CHAPTER 1: Introduction

This study is about self-perception and its affects upon adult learners. Over the last two decades, there has been a plethora of research in the areas of adult and workplace learning. Little of this research, however, has focussed on learner self-perception and the part it plