult education with a review of the groups within society most likely to be associated with participation. These are those within the higher social classes, who are young, male, and who are already well educated (e.g. Lowden 1985; McGivney 1990; cited in Crowther, 2000). Non-participants in adult education are typically claimed to be those of lower social status, who have lower levels of educational attainment, are older, unemployed, women, and/or are affiliated with ethnic minority groups (Crowther, 2000; Livingstone, 2001). Crowther (2000) proposes four rules that dominate the dominant discourse on participation in adult education. The first rule outlines that participation in adult education is necessarily a good thing. This assumption grew from the deficit or deficiency approach where the adult educator's purpose is to remedy deficiencies of skills or lack of critical thought (with the aim of encouraging processes of social change) in people. Within this approach, not valuing education in itself could be seen as a deficiency. Crowther (2000) argues that the purpose that adult education serves and who benefits from it, are key questions that need to be asked before an attribution of participation in adult education as a "universal good" is made (p.483). Also, he questions the right of choice in participation, arguing that the distinction between voluntary participation and other-determined participation is often not as clear-cut as some may assume, especially when considerations of power and authority are called into play. Further, when participation is viewed as something 'good', it places non-participation in a deficit and negative light.

The second rule of participation in the dominant discourse holds that participation is valid only as part of an institution or some form of formal learning. Crowther (2000) argues that there is little recognition of the large variety of informal learning that goes on outside of formal

institutions, and that formal learning works to emphasise the interests of those who set the curricula, as opposed to the varying meanings and ways of knowing that are associated with those who do not subscribe to the dominant discourse. This power over the curricula, it is argued, allows for learning to be divorced from the social action or learning of critical thought to reflect on the social world, and, thus, learning for social change is delegitimised (Crowther, 2000). Therefore, for many, formal adult education could be seen as something which is not very different from earlier compulsory schooling experiences.

The third rule holds that learners are seen as acting as individuals, rather than as part of a social world (Crowther, 2000). Crowther (2000) argues that the dominant tradition of adult education stresses personal development and individuality rather than collective values through a uniform curriculum, a curriculum argued by the dominant discourse to be student-centred. However, as Crowther (2000) argues, a student-centred curriculum would imply diversity, as opposed to uniformity. As a response to this, Crowther (2000) advocates self-directed learning where the tutor acts as facilitator as opposed to teacher, and the curriculum is arrived at through a process of negotiation. However, in a criticism of this approach in practice, Crowther (2000) states that there is an unequal power relation between the tutor and the learner, and the negotiation of an acceptable curriculum to both parties would only work when there is no conflict of interest. This, he argues, would be very difficult within the dominant discourse of adult education which often pathologises the adult learner as “not fully sovereign individuals...[who are] in need of an injection of adult education to achieve parity” (p.487). Crowther (2000) also argues that adult education needs to take into account the “socialised individual”, a conceptualisation of the individual with a wider social conscience, prepared to act to achieve collective goals (p.486).

The final rule posited by Crowther (2000) involves the dominant idea that there are barriers to participation (such as lack of time, lack of money, family duties, inconvenient locations, etc. (Livingstone, 2001)), rather than a conscious (or unconscious) resistance. It is often difficult to conceptualise that if participation in adult education is such a ‘universal good’ that anyone would consciously choose not to take part in it. MacLachlan and Cloonan (2003) undertook a study into barriers and incentives to participation in adult literacy education. The incentives to participation found were: accessing and retaining employment; improvement in quality of life; developing confidence; the nature of provision; when the programme had a high profile and information was available about it; responsibilities for dependents; for a collective or community benefit; to learn more about using technology; and to keep up with change (MacLachlan & Cloonan, 2003). MacLachlan and Cloonan (2003) found that the barriers to participation in adult literacy education included: a lack of confidence in learning ability combined with the fear of exposing this to peers (stigma); circumstantial factors such as lack of time, poor transport, lack of childcare facilities; the perceived cost of learning; a lack of information on where to go, and how to obtain assistance; the nature of provision (perceptions that it would be like school); lack of provision in some areas; family commitments and family pressure; and a sense that education is ‘not for us’. McGiveny (1993, cited in Norman & Hyland, 2003) outlines that there are situational barriers (such as time and cost), institutional barriers (such as an unresponsive adult education system in terms of teaching and learning strategies, timetabling, admissions to courses, lack of adequate information and publicity), and dispositional barriers (attitude prob-

lems, negative perceptions of learning, low motivation, anxiety, low self esteem, lack of confidence) to participation. MacLachlan and Cloonan (2003) state that while some of the barriers or incentives mentioned such as a lack of confidence as a barrier to learning, could actually be improved by participation in a course, this does not matter if the potential participants do not perceive that this could be the case (which could link with the perception of previous school experiences where 'education is not for me') (MacLachlan & Cloonan, 2003). In other words, if participants do not make the link between learning skills and enhancing other aspects of their wider lives in conjunction with this, then they may not make the judgment to participate at all. Further, MacLachlan and Cloonan (2003) argue that participation in adult literacy education programmes can only be enhanced by focusing on enhancing learner support and guidance to work on the dispositional barriers to learning.

While, in some cases, lack of participation in adult education could be due to circumstantial, institutional, or dispositional barriers, Crowther (2000) states that non-participation could perhaps be best understood in some cases as an active choice that is informed by prior experiences. It could also be an active choice informed by present status and the belief (or non-belief) in the programme's relevance and worthiness. Clegg (1989, cited in Crowther, 2000) outlines that there are two forms to resistance: to create a new base of power, or to create a basis for struggle to escape from power.

Resistance and deconstruction

Hughes (2000) views the focus of adult education as being one within which learners are encouraged and taught how to deconstruct dominant discourses and thus come to an understanding of how discourses shape their positions. This is a social justice approach, where learners are encouraged to critically review their individual and collective positions and identities, and understand how the social world has come to shape those positions and identities, with a perceived aim of collective social change (Hughes, 2000). This is based on the premise that non-dominant discourses or views are as valid as dominant discourses or views. Deconstruction can take place via two strategies: overturning or metaphorisation (Hughes, 2000). Overturning incorporates changing dominant term usage in language so they are replaced by more marginalised terms (Hughes, 2000). However, a limit of this approach is that it just replaces one discourse with another, which in Hughes' (2000) view does not eradicate tensions; instead it just creates new ones. The second deconstruction strategy, metaphorisation, involves holding the relation between two binary terms in play, so it is easy to see how each is dependent on the other for their meaning, for example, male-female or literate-illiterate (Hughes, 2000).

The first step before deconstruction can begin however, is working on overcoming resistance in the learner at the unconscious level (Hughes, 2000). Hughes (2000) notes that resistance to education about deconstruction could be seen as 'not acknowledging the oppression' or "selective reality" (p.4). Hughes (2000) states that resistant learners call adult educators' claims of having "superior knowledge" into question (p.8). Hughes (2000) outlines that educators actually do believe that they have better knowledge at least some of the time, knowledge that rests in the belief of the legitimacy and liberating aspects of education. In "liberating the resis-

tant learner” though, Hughes (2000) concedes, that there is a danger of marginalising “their preferred or prior ways of knowing” (p.8). This is a danger that every adult educator faces.

One way to address this danger is for the adult educator to act as a facilitator of learning, rather than as a teacher. Hughes (2000) offers an important insight that while adult educators need to offer learners the tools, questions, and methods for exploring discourses, they cannot provide answers or possible understandings or seek to impose their own view of reality. This type of facilitative approach is also outlined by James (1997) who discusses that some form of facilitator who mediates the flow of information to learners is required. This facilitator must be transparent in the type of learning being offered, provide a language within which these aspects can be discussed and develop conditions within which this discussion can take place (James, 1997). This type of approach advocates a stance where information is given to the learners for which they are then invited to discuss and make up their own minds. However, it is important to also keep in mind that the discourses that adult educators and others are working from will influence which information is presented, how it is presented, and why, hence a critical self-awareness is also necessary of adult educators.

Adult Literacy Theory

One aspect of adult education centres around adult literacy. This area of education has been a focus for many since the International Adult Literacy Survey (IALS) was conducted throughout 22 countries over the period from 1994 to 1998 (OECD, 2000). The IALS looked at those of working age, their literacy level in terms of prose, document, and quantitative literacy, and other demographic and social indicators. It found that many of the countries surveyed had significant proportions of their populations at a ‘below functional’ level of literacy skill (OECD, 2000). These findings went against previous ideas that adult reading, writing, and numeracy skills were not in need of improvement in developed first-world countries.

Literacy as a concept is more generally known in two distinct ways: the ability to read and write to *know* (viewed here as the formal school model); and the ability to read and write in order to *do things* (a form of practical functional literacy, usually found within workplace conceptualisations of literacy) (emphasis added, Hull, 2000). However, Hull (2000) argues that there are actually seven broad functions to literacy: to perform basic literacy functions; using literacy to explain; taking part in discussions around discourses about texts; participating in communicating information; problem-solving; participating in critical appraisals; and using literacy as power to exercise or resist authority.

Lonsdale and McCurry (2004) outline three broad models for understanding literacy. The first two, a cognitive individual-based model, and an economics-driven model seem to fit with Hull’s (2000) conception of the two most known understandings of literacy. However, Lonsdale and McCurry (2004), like Hull (2000), also support a third conceptualisation of literacy, the sociocultural model. This model states that literacy is shaped by its participation within social practices, and thus, there are several differing types of literacy, leading to the term ‘literacies’.

Hull's (2000) seven functions of literacy and Lonsdale and McCurry's (2004) models, fit in with four main groups of theory with regard to literacy and numeracy. These four groups comprise the basic skills or functional approach; the growth or heritage approach; the critical cultural approach (or social practice approach), and the social capital approach (Falk & Millar, 2002). The first of these, the functional approach conceptualises literacy as reading, writing, and sometimes numeracy, technical skills. The 'functional' aspect of literacy refers to the ability to use these skills to perform certain tasks in domestic or work life. In this understanding of literacy, literacy and numeracy skills are believed to be the foundation for other functions, therefore they can be taught in a generic fashion and their transfer across situations is largely assumed to be unproblematic.

The growth and heritage approach to literacy focuses more on the comprehension of meaning than the technical aspect proposed by the functional perspective (Falk & Millar, 2002). Here, literacy acquisition is viewed as a social process, where the emphasis is on the relationship between meaning, the literacy objects (texts, etc.), and the social context, as opposed to just the text. Reading and writing activities are situated within contexts and experiences that are meaningful to the learner so that comprehension is achieved.

The critical cultural view of literacy states that literacy is social practice and is socio-culturally situated (Gee, Hull, & Lankshear, 1996, cited in Falk & Millar, 2002). Here, literacy is deconstructed in terms of both the individual's and the wider community's sense of social identity, with the primary purpose of literacy being one of greater understanding, challenging of the dominant discourse, and, perhaps even social justice movements (Falk & Millar, 2002). This is the approach of the New Literacy Studies (NLS), described further below. Within this view, there is not just literacy, there are multiple literacies, and indeed, multiple numeracies, all of which have social, personal, educational, and political implications. This view of literacy(ies) is often associated with discussions of power and marginalised groups in society.

Finally, the social capital approach to literacy stresses the importance of social networks in learning (Falk & Millar, 2002). Falk (2001b, cited in Falk & Millar, 2002) found that trust within social networks of learning could act as the initiator for transfer of informal generic learning to help in further learning. Falk (2001a) also found that social networks can provide the means by which to transfer generic literacy knowledge to other life settings, for example, the workplace.

Critical cultural (or social practice) views of literacy

Mezirow (1996) conceptualises literacy as the ability to make meaning from the written word. His idea of literacy rests within the critical cultural or social practice view. He states that making meaning from texts involves transformative practices, where prior understandings and internalised discourses are critically appraised in response to new knowledge or understandings. It is argued by Mezirow (1996) that literacy defined as performance on tasks or competencies is insufficient, and curricula in adult literacy education must emphasise critical reflection on assumptions and discourses so as the learner can make meaning from the teaching. Mezirow (1996) states that when literacy is defined narrowly, the consequences of application of that

learning will then be narrow also. Hence, it is argued, with understanding based on meaningful engagement with literacies, the application, and thus transfer of this knowledge/understanding, is broader.

Problem solving, abstract thinking, the ability to generalise, and critical reflection on thinking or actions have often been viewed as a higher-order skill in the psychological literature (Kirsch & Jungeblut, 1986, cited in Mezirow, 1996; Mezirow, 1996). These higher-order skills are seen to be achieved only when a fundamental skill and knowledge base has been laid. Mezirow (1996) argues that literacy as a meaning making process, is integral within the transformative learning processes necessary to attain this higher level of functioning. This higher level of understanding is claimed to be the only way within which one can understand and function adequately within the knowledge economy world (Mezirow, 1996). Within transformative learning, the frame of reference the learner already holds, which includes their previous learning, identity, and habitus among others, is transformed through critically reflective processes to allow for other points of view (Mezirow, 1996). Critically reflective processes include the ability to reflect on what has been learned, to identify the distortions in assumptions (or indeed to identify the assumptions themselves), and to make the necessary modifications to transform or assimilate other points of view (Mezirow, 1996).

Mezirow (1996) claims that transformative learning involves the integration of three dimensions of understanding:

1. Literal understanding where the learner locates information in the text.
2. Interpretative understanding where a more detailed analysis of the text takes place allowing for inferences to be drawn. Here, recognition is also given to how the information obtained relates to other texts or other similar thoughts/problems the learner may have come across.
3. Evaluative learning which involves self-reflection and a focus on the relevance of the texts to the learners' own life-world. Reflection can occur in two ways: objective or subjective. Objective transformative learning allows for a critical reflection of the text or the problem itself. Subjective transformative learning allows for critical reflection on the learner's own assumptions.

Mezirow (1996) maintains that all adult learners in literacy programmes should leave the programme with the ability to understand constructs well enough to make discriminating judgments about them. The participants need to be able to interpret, judge, solve problems, be self-directed, and learn how to learn in order to be a "literate adult and a responsible citizen in our society" (Mezirow, 1996, p.6).

Freirean literacy theory

An important contributor to the development of adult literacy theory was Paulo Freire. Freire's work was based in the view of literacy as a means to critical consciousness for oppressed and/or marginalised groups (Findsen, 1998). This critical consciousness aimed to be followed by collective social action which aimed to overcome oppressive structures or discourses (Findsen, 1998). Developed in the social service industry in Brazil, Freirean theory was initially based on a conceptualisation of a dominant class that purported to be attempting to

'help' those of lower socioeconomic class through literacy education, but who were ultimately working to maintain the status quo of class division (Cavalier, 2002). Freire claimed that the goal of education was to "enable the working class to reproduce itself as such" (1987, cited in Cavalier, 2002, p.257). This was based on the view that education only provided a functional technical view of literacy training, as opposed to enabling a critical approach to be fostered (Cavalier, 2002). This allowed a status quo to continue where the wealthy were able to keep things as is while appearing to be trying to change the situation, and the poor were unable to question or seize power to change things (Cavalier, 2002). Through the development of critical consciousness, Freire believed that people could choose to construct a new social reality (Cavalier, 2002). Cavalier (2002) reports that Freire felt there were two choices to oppression with no neutral ground: either, a choice was made to act, or a choice was made not to act (a decision that continued the status quo, dehumanised people, and ensured that injustice continued forever).

One of the features of Freire's work was its unit of analysis at the level of the community or society, rather than at the level of the individual (Findsen, 1998). Findsen (1998) states that recent work within transformative learning processes (e.g. Mezirow, 1996) has tended to focus on the effects transformative learning has upon the individual. However, because of the individual focus, social action may not be forthcoming as a result of this learning process. Freire's theory however, works on developing a collective conscience or collective transformative learning which is then expected to develop into collective social action termed 'conscientisation' (Findsen, 1998).

Findsen (1998) outlines a typical way in which Freire would approach intervening in a setting. As opposed to the analogy of 'banking education' where information is 'banked' into a person's mind with no critical appraisal of the information, to be withdrawn and made use of at a later date, Freire emphasised a problem-posing approach. This meant that every situation needed to be assessed, before solutions and processes were discussed. Freire stressed that his theories were largely based on his findings within Brazil, thus conditions and situations were not necessarily going to be similar or even found within other countries or contexts. Freire particularly emphasised in his later works the importance of viewing his work as one possible interpretation of social reality, as opposed to *the* interpretation (Cavalier, 2002).

In his work, Freire would ensure that a situation would be intensely studied via secondary materials before he and his team entered the scene (Findsen, 1998). Then, through appropriate public meetings, the invitation would be given for those living within the community/society to help Freire's team to fully understand the local context. Over time, as the team's understanding deepened, they would analyse key words from accounts of the people in the community/society as to what their representations of their realities were. These realities would then be described, questioned, and challenged in a collective process (termed the problematising process). Thus, it was claimed that 'conscientisation' occurred, with the collective community/society becoming involved in questioning and critically appraising what had been 'taken-for-granted realities' (Findsen, 1998).

Findsen (1998) claims that many adult educators hold a discourse or assumption that their work is necessarily beneficial and apolitical, however, Freire, it is argued, would hold that

education of any means is necessarily a political process. St Clair (1998) also states this view in his thinking around community and literacy, where he states that what people learn influences their community affiliations, therefore education cannot be neutral. Freire also pointed out that literacy education was only one part of many things that needed to change in order for the social action of oppressed and marginalised peoples' to begin and possibly, achieve its goals, (Cavalier, 2002), therefore, its causal benefits should not be overemphasised.

Freire saw the role of the teacher as an interventionist (Cavalier, 2002). It was claimed that intervention has to occur as the oppressed are immersed in the false reality promoted by the oppressors who have a stake in retaining the status quo (Cavalier, 2002). Freire advocated a relationship between teacher and learner where both were on an equal footing and mutual respect abounded (Cavalier, 2002). The relationship between teacher and learner was to be one of trust with dialogue that took place on a horizontal plan as opposed to a top-down process (Cavalier, 2002). Freire states that "no-one liberates himself by his own efforts alone, neither is he liberated by others" (Cavalier, 2002, p.264). Freire also claimed that "no pedagogy which is truly liberating can remain distant from the oppressed by treating them as unfortunates and by presenting for their emulation models from among the oppressors" (Freire, 1970, cited in Cavalier, 2002, p.263), nor can the oppressed be liberated by others working on their behalf (Cavalier, 2002). Freire also claims that if the intervention of the adult educator does not lead to liberation and enhanced autonomy of the learner, then it is not liberating education (Cavalier, 2002). Further, Freire outlines that those that view educational intervention as equivalent to manipulation have a naïve apolitical view of education, a view that Freire addresses by his notion of mutual respect decreasing the concerns of invasion by a teacher to a learner (Cavalier, 2002). However, it is noted that there is a risk of manipulation within this system even if strictly adhered to, with Freire stating that a necessary aspect of 'liberating education' is the pushing of a particular political stance: "There is no liberating education without some measure of manipulation; there is no such thing as angelical purity" (Cavalier, 2002, p.267).

Bowers (1983, cited in Roberts, 1998), in criticising Freire's approach, argues that this approach is another form of oppression. He argues that through emphasising the 'Western' view that it is imperative to intervene in conditions considered oppressive, Freire's approach is a form of oppression in itself. Bowers (1983, cited in Roberts, 1998) cites the example of Freirean ideas being applied to traditional societies as a form of cultural invasion to illustrate his views. Here, he posits that if Freirean principles are carried out within a traditional society, which has been largely untouched by outside ways, the intervention is actually a form of oppression by forcing differing ways of knowing onto that group of people. With relation to New Zealand, Bensemman (1998) has argued that Freire has had little impact on the adult literacy education scene for three reasons: the conservative nature of adult literacy in the country, the low level of awareness of Freire's work, and thirdly, the structural nature of adult literacy provision does not lend itself to Freirean designs. Bensemman (1998) reports an adherence to the agenda of funders of adult literacy programmes, which does not allow for much scope in terms of movement from this agenda, or movement into areas of thought that would challenge the status quo. Tutor training is not a centralised process to a large extent and emphasis of training is largely on practical components of teaching, as opposed to the theoretical bases for the approaches (Bensemman, 1998). Finally, even if Freirean principles were viewed to be fit to apply within

New Zealand, modifying programmes to fit within the Freirean framework would require considerable amounts of funding, time, teamwork, and long term commitment; aspects that are lacking under the current system in current circumstances (Bensemann, 1998).

Autonomous model of literacy (functional literacy)

The reports resulting from the IALS all strongly recommended a focus on improving literacy skills as the key to unlocking the benefits of globalisation (OECD, 1995, cited in Black, n.d.). The IALS definition of literacy encompassed viewing literacy as a set of technical skills, relatively autonomous of social context (Black, n.d.). This view of literacy has been termed the autonomous model. It has also been termed 'functional literacy' which is defined by the Basic Skills Agency in Britain as "the ability to read, write and speak in English and use mathematics at a level necessary to function and progress at work and in society in general" (BSA, 1997, cited in Bynner, 2002, p.3). Within this autonomous model, literacy is usually measured in terms of level of capability on tests of reading, writing, or numeracy skill, with higher literacy levels usually found to positively correlate with a higher likelihood of employment, higher income, and higher socioeconomic status (Lee & Miller, 2000, cited in Black, n.d.). The autonomous model of literacy encourages the view of literacy as a generic skill that can be applied similarly across people and contexts.

Many policy understandings of literacy have been based on the autonomous model. Here, literacy and numeracy skills are viewed as the means by which people are equipped with the basics to build on for learning throughout life (Bynner, 2002). Street (1984, cited in MacLachlan & Cloonan, 2003) argues that the autonomous model of literacy assumes four things: that literacy can be removed from its social context and treated as a skill devoid of social meaning; that literacy development or skill level can be traced in a single direction (i.e. literacy can be measured in terms of levels of capability); that there are strong associations between literacy levels and social progress; and, that there are strong associations between higher literacy skills and higher cognitive abilities (for example, problem solving and self-reflection). The dominant discourse in this area holds that without these 'basics', opportunity in terms of acquiring qualifications and employment are restricted, and global economic competitiveness of industries is at stake (Bynner, 2002). Bynner (2002) offers a birth cohort study to illustrate this point. The relationship between literacy and employment for two birth cohorts, one a 1958 cohort, another a 1970 cohort, was analysed. In both cohorts, it was found that over 80% of those with the lowest literacy and numeracy levels had left school by the minimum age of 16. (It should be noted that differing assessments of literacy and numeracy were used for each of these cohorts. These assessments were mapped into four levels of literacy and three levels of numeracy that define the British Basic Skills Agency standards (Bynner, 2002)). With the change to the 'knowledge economy', Bynner (2002) claims, has come changes to skill needs in industry, with basic literacy skills now needed where people could 'get by' before. The 1958 cohort mostly gained unskilled or semi skilled jobs, with some gaining training and moving into skilled jobs. Of the 1970 cohort, (and perhaps the beginnings of a knowledge economy) approximately two-thirds would enter training schemes or became unemployed. Of the one-third who achieved employment, there was little job security or training on offer and they tended to experience periods of unemployment.

Within the 1958 cohort, those in the very low literacy group received less vocational training than those with higher literacy levels. Also, those with both poor literacy and poor numeracy showed the lowest employment rates across the ages of 16-37. For women especially, having lower levels of numeracy skills as opposed to their level of literacy skills, had a larger effect on their later employment prospects. Also, in the 1970 cohort, those women with poor numeracy were least likely to have received vocational training over their entire work career (after the age of 16); they received the lowest wages, and they were the least likely group to be promoted. Bynner (2002) outlines the need for lifelong learning to keep a foothold in the labour market, claiming that a major consequence of not succeeding in the labour market is the marginalisation of those segments of society without the skills necessary, leading to a breakdown in social cohesion.

The associations that the above and other studies, particularly the IALS, have noted between literacy and employment (and other economic and social factors) have led to a belief that enhancement of literacy skills (defined in a functional, autonomous sense) can lead to enhancement of employment opportunities, higher skilled employees for the industry's benefit, and better socioeconomic conditions for the individuals involved. There have been claims that low levels of literacy in workplaces can cost nations billions of dollars a year in lost productivity (Miltenyi, 1989, cited in Black, n.d.). The idea is held that individuals or groups who are lacking in certain levels of skills can be identified, and prescribed some form of education to enhance their and therefore, the country's, economic wellbeing (Black, n.d.). However, Gorard (2003) argues that there are two major problems with the 'economic imperative underlying the learning society' (p.59). These are that the idea of learning enhancing economic outcomes does not work in practice and appears to be in conflict with its social inclusion motive. Secondly, there are questions around whether learning does pay off in economic terms, for example, Roberts, Parsell, & Connolly (1991, cited in Gorard, 2003) found that those who undertook post-compulsory education were no better off in terms of employment outcomes than those who went straight into the labour market at 16 years of age. However, this is based around a study that did not focus on those with autonomously-defined low levels of literacy.

Gorard (2003) claims that politicians and economists generally talk in terms of literacy, trade, or other formal educational skills when they discuss skills shortages. However, it is claimed that while skill shortages are blamed for a lack of jobs being filled, and therefore, literacy education and formal education is seen as a means towards economic enhancement, the phrase 'skills shortage' could have several interpretations. Two offered by Gorard (2003) are firstly that, it could be that there is not necessarily a shortage of skilled applicants for the job, but that no-one with the appropriate skills for the job wishes to apply for the conditions that are offered. Further, Gorard (2003) offers that discussions of skills shortages by employers could be taken to mean a lack of punctuality, reliability, or commitment to the work, rather than a lack of any measurable skill level or type. Pettigrew, Hendry, & Sparrow (1989, cited in Gorard, 2003) note that there are few firms that find a traditionally defined weakness in their employees' skills that provide barriers to their working effectively. Also, Frank (2003) noted in a United Kingdom survey of skills needs of employers, that 18% of employers stated there was a skills shortage, but only 4% felt that this was in the area of literacy and numeracy skills. The employers felt there was mainly a lack in the areas of management skills, general communication skills, per-

sonal skills such as motivation, and computer literacy (Frank, 2003). Other employers did note that having 'basic' or 'generic' skills were important, but also noted that skills of innovation, adaptability, flexibility, being a team player, good organisational skills, creativity, taking the initiative, a customer focus, appropriate personal attributes, a capacity to learn, a willingness to embrace change, practicality, and a business orientation were also important (Velde, 1997; Kearns, 2000; Allen Group, 2000; all cited in Falk & Millar, 2002). Interestingly, no employer mentioned self-management, self-evaluation/reflection, or sociocultural understanding as important attributes for employees to have (Falk & Millar, 2002). However, this range of skills valued by employers illustrates the caution that must be undertaken when defining what is meant by 'skills shortage'.

Criticisms of the IALS and functional approach to assessing literacy

While the IALS has highlighted the prevalence of literacy skills of many countries around the world, its methodology and approach have been criticised by some, not least of whom are Hamilton and Barton, authors of a paper entitled "The International Adult Literacy Survey: What does it really measure?" in 2000. Hamilton and Barton's (2000) criticisms are threefold: the IALS provides only a partial picture of literacy; culture is treated as bias; and the test items do not represent the real-life items as claimed. These criticisms are put forward from the approach of the NLS, an approach based upon the belief that literacy only has meaning within its particular context of social practice and does not transfer unproblematically across contexts. Literacy practice can be defined as the "socially regulated, recurrent, and patterned things that people do with literacy as well as the cultural significance they ascribe to those doings" (Street, 1984, cited in Brandt & Clinton, 2002, p.342). This is in contrast to the IALS approach which assumes consistency of skills across contexts, for example, the skill of reading is the same when reading a book in a library, as opposed to reading a poster in a noisy street. Hamilton and Barton (2000) argue that there are different literacy practices in different domains of social life, such as education, religion, workplaces, public services, families, and the community. It is argued that these differences between situations can help reveal the meanings, values, and uses that literacies have for people in their everyday lives and that this understanding of different contexts must be taken into account when discussing literacy (Hamilton & Barton, 2000).

The issue of culture being seen as a bias is also contested by Hamilton and Barton (2000). It is argued that in the IALS the tasks are seen as culturally-neutral which in Hamilton and Barton's (2000) view does not take into account the complexities of cross-cultural comparisons. Any literacy practice that is not recognised beyond a particular cultural group was not used to generate test items for the IALS as this would constitute cultural bias, however, the new literacy studies perspective sees literacy as constituted by its cultural context (Hamilton & Barton, 2000). Therefore, in searching for cultural neutrality it is argued that the IALS directs attention away from the factors that are essential for understanding literacy and its social situation, making the test items themselves not real life tasks, but proxy measures of literacy (Hamilton & Barton, 2000). Hamilton and Barton (2000) argue also that the IALS makes generalised claims about causality from descriptive correlations and differences, and question its appearance of objectivity by stating that it does not allow other research paradigms to interpret the results in their own ways.

In discussing that literacy as tested in the IALS is not equivalent to real-life items, Hamilton and Barton (2000) argue that the levels 0-5 used in the IALS are arbitrary and are not based on people's actual lived practices. The authors state that people's own judgments of their literacy proficiency are more positive and while the IALS reports this as self-delusion, they would argue that the IALS is measuring something other than everyday literacy practices.

Hamilton and Barton (2000) conclude that the IALS is really measuring "artificially constructed *test literacy*, sampling a transnational culture and tapping people's participation in the global economy. However, the IALS provides useful general correlations and statistics that can help governments to target aspects of their population who are low in literacy (as has been measured by the IALS and which Hamilton & Barton (2000) do acknowledge as "*a literacy*" (p.385)).

The prevalence of the dominant discourse of literacy as an autonomous functional skill is illustrated by MacLachlan and Cloonan (2003), who asked some participants in literacy programmes what literacy meant to them. The understandings of participants were initially congruent with the autonomous model, with literacy viewed as a functional skill which could be improved upon. Later discussions did draw out some understandings of literacy as linked with empowerment (feelings of competence and assertiveness), but the strong view of the participants interviewed was that of the functional literacy view. Literacy demands in personal life were viewed in terms of an increasing need to understand and manipulate complex written and numerical information, especially the need to keep up with children or grandchildren. Workplace literacy skills were reported as needed due to an increasing amount of paperwork and technological language. MacLachlan and Cloonan (2003) suggest that while understandings of literacy as more than a functional skill are becoming more prevalent in the literature, and may also be in policy, the perceptions of participants in literacy programmes has not as yet changed.

Moving between discourses of functional literacy and the New Literacy Studies (NLS)

Literacies of the NLS represent a wide range of practices, contexts and social relationships within which people engage, and reject the view of literacy as a generalised, measurable set of skills (MacLachlan & Cloonan, 2003). A dominant literacy (autonomous model) in any one society is representative of the communicative norms of the dominant group (who award different statuses to different uses of literacy and the different people using it) (MacLachlan & Cloonan, 2003). The understanding of literacies within NLS outlines that there are a variety of differing literacies at differing levels, for differing purposes, at differing contexts. Cairney (1995, cited in Taylor, King, Pinsent-Johnson, & Lothian, 2003) states that functional skills of reading and writing are learned as people socialise with each other using language and other sign systems. Thus, it is argued that people become literate within social practices through their relationships and interactions with other people.

In working with adults, it is advocated by MacLachlan and Cloonan (2003) that the learners' definition of literacy and their literacy skills should be linked to their individual and collective needs within their selected contexts, rather than any generalised pre-determined outline that others would set. Tett (2000) also argues for this in her discussion of school involvement

with family literacy interventions. Here, she argues that parents engage in a wide range of literacy practices that do not necessarily fit within a functional dominant way of knowing about literacy. It is argued that these ways of knowing should be built on through a programme based on the concerns and aspirations of the people involved, working on everyday literacy practices for a starting point for the curriculum (Tett, 2000). Also, MacLachlan and Cloonan (2003) suggest that adult literacy learning programmes need to aim to empower their learners through educating them on the dominant discourses at play which are seen to marginalise groups of people, or understandings of literacy. Tett (2000) found in her study, that explicitly encouraging adults to critically reflect on their school experiences worked to avoid “simplistic pathological explanations of failure at school” (p.2). However, this view also comes under criticism when the argument that the dominant discourse should be just as valid as other discourses, or the argument that adult literacy educators must be careful not to enforce their own points of views or discourses onto the literacy programmes or learners themselves, is taken account of.

Barton and Hamilton (1998, cited in Black, n.d.) state that literacy practices are “patterned by social institutions and power relations, and some literacies become more dominant, visible and influential than others” (p.5). This idea can be viewed in terms of autonomous literacy becoming more dominant in policy documents than literacy as a social practice. Black (n.d.) outlines a case study where he argues that functional literacy models cannot account for all practices within a workplace. In this case study, management of a council team decided that to compete in an increasingly competitive workplace, all council workers had to undergo literacy training to enhance their economic potential. However, the actual literacy practices of the workplace showed this to be unnecessary. Because of the structure of the workplace in teams, only some people needed to be able to contend with the texts, accident/incident reports, and other paperwork. Therefore, enhancing the functional literacy skills of all the team members was not necessarily going to make them any more productive than they were already. However, the author acknowledges that lack of functional literacy skills could become an issue if, for some reason, the workers were required to take over the role of the worker who did the paperwork, for example, in the case of illness. Further, Scholtz and Prinsloo (2001) present a study within a factory where reliance on others for reading text, which is then explained to the rest of the team, worked well as long as the person with those functional literacy skills was there. However, when this person was removed from the team, in this case, costly mistakes were made as the replacement did not give the full information that was required to the rest of the team, and the rest of the team was unable to access that information in the form in which it was presented by themselves.

It is suggested by Hull (1999) that workplaces must be organised to allow and even require workers to take responsibility for reading and writing on the job. Hull, Rose, Fraser, and Castellano (1991, cited in Hull, 1999) argue that one barrier that stands in the way of allowing people to take responsibility for workplace literacy practices, is the idea that some people are incapable of doing this. Hull (1999) argues that those that hold this view need to move beyond the idea of literacy as a functional skill that is either held or not, into the idea of literacy as a sociocultural practice, which takes into account the institutional, social, and cultural contexts of the individual and the workplace. This will give an overview of what kind of literacy practices are required of workers in any one company. Hull (1999) argues that workplaces that act to

lessen literacy practices for certain groups of workers are doing the workers and the company a disservice. It is argued that workers need to be given access to a wide range of information about the company, the company's aims, wide information about the work they are undertaking, and opportunities to undertake literacy practices, if they are to contribute fully to the workplace and its place in the 'knowledge economy' (Hull, 1999). Access to this knowledge also makes the tasks more meaningful and understandable, and seeks to counteract the example mentioned above where costly mistakes for companies can be made through workers not being responsible for their own literacy needs.

However, as Black (n.d.) points out, functional literacy ability is not essential to gaining employment. Black's (n.d.) study found that while his interviewees were lacking in functional literacy skills, they had had no trouble locating employment. As Levett and Lanshear (1994, cited in Black, n.d.) note, not all jobs are in leading edge 'knowledge economy' industries. Indeed, most new jobs in several developed countries are predicted to be in low paid retail, trade, and service sectors (DEET, 1995, cited in Black n.d.), many involving repetitive work that does not require high levels of functional literacy (Luck, 1992, cited in Black, n.d.). Black (n.d.) argues that by stating that a lack of literacy skills is why people are unable to procure jobs, places the blame upon the individual for their 'deficit', rather than looking for reasons in the wider context as to why jobs may be hard to obtain. Black (n.d.) attributes a perceived lack of jobs as a consequence of capitalism. He further outlines that the view that literacy is not essential for employment calls into question policies that fund literacy provision programmes purely for economic outcomes, and that both adult educators and policy need to begin to take into account the culture and social structure of the workplace to begin to address those competencies that people may need for work, rather than a generic functional literacy skills view.

Kazemek (1991) argues that the real issue for literacy is one of power. He asks "How [can] people [be made] more powerful in their own lives while acknowledging there will be little to no effect on low pay, unemployment, and general social deprivation?" (p.2). Kazemek (1991) goes further to state that literacy training purely for economic job-related reasons, is one form of power of elite groups over those less powerful in society, and one way in which marginalised groups can be blamed for the nation's lack of economic progress (if this is occurring). Literacy training for the workplace is, Kazemek (1991) claims, training for low-status, low-paying jobs, and there is no evidence in Kazemek's view that participation in literacy programmes places participants on a trajectory to better and better employment, or income. Kazemek (1991) goes further to state that the kind of literacy needed for most jobs, is in fact better learned on the job site itself. This ties in with the perceptions of some employees and students outlined above, who reported that skills for practical use at work, were best learnt on the job-site (Collin & Tynjala, 2003).

Falk and Millar (2002) also found that while their interviewees may have easily learnt to read and write in a formal learning environment, they reported they had to relearn and learn new literate and numerate practices and identities throughout their lives. Falk and Millar (2002) suggest therefore that basic skills cannot be assumed to transfer across settings. Further, they suggest that rather than the focus being on learning generic skills that will ideally transfer across settings, that the focus should be on effective learning for specific purposes (Falk & Mil-

lar, 2002). Falk and Millar (2002) suggest that success in learning and effective literacy practices is defined by the specific purpose or need within the specific context. If a worker buys into the workplace practices and shows appropriate learning and behaviour, Falk and Millar (2002) argue that this will promote positive self-efficacy as they will be given positive support and resources to achieve their goals. This is akin to Billett's (2001a) idea of workplace affordances, where Falk and Millar (2002) suggest that these affordances are made more accessible to workers if they attain or work towards the 'right' identity of the workplace, which in turn improves their self-efficacy and internalises the workplace practices. Thus, instead of generic basic learning, Falk & Millar (2002) call for a need for 'effective learning' (p.56). In their view this would consist of a series of steps including: establishing a need for the learning, negotiating a common purpose for the activities, designing the necessary quality and quantity of the learning event (both formal and informal); knowledge, skill, and identity development that is seen as strictly imbedded with achieving that purpose; the learning is embedded as far as possible in meaningful contexts; the learning is evaluated and the achievement of the purpose celebrated, with a final step of redefinition of further learning goals.

Kazemek (1991) argues that what is deemed a 'functional' skill is something that is highly personally constructed and probably highly transient across time and situation. Rather than taking a purely autonomous or social practice view, Kazemek (1991) suggests that we should attempt to make sense of the world and our learning within that through the interaction of two modes of knowing. These modes of knowing are the paradigmatic mode and the narrative mode (Bruner, 1985, cited in Kazemek, 1991). The paradigmatic mode of knowing is formed around a basis of theory, tight analysis, logic, and empirical methods guided by hypotheses. The narrative mode is related to a constructivist perspective where people create their worlds through stories. Kazemek (1991) argues that we learn functional skills through a variety of means which includes demonstrations from others, analysis of practice, reading, writing, paradigmatic ways, and storytelling. The storytelling is hypothesised to give the learner an understanding of the job at hand, the techniques that need to be used, the social and political context, and the implicit knowledge governing behaviour in the workplace. Therefore, learning for the workplace must necessarily involve knowledge of the specific workplace community of practice, and it cannot be assumed that the skills necessary for employment can be taught or learned within a separate classroom.

Viewing literacy as a social practice does create problems however, as, if each literacy practice is unique and specific to its context, how can one learn these literacies or transfer them across settings? Brandt and Clinton (2002) suggest that local literate practices are in fact, differing versions of literate designs that have originated elsewhere. The literacy practice may be ascribed a different meaning or use within a local context than was originally intended, but the actual text or tool itself may be derived from outside the local. Brandt and Clinton (2002) further argue that if reading and writing are means by which people in differing contexts can connect with each other, then there is some sort of shared meaning or shared literacy practice that is not constrained purely to the local and specific. It is claimed that literacy neither determines nor creates the local context; instead it participates within it as part of a social practice (Brandt & Clinton, 2002). It is important to note that within this practice though, the possible meanings

that could be derived from these literacies is not exhausted by any one locality (Brandt & Clinton, 2002).

Brandt and Clinton (2002) argue that literacy should be granted the capacity to travel, to stay intact on its travels, and to be visible and constructed of something outside of a 'literacy event'. A literacy event is defined as "a social action going on around a piece of writing in which the writing matters to the way people interact" (Brandt & Clinton, 2002, p.342). The ability to stay intact is inherent within the material form of the literacy (Brandt & Clinton, 2002). Brandt and Clinton (2002) give an example of obtaining a loan at a bank to illustrate this concept: While there are various aspects of the interaction between customer and bank manager which may be localised and socially meaningful to the specific context, for example, the nature of the engagement (casual/formal, long/short), outside meanings impinge on this event in the form of interest rates, disclosure and contract language, the reporting mechanism, etc. These texts and objects mediate interactions and the meanings that are placed on them by those involved in the interactions. In other words, while the transaction and the people involved in it are focused only on the local, this should not imply that the transaction and the literate practices undertaken within it are unrelated to a much wider, general context.

It is argued that there is an autonomous aspect to literacy in the form that the objects of literate practices still exist when the people around it are gone (Brandt & Clinton, 2002). The authors argue that access to literate practices have always required permission and assistance of more powerful others. These more powerful others set the conditions for access to literacy materials, and the interests of these 'others' and the 'learners' do not necessarily converge. This gives one example that literate practices are rarely invented or sustained by the people acting within a local setting alone (Brandt & Clinton, 2002).

Workplace literacy is a form of literacy that has generally been tied with autonomous models and ideas of the knowledge economy. Within this discourse, literacy is a functional employment skill which is closely associated with productivity and profitability of the workplace, industry, and nation (Castleton, 2000). Castleton (2000) argues that workplace texts construct the functional aspects of literacy (reading and writing, and the ability to communicate effectively both in written and oral form) as the ideal, preferred way of knowing. Consequently, the responsibility for productivity and profitability of the workplace is placed on the 'worker whose skills are not high enough to deal with the demands of the workplace'. In contrast with the social practice approach, literacy skills are typically seen to be situated within individuals, and are not seen as something that can be shared across groups or between individuals (Castleton, 2000). The association between functional literacy skills and work ability is viewed as a given (as evidenced by interviews with workers in Castleton's (2000) study).

Castleton (2000) argues that there is no attempt made within this discourse to account for the situations within which work takes place, and the effect that the workplace can have on an individual's or group's functioning. Instead, within this discourse, workplaces are generally viewed as similarly constructed sites, which are separated and distinct from the workers who inhabit them (Castleton, 2000). The factors of how the work is organised, what work processes are valued within the workplace structure, and also Billett's (2001a) workplace affordances are

not seen to play a role in the development or opportunity to participate in these skills (Castleton, 2000). Again, this could be because the skills are viewed as autonomous individual context-indifferent aspects, whereas Billett's (2001a) approach emphasises literacy as situated within its social practices and interactions. This view of the workplace as a "homogenous, monocultural and seamless site" implies that skills once learned can be transferred over differing parts of the workplace, or indeed differing workplaces (Castleton, 2000, p.99). Castleton (2000) argues that the dominant discourse of workplace literacy serves to strengthen power relationships between those who are 'skilled' and those who are 'unskilled', reflected in the schooling discourse of 'good' students and 'poor' students. Pearson et al (1996, cited in Castleton, 2000) note that training programmes based on this definition of literacy are likely to have benefits in terms of workplace performance in the short term. However, Gowen (1994, cited in Castleton, 2000, p.101) states that programmes based on functional literacy skills do little to help organisations "re-structure themselves into more humane and democratic workplaces". While the latter could be seen to be an ideal aim of the 'knowledge economy' workplace, the former approach taken to literacy training within the workplace, highlights a tension between what is aimed for (the latter), and the control management is perceived to both want and need in a society where it is open to legislation holding it responsible for workers' safety and professional development (the former). As Scholtz and Prinsloo (2001) claim, many workers feel alienated by literacy practices that they often have never needed to deal with before, or have designed their own alternative routes to the same outcome. More structured workplace literacy practices in Scholtz and Prinsloo's (2001) study were linked by workers with management power structures and strategies, which may encourage resistance to training, an unexpected outcome for those subscribers to the dominant discourse who believe training programmes of the functional nature are a tool for worker empowerment.

Castleton (2000) proposes that workers' preferred ways of knowing, practices, and knowledge must be recognised and valued in training programmes to be effective, rather than an external point of view on the value of certain knowledge being portrayed. It is argued that by working from workers' experiences, policy and practice may come to reflect the 'lived reality of the workers' rather than a reality purported by the dominant discourse (Castleton, 2000). Hull (2000, cited in Scholtz & Prinsloo, 2001) also states that there are many differing types of workplace literacy, with only a small part being those functional literacy skills or tasks. He gives the examples of using literacy to explain texts, participating in information flow, problem-solving processes, critical judgment, and power struggles (either to resist or exercise authority) as functions of literacy (Hull, 2000, cited in Scholtz & Prinsloo, 2001). Scholtz and Prinsloo (2001) go further to state that what an individual worker needs therefore, is a range of behaviours and attitudes that allow him/her to participate in the above functions in a manner that is congruent with the specific workplace's forms, genres, and language. In other words, while functional literacy skills are an important part of literacy, these skills need to be combined with skills of learning how to learn, communication, problem solving, and critical judgment, which are practiced within the affordances and tools of the workplace.

Scholtz and Prinsloo (2001) outline the concept of a 'literate identity' where a worker should carry around a wide ranging 'repertoire' of "situated ways of using written language and other forms of representation in order to carry out a work related activity", that can be used

as necessary as differing problems, challenges, and tasks arise in the workplace (p.1). Searle (2002) also notes within her study of front-line workers' communicative competence that generic communicative skills were never used as a concrete skill on their own; instead, differing skills and experiences were drawn on by workers dependent on the situation or problem they faced. Searle (2002) argues for a multiple literacies approach to workplace literacy, stating that the skills drawn upon in any one situation are "highly contextualised" and "situated within the specific discourses of the individual workplace" (p.27). She goes further to reiterate that it is only through understanding these discourses that the worker can fully understand the social meanings, values, and therefore literacies of the particular workplace (Searle, 2002).

Learning Transfer

The idea of literacy as a social practice can imply difficulties, if not impossibilities, in transfer of learning or understanding of literacies across different settings. The cognitive view of learning transfer holds that knowledge is something that can be learned uniformly across individuals (Billett, 2002a). Therefore, its transfer to other settings does not change that knowledge, and in a fundamental view of this approach, the setting has no effect on the practice of that knowledge (Billett, 2002a). The fundamental social practice view would hold that knowledge is specific to its context, which both shapes and is shaped by the social practices within it. This view holds difficulties for the concept of learning transfer. However, a third model, the sociocultural view, holds that settings both shape and are shaped by social practices, but also argues for inclusion of aspects of the cognitive model, thus, implying that learned knowledge must be adaptable and changeable to be useful within any specific context (Billett, 2002a). Similarly, as noted earlier, Brandt and Clinton (2002) argue for literacies that are part of the social practice model, but are also not so completely tied with specific contexts that the premises on which they are learnt cannot be transferred to other contexts. Hodkinson et al (2004) also argue for a sociocultural approach to adult learning. They state that while learning successful skills for job performance in one setting does not automatically lead to the ability to be successful in a similar job in another setting, the structural features of the learning may be able to be transferred between the two. However, for the knowledge previously learnt to be useful in the current context, they argue that the knowledge has to be "situated, underpinned by domain-specific knowledge and developed through social interaction within the culture and context of the work environment" (p.5).

Billett (2000) holds that transfer of knowledge is likely to be most effective and smooth where the circumstances of learning are similar to the circumstances of application, or alternatively, where circumstances of application, for example, two jobs in different settings, are similar. Billett (1998, cited in Billett, 2000) also holds that smooth transfer of knowledge is not only dependent on the similarities between settings, but on the personal qualities of the individual, i.e. the way that an individual constructs or adapts knowledge depends on their personal history (or habitus). Thus, these factors can interact to enhance effective transfer of knowledge from one setting to another, or indeed, can result in difficulties of transfer.

To enhance the chances of appropriate and smooth learning transfer taking place, Billett (2000) proposes two approaches. The first of these is for education providers to provide learning within a range of contexts/workplaces, with instruction deliberately aimed at providing understanding, and procedures for approaching a task that are broad (and thus adaptable to most circumstances). While he claims that this sort of approach would be the ideal, he acknowledges that this is rarely available within providerships (Billett, 2000), possibly due to financial, resourcing, or other issues. As another option, Billett (2000) suggests that instruction could develop knowledge in one setting or workplace, and then deliberately provide examples of how that knowledge could be applied or adapted to or in other settings. Falk and Millar (2002) also advocate the teaching of skills to be undertaken within the context of the workplaces, to enhance the likelihood of subsequent skill transfer.

There are several other aspects that are believed to be influential with regard to learning transfer. Pea (1987, cited in James 1997) claims that which knowledge is transferred from situation to situation is dependent on the judgment of the individual as to the cultural appropriateness of using that knowledge in a particular setting. Dweck (1986) argues for the importance of motivational processes, stating that differences in goal orientation, self-conception, and prior attributions related to success and failure are very influential in determining whether learned knowledge will be tried with new problems or challenges. James (1997) also notes that being able to learn from and be undeterred by failure is necessary for learning transfer to occur.

James (1997) also discusses the notion of appropriate identity development for the goal of learning transfer. She states that if skills and understandings are out of line with current identities, or if an individual's habitus does not lend itself to a particular way of understanding, people will likely have difficulty in adopting skills that go beyond mechanical repetition (James, 1997). If however, the learning is embodied (part of the learner's identity), it will more likely be transferable (Lave and Wenger, 1991, cited in James, 1997). This deep level embodiment of learning is considered to occur during reflective participative practices, exploring new learning (James, 1997). James (1997) goes further to suggest that through these reflective processes within groups, people could together build identities that could include the confidence to explore recently-acquired knowledge and put it into practice in other settings, thus, concurrently transferring and consolidating the learning.

Adult Literacy Policy

Literacy policy development is reviewed in Castleton and McDonald's (2002) paper "A decade of literacy: Policy, programs, and perspectives." Castleton and McDonald (2002) claim that literacy activists worked in the 1980s to link literacy with economics, thus making it a mainstream issue and one worthy of the Australian government's concern. This awareness campaign also looked at literacy's social justice implications and purposes. The economic link was taken up by the OECD, and in the 1990s, increases in globalisation led to concerns over underskilling and a lack of training in the workforce to deal with the changing economy (Castleton & McDonald, 2002). It was stated that "it is not possible to have successful retraining programmes for a number of people in the workforce unless you first of all provide them with the

opportunity to develop adult literacy and basic education" (Simpson, 1988, cited in Castleton & McDonald, 2002, p.5). Thus, literacy began to be associated more and more with employment and productivity in the workplace, than its social justice roots (Castleton & McDonald, 2002). Particularly with the advent of the IALS across several countries, Castleton and McDonald (2002) report that strong conclusions began to be made about adult literacy internationally. These included:

1. That there are important differences with regard to literacy skills (as defined by the IALS) across countries.
2. That literacy skill deficits are not just found among the marginalised groups of society, but throughout the entire adult population.
3. That literacy level is strongly correlated with access and use of opportunities in life.
4. That literacy level could be as much a determinant of educational attainment as it is considered an outcome.
5. That literacy skills are enhanced and maintained through regular use.
6. That adults with low literacy skill levels are either unaware of or may not acknowledge that this is a problem.

The final report of the IALS (OECD, 1996, cited in OECD, 2000, p.11) outlined, and arguably encouraged, the dominant discourse of literacy and its links to the employment market when it stated that the labour market requires workers with "broad foundation skills that must be regularly updated and complemented with specific skills through training and lifelong learning processes". Within the knowledge economy, literacy skills are viewed as critical in this context.

Generally, adult literacy policy has tended to focus on a functional generic view of literacy skills. In their work reviewing Australian adult literacy policy, Lonsdale and McCurry (2004) identify a need for policy that supports a wider contextual view of literacy and literacies. They argue for policy that supports practitioners being able to recognise and teach the differing literacies that are required when working with differing learners (Australian Policy Online, 2004, cited in Lonsdale & McCurry, 2004).

Adult literacy provision

Interviews were undertaken with a variety of key people involved with adult literacy policy, provision, and research in Australia as to their views on the issues facing adult literacy policy, provision, and research. One issue raised was the change to competitive tendering of contracts within adult education provision resulting in most teachers'/tutors' work becoming based on short-term or casual contracts (Castleton & McDonald, 2002). Adult literacy providers were and are also generally forced to work within funding arrangements that are not certain in terms of a long-term commitment, and funding sources (at least in Australia) are often fragmented and unconnected (Castleton & McDonald, 2002). Further, the introduction of competency-based assessment emphasised pre-determined performance outcomes and standards, focusing, in the view of these authors, attention on the assessments and reporting procedures, as opposed to the teaching practices (Castleton & McDonald, 2002). Interviews with some providers of adult literacy outlined the valuing of accredited formalised programmes over those programmes that offered a non-accredited, more community-based adult literacy programme (Castleton & McDonald, 2002). This was seen by some to be a way in which the dominant discourse marginalised

other potential forms of provision, however, it was also acknowledged by Castleton and McDonald (2002) that the development of accredited curricula in adult literacy and numeracy provision has been seen to provide positive vocational outcomes and pathways for learners. Further, there was a conflict perceived by some interviewees who stated that for those with very low literacy and numeracy levels, the push to integrate the teaching of these skills within an employment/vocational training framework, was unhelpful (Castleton & McDonald, 2002). The arguments here were that, within integrated learning, difficulties with literacy and numeracy skills could be hidden better. Also, the individual literacy needs of the learner could not be adequately addressed within the resources allocated for integrated learning, as resources were not necessarily focused on literacy skills (Castleton & McDonald, 2002). Finally, there was also a general consensus of opinion among interviewees, that professional development for adult literacy tutors had declined over the years (Castleton & McDonald, 2002).

With regard to future policy, Castleton and McDonald (2002) state that key philosophical and pedagogical roles for professional development to enhance teaching is needed in adult literacy education. Further, empirical research on the effectiveness and use of resource materials, teaching processes and practices, and what works for what groupings of clients was viewed as needed (Castleton & McDonald, 2002). It was noted by one interviewee in Castleton and McDonald's (2002) study that "a lot of the critical assumptions [of literacy] remain untested by research" (p.36). Castleton and McDonald (2002) also emphasise the role that the literacy providers, tutors, and participants should have in development of policy, stating that if viewpoints at the grass-roots level are not heard, policy will continue to be uninfluenced by actual practice. The idea of a 'whole government' approach to literacy provision was also put forward as a means of addressing a perceived fragmentation of government departments where unclear communication exacerbated a lack of collaboration between related government departments (Castleton & McDonald, 2002). The whole government approach has been used in the UK where a governmental committee was established with overall responsibility for the implementation and coordination of adult literacy and numeracy across all the portfolios (DfEE, 2001, cited in Castleton & McDonald, 2002).

Within New Zealand, Castleton and McDonald (2002) argue that the whole of government approach has been avoided, as has a national policy on literacy and literacy provision that has stated ideological underpinnings, planned outcomes, and specific objectives. To date, the focus within New Zealand is argued to have been largely programme-focused on specific target populations (usually perceived to be disadvantaged in some way), with adult education otherwise largely being the proviso of community-based programmes (Castleton & McDonald, 2002).

Castleton and McDonald (2002) state that lifelong learning needs to be understood as more than pursuing and achieving vocational outcomes. Some interviewee's views that some people don't want vocational or accredited courses, led to the call for an accredited curriculum for adult literacy education that is "broader and richer than the competency approach allows for" (Castleton & McDonald, 2002, p.35). Castleton and McDonald (2002) also state that the dominant belief in the 'power' of literacy and numeracy can enhance the perceived effects of literacy beyond what it is capable of achieving, stating that "literacy alone will not achieve wealth re-distribution nor social justice" (p.50). Castleton and McDonald (2002) outline that lar-

ger issues of, for example, wealth re-distribution and social justice, can only potentially be affected if literacy and numeracy provision is accessed in conjunction with other things such as general education, changes in employment policy, changes in literacy and literacy provision policy, and availability of jobs (as some examples).

MacLachlan and Cloonan (2003) outline that literacy provision policy needs to acknowledge that there are a variety of literacies that are just as valid to explore as functional definitions of literacy. MacLachlan & Cloonan (2003) also argue that literacy provision should be suited to the individual and collective needs of the learners as defined by the learners for use in particular contexts, rather than a pre-set standard. It is also argued that critical literacies need to be encouraged (MacLachlan & Cloonan, 2003). As stated by MacLachlan and Cloonan (2003): "If literacies is recognised as a socially situated set of practices that are inescapably linked to the operation of power, and if there is a need for the continual development of skills in all spheres of life, it follows that a uniform approach to literacy constructed upon pre-determined levels of attainment is an inappropriate, simplistic response to what is, in effect, a complex, multifaceted and value ridden area of practice" (p.125).

Use of assessments within adult literacy provision

Typically, assessment within adult literacy programmes follows a view of measuring the functional skill level of an individual, with the idea that the higher the score on the assessment, the higher the person's competency in that particular skill. Kazemek and Kazemek (1992) take a systems theory view of assessment measures when they state that these types of standardised assessments typically ignore the multiple systems that make up an individual's life-world. Assessments need not only look at the functional aspect, but as Kazemek and Kazemek (1992) state, they must also take into account the conceptual problems some adults may have, ineffective literacy strategies they may be using, how anxiety is typically experienced, their goals and motivations which drive their literacy efforts, and their social contexts and relationships that intersect with all of these factors. Kazemek and Kazemek (1992) suggest an initial planning conference (IPC) approach. This involves a two hour structured interview process where learners are asked to describe and assess their own experiences, interests, and abilities with regard to literacy and the planning of their own learning. The emphasis here is on the individual's expectations of themselves and the programme, their ideas of their own competence, their prior knowledge, and actively bringing what the person already knows to learning something partially new.

Bensemman and Sutton (1999) claim that assessment in the form of standardised testing has never been typical of the New Zealand adult literacy movement. This is primarily because of the negative associations that could be ascribed to these assessments by learners associating the assessments with an environment of school and perhaps, therefore, an environment of 'failure' (Bensemman & Sutton, 1999). A further option offered by Bensemman and Sutton (1999), in response to this, is a self-report informal assessment with the learner where they, and not the tutor, are the ones who determine whether their progress is satisfactory and where they would like to proceed to next. This form of assessment is implicitly based on the assumption that learners are autonomous adults who wish to learn and attend the adult literacy programmes of

their own free will, thus, it is argued, they should also be free to determine their own progress and the acceptability of this (Bensemann & Sutton, 1999).

Evaluation of Adult Literacy Provision

Within New Zealand a 1999 article "Evaluating adult literacy programs at the community provider level" stated that the usual means of evaluating learner progress within providers was to examine the extent to which literacy provision had brought about changes in literacy skills (Bensemann & Sutton, 1999). Adult literacy provision at the time, and perhaps still today, was predominantly the place of small community-based providers staffed by a small number of paid managers, tutors, or co-ordinators, and also, volunteers (Bensemann & Sutton, 1999). Bensemann and Sutton (1999) outline that evaluation of programmes can take place in three different ways:

1. Assessing the degree of change or learning that takes place with learners as a result of the interactions with the literacy tutor.
2. Assessing the impact of the literacy programme at the community/societal level.
3. Assessing various aspects of the programme for the purpose of improving programme effectiveness and efficiency. It is argued by Bensemann and Sutton (1999) that while the tutor/learner relationship is primary, other factors are important to assess also in terms of programme evaluation, for example, administration and organisational procedures around the programme, provision of resources, access to appropriate spaces and facilities, liaison with external community agencies, extent and quality of tutor training, and the provision of childcare, among others.

Bensemann and Sutton (1999) argue that positivist approaches to programme evaluation do not allow for the reality and complexity of people's lives as social beings.

In a similar vein, Bingman, Ebert, and Bell (2000) noted in their study that while adult learners reported outcomes such as employment that fit with the proposed evaluative indicators of the funding body, the learners were actually more likely to discuss other outcomes such as changes to their sense of self, and how they used literacy in their everyday lives. Bingman, Ebert, and Bell (2000) cite the Tennessee Longitudinal Study carried out between 1992-1995, which looked at socio-economic, social, personal, and physical outcomes of adult literacy education. This study found that while there was an increase in the rate of employment from 32% to 48%, other outcomes in differing areas were also noted. Learner outcomes included significant increases in overall satisfaction with their financial situation, increases in self-esteem, and increased involvement with community organisations. A marginally significant increase ($p < .06$) was seen in voter registration behaviour. Finally, positive changes were noted in three of the eight literacy practices examined with significant changes in paying bills, numeracy skills on the job, and less need to memorise due to a lack of reading ability.

Changes in the lives of learners are reported by learners themselves as varied (Bingman, Ebert, & Bell, 2000). Bingman, Ebert, and Bell (2000) state that measuring changes in skill level with standardised tests will not give policy makers all the information on outcomes that is needed. It is argued that more sensitive and broad measures are required to capture those outcomes that are important to all involved, and also to give an accurate evaluation of the services

that the programme is providing (Bingman, Ebert, & Bell, 2000). Bingman, Ebert, and Bell (2000) argue that if adult literacy programmes do not cater to the full needs of the learner then they will lose students. Also, it could be argued that if programmes are not seen to be catering to a wide range of needs, potential learners may choose not to participate.

One means of assessing adult literacy programmes has been suggested in the form of the framework 'Equipped for the Future' (EFF) (being developed by the National Institute for Literacy in the USA (NIFL)). Described by Bingman, Ebert, and Bell (2000), 'Equipped for the Future' consists of the following:

- Four purposes for learning which were originally defined by adult learners themselves and then validated by other adults. These are: access to information so adults can orient themselves in the world; the voice or ability to express ideas and opinions with confidence; independent action or ability to solve problems and make decisions independently; and, providing a bridge to the future or learning how to learn to keep up with a changing world (Bingman, Ebert, & Bell, 2002).
- Three maps that define what it means to be successful in terms of the roles of worker, citizen, and family member.
- Thirteen activities that are common across these three roles.
- Sixteen skill standards derived from the three maps, which provide specific and measurable statements of what it is that adults need to know and be able to do. These are categorised into four categories: communication, interpersonal, decision-making, and lifelong learning.

Bingman, Ebert, and Bell (2002) argue for a localised approach to development of outcomes as measures of programme accountability, perhaps using the EFF framework or standards developed as a basis for identifying, assessing, and reporting on localised student goals and progress. This development is encouraged to be based on action research processes (Bingman, Ebert, & Bell, 2002).

Motivation

With regard to the motivations for participation in adult literacy programmes, the list is long and varied. Beder and Valentine (1990, cited in Demetrian, 1997) list several possible sources of participant motivation: self-improvement, family responsibilities, diversion, developing their literacy skills, furthering community/church involvement, job advancement, an economic need, or educational advancement. Lytle (1991, cited in Demetrian, 1997) adds a desire for enhanced self-esteem as an implicit motivation to this list. This adheres to Fingeret and Danin's (1991, cited in Demetrian, 1997) thoughts that a major source of motivation to participate is the quest to remove the stigma associated with having low literacy levels, and thus, promoting social inclusiveness for themselves in their perceptions. Demetrian (1997) goes further to state that the motivations for learning are not always tied up with the material benefits of that learning (for example, scoring a level higher on a standardised test) but can be seen as being tied up with the social and psychological needs of the individuals, which in turn, influence the constructions of their personal and social identities. Stein (1995, cited in Demetrian, 1997, p.3) claims that adults participate in literacy training to "change what they can do, how

they are perceived and how they perceive themselves in specific social and cultural contexts". Demetrian (1997) also endorses this view stating that a quest for a better life, and a goal of inclusiveness, are primary motivators for participants in adult literacy programmes. Demetrian (1996, cited in Demetrian, 1997) further states that the more personal goals side of motivation may constitute a previously untapped area of focus for adult literacy programme tutors' use within the programme itself.

Participatory literacy education, where ideally, it is the learner who selects the content of the course and participates in the critical evaluation of this course content, is put forward as a potential motivating force for learners (Demetrian, 1998). However, Demetrian (1998) points out that in the majority of cases students do not exercise a preference for choosing course material, seeing this as the tutor's role. Demetrian (1998) claims that this is because the content is less important to the learner than the desire to engage in a meaningful learning process. It is important to keep in mind that this is only one possible interpretation, and other explanations may be as valid here. For those who do not actively involve themselves in the choosing of course material, this is also viewed by Demetrian (1998) as the specific instructional material being less important than the actual attainment of the skills that the learner is aiming for. Demetrian (1998) suggests that to enhance learner involvement in participatory literacy education, the learning process needs strategies and approaches that address the learners' intrinsic desires, interests, and thus, motivations.

Tuman (1987, cited in Demetrian, 1998) puts forward a developmental theory of literacy upon which he suggests adult literacy education should be based. Tuman's (1987, cited in Demetrian, 1998) main concern lies with those who argue for the privileging of the everyday world of those with limited literacy over and above learning literacy skills so that an ability to challenge and redescribe current conceptualisations of the dominant world is fostered. In other words, he argues that privileging the ways of knowing of the marginalised groups, over and above the dominant discourse, does these groups a disservice by not allowing them access to those tools that the dominant discourse holds. Tuman (1987, cited in Demetrian, 1998) argues that because today's world is a complex, pluralistic society, subcultures are always in a transitional, dynamic relationship with other subcultures. What is important, Tuman (1987, cited in Demetrian, 1998) argues, is not so much the preservation of these subcultures, but the growth of the ability of individuals, groups, and subcultures to "reconstruct their cultures in ways that lead to self-defined progress" (p.10). This theory holds that accommodation and assimilation should be levelled off against one another, with accommodation meaning "wherein we alter ourselves so that we conform to the demands of the world" and assimilation meaning "wherein we attempt to change the world either in thought or in reality to conform to our wishes" (Tuman, 1987, cited in Demetrian, 1998, p.8). By making accommodation increasingly deliberate and assimilation increasingly constructive, Tuman (1987, cited in Demetrian, 1998) argues that the learner will then attain growth. Tuman (1987, cited in Demetrian, 1998) further argues that educators need to worry less about the content of their teachings, and more about the complex motives that lie behind the students' long-term developmental needs. He defines literacy under the line of thought that "reading and writing must become practical activities that develop direct connections between, on the one hand, the necessarily theoretical experience of reading and

writing texts and, on the other hand, the arousal and fulfilment of the student's own practical goals" (Tuman, 1987, cited in Demetrian, 1998, p.9).

Barriers and motivators to and for learning respectively were outlined in a study by Frank (1996). Time, money, employer attitudes to training, and distance were the barriers put forward by the participants in this study, with a particular emphasis on the first two. Some participants stated that they did not take further courses or participate in courses that their employer did not fund, as they did not feel they could, or were not willing to, override the financial barrier themselves. Confidence was also seen as a motivator for participating in further education and training, particularly in terms of when confidence was gained from the completion or undertaking of a first positive educational experience. Benefits of attending adult education reported by Frank's (1996) participants were: enhanced reading, writing and spelling skills in terms of business letters and note-taking; family literacy benefits; a fuller understanding of the work organisation; increased possibilities of taking part in community activities; and, increased confidence. Long-term benefits included: increased confidence; encouragement to continue on with learning; self-esteem increases; promotion prospects improved as did job-seeking prospects when the company closed or redundancies occurred; more offers of training opportunities; gains in useful skills for work; gains in useful skills for other training programmes; improved participation in meetings; and, a wider range of further training/education was taken up.

Saunders and Fuller (1993, cited in Frank, 1996) put forward a use and exchange value theory for discussion when looking at the benefits of an education programme. They state that if a student can apply their learning immediately within their life-world (which also includes their work life), then the course has a high use value for them. If the education programme opens new doors for the student, then it is said to have high exchange value. These two values can serve as motivators for attendance and also as motivators for progress after the course has ceased.

Confidence

Norman and Hyland's (2003) study of confidence in learners highlighted several themes that influence lack of confidence in a learner, as well as several factors that appeared to influence increases in confidence. A lack of confidence could be caused by: the newness of the task; an incongruence of identity with the teacher (i.e. does not look like or like the teacher); overestimating task requirements; self-doubt; own physical characteristics; fear of not being accepted by others; feeling of inferiority and perceived knowledge deficit; negative thinking; feeling scared; feeling of being judged; and an uncertainty of being successful (Norman & Hyland, 2003). However, the factors judged to be useful in increasing confidence included: being able to learn, experience and achieve (this included learning and utilising new things, being successful in accomplishing things, being given responsibility, establishing a positive rapport with other learners and receiving feedback from both other learners and tutors, having an open environment where fears and problems could be discussed); realism (acceptance that the learner does not need to know everything); social interaction; familiarity and receiving support and encouragement; relaxation and reassurance; self-management; working with staff; receiving criticism

constructively; and being treated well (Norman & Hyland, 2003). Norman and Hyland (2003) argue that these confidence building factors can be best fostered within social interactions. They argue that learning has its basis in interactions between people (social practice and social capital view), and thus social interaction between learners and tutors not only enhances confidence, but learning as well. The relationship between confidence and learning is complex and reciprocal.

Wider Outcomes of Adult Education

It has been outlined above that adult education has wider benefits for participants than is perhaps the official aims of the programmes. Feinstein (2002a) claims that it is difficult to determine the benefits of adult education due to the limitations of differing aspects of learning, differing measures of learning, differing approaches to programme delivery, data gathered at differing times, and differing contexts. However, while the studies reported here have to be read with this proviso in mind, they do offer areas for future research in the areas of crime, family literacy, and health.

In terms of family literacy, Preston and Hammond (2002) argue that adult learning brings parents to value their children's learning more and to engage more actively with it. Preston and Hammond (2002) also claim benefits in adult further education, claiming that it heightens personal autonomy, preventing individuals from becoming dependent on their families or communities. However, it is noted that adult education can also generate friction in that transformative learning processes could lead to changes in roles, structures, or power within a community or family grouping, something that others within this group may resist (Preston & Hammond, 2002).

Preston and Hammond (2002) offer a wide range of benefits of adult education including: enhanced communication abilities; ability to articulate needs and understand services that are available; ability to formulate goals; and increases in the sense of control over one's life. Benefits in terms of health, social capital, and people's enhanced roles of civic participation are also outlined. Adult education is claimed to enable people to better understand the systems and networks within which they work and operate, to develop and maintain networks that would otherwise have been unavailable to them, and to reanimate dormant networks or, alternatively, to disengage from networks completely. Preston and Hammond (2002) state that learning helps people to obtain, maintain, and/or change their sense of identity. Learning is also seen as a means by which people can come to understand that there are other perspectives and values and to value them, regardless of whether this causes a change in their own (Preston & Hammond, 2002).

From the adult education practitioner viewpoint, self-esteem and efficacy enhancement were the most important benefits of participating in adult education (Preston & Hammond, 2002). The practitioners stated that increases in self-esteem could potentially lead to improved psychological health, whereas improvements in efficacy could potentially lead to more participation in the community. Problem-solving and other skill enhancement was also seen as beneficial for both economic and non-economic areas of life. Finally, the social integration element of

adult education was considered vital in the formation of tolerant attitudes to others, to bridge differences between ethnic groups, culture, and age groups for example, and also in learning how to develop, and in developing social networks.

Crime

Low levels of education have been linked with higher levels of crime (Maguin & Loeber, 1996, cited in Feinstein, 2002a). Feinstein (2002a) offers five hypotheses for the effect of education on crime reduction:

1. If education increases the potential for higher wages, this may reduce crime indirectly, as frustration that leads to crime is reduced.
2. If education increases risk aversion behaviours or patience, then the threat of future punishment may be given more weighting in an individual's consideration of committing a crime (there is little evidence to support this hypothesis).
3. Direct effects on recidivism.
4. The effect of pleasure gained from committing a crime could be linked with education's effects on empathy or, more directly, participating in school makes it less likely for an opportunity to commit a crime to present itself, and thus, there is less opportunity to derive pleasure from this action.
5. Intergenerational effect on potential for criminal behaviour could be mediated by education (if education is indeed negatively associated with criminal behaviour). This intergenerational effect could be due to environmental or genetic reasons, although Moffitt (1987, cited in Feinstein, 2002a) found that there was no evidence of a genetic link in his study of the criminal records of 5659 Danish male adoptees.

The claim that education is associated with crime levels is to date unclear. Feinstein (2002a) states that while school and schooling is important to the potential for offending, the causal processes are not as yet known.

Health

Another area of research has looked at the relationship between adult education and health. Feinstein et al (2003) studied the effects of adult education on several health behaviours: the giving up of smoking if a smoker, whether those depressed recovered from depression, whether those not depressed were less likely to get depressed, whether or not level of exercise increased, any change in the amount of units of alcohol drunk, and overall life satisfaction. These factors were measured across four different types of course: academic accredited, vocational accredited, work-related, and, leisure. Feinstein et al (2003) found that for those taking the leisure course, the health benefits were the most pervasive, particularly the relationship between adult learning and more engagement with exercise. The vocational accredited and leisure courses seemed to promote a reduction in alcohol consumption, while the work-related course participants increased their alcohol consumption. This could be related with the effects of taking only a few courses, compared with taking many courses, if those in the work-related courses tended to be those who were taking many courses. Those taking many courses were found to have not as good outcomes in terms of smoking and alcohol consumption behaviours as those taking few courses. Feinstein et al (2003) state that a possible explanation for this could

be that the increased socialising that is sometimes a part of taking part in courses could lead to an increase in smoking and drinking behaviours, which offset effects on other health practices. Another possible explanation is selection bias (Feinstein et al, 2003). Finally, the reduction in life satisfaction generally seen between the ages of 33-42 was offset to a small degree by participation in adult education, regardless of the type of course (Feinstein et al, 2003).

Feinstein (2002b) suggests that the channels by which educational levels influence health could be through:

1. Information Awareness: education could affect the ability or the confidence to search for information on health.
2. Psychosocial Benefits: education may increase an individual's sense of power and control over their own lives, thus, their sense of power and control over health related behaviours.
3. Direct effects on patience or risk aversion: If education increases patience levels, then it may reduce the propensity to engage in unhealthy behaviours due to the ability to see the long-term cost.
4. Intergenerational factors may also represent a channel whereby health related behaviours are passed down in relationships that are mediated by wealth, or alternatively are affected by the educational level of the older generations in the family.

Intergenerational effects

In Feinstein, Duckworth, and Sabates (2004) model of the intergenerational transmission of educational success, parental education is viewed as a major influence on child educational achievement, both directly and through other channels such as income and parenting skills (for example, warmth and discipline). Feinstein et al (2004) also claim that part of the effect of parental education on childhood educational achievement is its moderating effects on the many other elements that can affect this outcome. Feinstein et al (2004) put forward a model of intergenerational transmission based on ecological conceptualisations of developmental psychology. In the centre of this model lie the proximal processes which centre around the interactions between parents and their children. Here, the interaction is influenced, helped, or constrained by factors such as the characteristics of the family in terms of beliefs, resources, values, aspirations, attitudes, and well-being, which in turn are influenced by more distant social, economical, and demographic factors such as parental income, family structure, and educational level of the parents (distal factors). Within this model, the educational system of schools, pre-schools, and other contexts such as the wider community, provide channels for the effects of these proximal and distal factors, thus contributing and influencing in a reciprocal way the intergenerational influence on educational achievement (Feinstein et al, 2004). Parental education, it is claimed, can also moderate the effects of risk factors and ease their effect on the child through the interaction between the parent and the child (Feinstein et al, 2004). Feinstein et al (2004) call for a holistic perspective to education in policy documents so as to allow for consideration of all those factors that have been shown to impact on educational achievement.

Conclusion

Beginning with a context overview of postmodernism and the emerging knowledge economy, this literature review has sought to understand varying discourses and theoretical understandings of adult education and, specifically, adult literacy education. Furthermore, this review has investigated the aligned and equally important areas of lifelong learning, social capital, adult education and literacy policy, adult literacy provision, learning transfer, and workplace learning theory. It has ended with a discussion of motivational factors inherent in participation, and an overview of the wider benefits that can be associated with adult further education.

Adult literacy theory abounds with differing perspectives on how literacy should be defined and assessed. The dominant model largely promotes the autonomous, functional literacy view, which is increasingly being challenged by the social practice or critical cultural approach (sometimes termed the New Literacy Studies). The effects of these two modes of thought on adult literacy provision policy and practice were explored here.

To reiterate, this review aims to present the views of various authors in the field of adult education, some with divergent viewpoints. Therefore, this literature review is offered as a starting point for discussion around theoretical conceptualisations of literacy, for researchers, practitioners, and policy makers alike.

References

- Avis, J. (2002). Social capital, collective intelligence, and expansive learning: Thinking through the connections. Education and the economy. *British journal of educational studies*, 50, (3), 308-325.
- Balatti, J. & Falk, I. (2002). Socioeconomic contributions of adult learning to community: A social capital perspective. *Adult education quarterly*, 52, (4), 281-298.
- Balatti, J., Gargano, L., Goldman, M., Wood, G., & Woodlock, J. (2004). *Improving indigenous completion rates in mainstream TAFE: An action research approach*. Retrieved 08-08-04, from <http://www.ncver.edu.au/publications/1472.html>
- Barrett, F. J. (1995). Creating appreciative learning cultures. *Organizational dynamics*, 24, (2), 36-49.
- Benseman, J. (1998). An impact assessment of Paulo Freire on New Zealand adult literacy: Some observations. *New Zealand journal of adult learning*, 26, (1), 23-31.
- Benseman, J. & Sutton, A. (1999). Evaluating adult literacy at the community provider level. *Adult basic education*, 9, (1), 21-36.
- Berryman, S. E. (1994). *The role of literacy in the wealth of individuals and nations*. Retrieved 21 November, 2004, from http://www.eric.ed.gov/ERICDocs/data/ericdocs2/content_storage_01/0000000b/80/22/e4/fb.pdf
- Billett, S. (2000). Defining the demand side of vocational education and training: Industry, enterprises, individuals, and regions. *Journal of vocational education and training: The vocational aspect of education*, 52, (1), 5-30.
- Billett, S. (2001a). Co-Participation: Affordance and engagement at work. *New directions for adult and continuing education*, 92, 63-72.
- Billett, S. (2001b). Learning throughout working life: Interdependencies at work. *Studies in continuing education*, 23, (1), 19-35.
- Billett, S. (2002a). Critiquing workplace learning discourses: Participation and continuity at work. *Studies in the education of adults* 34, (1), 56-67.
- Billett, S. (2002b). Toward a workplace pedagogy: Guidance, participation, and engagement. *Adult education quarterly*, 53, (1), 27- 43.

- Billett, S., Herson-Tinning, B., & Ehrich, L. (2003). Small business pedagogic practices. *Journal of vocational education and training*, 55, (2), 149-167.
- Billett, S. & Somerville, M. (2004). Transformations at work: Identity and learning. *Studies in continuing education*, 26, (2), 309-326.
- Bingman, M. B., Ebert, O., & Bell, B. (2000). *Outcomes of participation in adult basic education: The importance of learners' perspectives*. Retrieved 8 December, 2004, from http://gseweb.harvard.edu/~ncsall/research/op_bingman.pdf
- Black, S. (n.d.). *Whose economic wellbeing?: A challenge to dominant discourses on the relationship between literacy and numeracy skills and (un)employment*. Retrieved September 15, from http://www.staff.vu.edu.au/alnarc/onlineforum/AL_pap_black.htm
- Bloomer, M. & Hodgkinson, P. (2000). Learning careers: Continuity and change in young people's dispositions to learning. *British educational research journal*, 26, (5), 583-597.
- Boud, D. & Solomon, N. (2003). "I don't think I am a learner": Acts of naming learners at work. *Journal of workplace learning*, 15, (7/8), 326-331.
- Brandt, D. & Clinton, K. (2002). Limits of the local: Perspectives on literacy as a social practice. *Journal of literacy research*, 34, (3), 337-356.
- Bratton, J. A. (2001). Why workers are reluctant learners: The case of the Canadian pulp and paper industry. *Journal of workplace learning*, 13, (7), 333-344.
- Bynner, J. (2002). *Literacy, numeracy, and employability*. Retrieved 8 December, 2004, from http://www.staff.vu.edu.au/alnarc/onlineforum/AL_pap_bynner.htm
- Castleton, G. (2000). Workplace literacy: Examining the virtual and virtuous realities in (e)merging discourses on work. *Discourse: Studies in the cultural politics of education*, 21, 91-104.
- Castleton, G. & McDonald, M. (2002). *A decade of literacy: Policy, programs, and perspectives*. Retrieved 6 December, 2004, from <http://www.staff.vu.edu.au/alnarc/publications/02CastletonMcDonald.pdf>
- Cavalier, W. (2002). The three voices of Freire: An exploration of his thought over time. *Religious education*, 97, (3), 254-270.
- Chapman, V.-L. (2004). Using critical personal narratives: A poststructural perspective on practice. *New directions for adult and continuing education*, 102, 95-103.
- Clegg, S. & McNulty, K. (2002). The creation of learner identities as part of social inclusion: gender, ethnicity, and social space. *International journal of lifelong education*, 21, (6), 572-585.

- Collin, K. & Tynjala, P. (2003). Integrating theory and practice? Employees' and students' experiences of learning at work. *Journal of workplace learning*, 15, (7/8), 338-344.
- Contu, A. & Willmott, H. (2003). Re-Embedding situatedness: The importance of power relations in learning theory. *Organization science*, 14, (3), 283 – 296
- Crowther, J. (2000). Participation in adult and community education: A discourse of diminishing returns. *International journal of lifelong education*, 19, (6), 479-492.
- Culligan, N., Arnold, G., Noble, A., & Sligo, F.X. (2004). *Analysis of New Zealand data from the International Adult Literacy Survey; Demographic predictors of low literacy proficiency*. Department of Communication and Journalism, Massey University, N.Z. Report commissioned by the N.Z. Ministry of Education, Wellington.
- Davis, B. & Sumara, D. (2001). Learning communities: Understanding the workplace as a complex system. *New directions for adult and continuing education*, 92, 85-95.
- Demetron, G. (1997). Student goals and public outcomes: The contribution of adult literacy education to the public good. *Adult basic education*, 7, (3), 145-165.
- Demetron, G. (1998). A Critical Pedagogy of the Mainstream. *Adult basic education*, 8, (2), 68 – 90.
- Dweck, C.S. (1986). Motivational processes affecting learning. *American psychologist*, 41, 1040-1048.
- Edwards, R. & Usher, R. (2001). Lifelong learning: A postmodern condition of education? *Adult education quarterly*, 51, (4), 273-287.
- Falk, I. (2001a). *Sleight of hand: Literacy, social capital, and social disadvantage*. Retrieved September 2, 2004, from http://www.staff.vu.edu.au/alnarc/publications/00forumianfalk_paper.html
- Falk, I. (2001b). Literacy by design, not by default: Social capital's role in literacy learning. *Journal of research in reading*, 24, (3), 313-323.
- Falk, I. & Kilpatrick, S. (2000). What is social capital? A study of interaction in a rural community. *Sociologia ruralis*, 40, 87-109.
- Falk, I. & Millar, P. (2002). *Non/working lives: Implications of 'non-standard work practices' for literacy and numeracy*. Retrieved 18 November, 2004, from <http://www.staff.vu.edu.au/alnarc/publications/02FalkandMillar.pdf>
- Farrell, L. (2000). Ways of doing, ways of being: Language education and 'working' identities. *Language and education*, 14, (1), 18-36.

- Feinstein, L. (2002a). *Quantitative estimates of the social benefits of learning, 1: Crime*. Retrieved 16 November, 2004, from <http://www.learningbenefits.net/>
- Feinstein, L. (2002b). *Quantitative estimates of the social benefits of learning, 2: Health (depression and obesity)*. Retrieved 16 November, 2004, from <http://www.learningbenefits.net/>
- Feinstein, L., Duckworth, K., & Sabates, R. (2004). *A model of the intergenerational transmission of educational success*. Retrieved 16 November, 2004, from <http://www.learningbenefits.net/>
- Feinstein, L., Hammond, C., Preston, J., Woods, L., & Bynner, J. (2003). *The contribution of adult learning to health and social capital*. Retrieved 16 November, 2004, from <http://www.learningbenefits.net/>
- Fenwick, T. (2001). Tides of change: New themes and questions in workplace learning. *New directions for adult and continuing education*, 92, 3-17.
- Findsen, B. (1998). Freire as an adult educator: An international perspective. *New Zealand journal of adult learning*, 26, (1), 9-21.
- Frank, F. (1996). 'Like a cork flying out of a bottle': Students' journeys after Workplace Basic Skills Training courses. A follow-up study. Retrieved 08-08-2004, from <http://www.lancs.ac.uk/fss/edres/staff/frank/followup.html>
- Frank, F. (2003). Learning to accentuate the positive. *Adults learning*, 14, (8), 18-21.
- Fryer, R. H. (1999). *Creating learning cultures: Next steps in achieving the Learning Age*. Retrieved September 28, 2004, from <http://www.lifelonglearning.co.uk/nagcell2/nagcell2.pdf>
- Gorard, S. (2003). Patterns of work-based learning. *Journal of vocational education and training*, 55, (1), 47-63.
- Green, A., Preston, J., & Sabates, R. (2003). *Education, equity and social cohesion: A distributional model*. Retrieved 8 November, 2004, from <http://www.learningbenefits.net/>
- Hamilton, M. & Barton, D. (2000). The International Adult Literacy Survey: What does it really measure? *International review of education*, 46, (5), 377-389.
- Hemphill, D. F. (2001). Incorporating postmodernist perspectives into adult education. In V. A. S. Sheared, P. A. Ed. (Ed.), *Making spaces* (pp. 15-28). Westport, Connecticut & London: Bergin and Garvey.
- Hobbs, G. (2000). *What is social capital? A brief literature overview*. Retrieved 21 October, 2004, from http://www.caledonia.org.uk/soc_cap.htm

- Hodkinson, P., Hodkinson, H., Evans, K., Kersh, N., Fuller, A., Unwin, L., & Senker, P. (2004). The significance of individual biography in workplace learning. *Studies in the education of adults*, 36, (1), 6-24.
- Hughes, C. (2000). Resistant adult learners: A contradiction in feminist terms? *Studies in the education of adults*, 32, (1), 51-62.
- Hull, G. A. (1999). What's in a label?: Complicating notions of the skills-poor worker. *Written communication*, 16, (4), 379-411.
- Hull, G. (2000). Critical literacy at work. *Journal of adolescent and adult literacy*, 43, (7), 648 - 652.
- Illeris, K. (2003). Workplace learning and learning theory. *Journal of workplace learning*, 15, (4), 167-178.
- James, P. (1997). Transformative learning: promoting change across cultural worlds. *Journal of vocational education and training*, 49, (2), 197-219.
- Johnston, R. & Usher, R. (1997). Re-theorising experience: Adult learning in contemporary social practices. *Studies in the education of adults*, 29, (2), 137-150.
- Kazemek, F. E. (1991). 'In ignorance to view a small portion and think that all': The false promise of job literacy. *Journal of education*, 173, (1), 51- 64.
- Kazemek, C. & Kazemek, F. (1992). Systems theory a way of looking at adult literacy education. *Convergence*, 25, (3), 5-15.
- Kilpatrick, S. (1999). *How social capital facilitates learning outcomes for small businesses*. CRLRA discussion paper. Launceston: University of Tasmania.
- Kilpatrick, S. (2001). *Lifelong learning: Rural communities sharing a journey*. Retrieved October 6, 2004, from <http://www.crlra.utas.edu.au/files/discussion/2001/D12-2001.pdf>
- Kilpatrick, S., Barrett, M., & Jones, T. (2003). *Defining learning communities*. Retrieved October 6, 2004, from <http://www.crlra.utas.edu.au/files/discussion/2003/D1-2003.pdf>
- Livingstone, D. W. (2001). Expanding notions of work and learning: Profiles of latent power. *New directions for adult and continuing education*, 92, 19-30.
- Lonsdale, M. & McCurry, D. (2004). *Literacy in the new millennium*. Retrieved 02-08-2004, from <http://www.ncver.edu.au/publications/1490.html>
- MacLachlan, K. & Cloonan, M. (2003). Three dimensional change? The relationship between theory, policy, and adults' understanding of literacies. *Research in post-compulsory education*, 8, (1), 123-136.

- Mezirow, J. (1996). Toward a learning theory of adult literacy. *Adult basic education*, 6, (3), 115-126.
- NCVER. (2003). *What makes for good workplace learning?* Retrieved 14 June, 2004, from <http://www.ncver.edu.au/research/core/cp0207.pdf>
- Norman, M. & Hyland, T. (2003). The role of confidence in lifelong learning. *Educational studies*, 29, (2/3), 261-272.
- OECD. (2000). *Literacy in the information age: Final report of the international adult literacy survey*. Canada: Statistics Canada.
- OECD. (2001). *The well-being of nations: The role of human and social capital*. Retrieved 27 May, 2005, from <http://www1.oecd.org/publications/e-book/9601011E.PDF>
- Poell, R. F. & Van der Krogt, F. J. (2003). Learning strategies of workers in the knowledge-creating company. *Human resource development international*, 6, (3), 387-403.
- Preston, J. & Feinstein, L. (2004). *Adult education and change*. Retrieved 16 November, 2004, from <http://www.learningbenefits.net/>
- Preston, J. & Hammond, C. (2002). *The wider benefits of further education: Practitioner views*. Retrieved 16 November, 2004, from <http://www.learningbenefits.net/>
- Roberts, P. (1998). Beyond pedagogy of the oppressed: Reading Freire holistically. *New Zealand journal of adult learning*, 26, (1), 32-55.
- Scholtz, S. & Prinsloo, M. (2001). New workplaces, new literacies, new identities. *Journal of adolescent and adult literacy*, 44, (8), 7-10.
- Searle, J. (2001). Constructing literacies in the new work order. *Literacy and numeracy studies*, 11, (1), 21-40.
- Searle, J. (2002). Situated literacies at work. *International journal of educational research*, 37, (1), 17-28.
- Spencer, B. (2001). Changing questions of workplace learning researchers. *New directions for adult and continuing education*, 92, 31-40.
- St Clair, R. (1998). On the commonplace: Reclaiming community in adult education. *Adult education quarterly*, 49, (1), 5-14.
- Sun, H.-C. (2003). Conceptual clarifications for 'organizational learning', 'learning organization', and 'a learning organization'. *Human resource development international*, 6, (2), 153-166.

- Taylor, M., King, J., Pinsent-Johnson, C., & Lothian, T. (2003). Collaborative practices in adult literacy programs. *Adult basic education, 13*, (2), 81-99.
- Tett, L. (2000). Excluded voices: Class, culture, and family literacy in Scotland. *Journal of adolescent and adult literacy, 44*, (2), 122-128.
- Thursfield, D. & Henderson, R. (2004). Participation in lifelong learning: Reality or myth? Issues arising from a United Kingdom coalfield closure. *Journal of vocational education and training, 56*, (1), 117-134.
- Tusting, K. & Barton, D. (2003). *Models of adult learning*. Retrieved 11-08-04, from http://www.nrdc.org.uk/uploads/documents/doc_2803.pdf

**Department of Communication & Journalism
College of Business
Private Bag 11-222
Palmerston North
New Zealand**

<http://literacy.massey.ac.nz>

ISBN 0-9582646-3-5

**ISSN 1176-9807
Adult Literacy and
Employment in Wanganui**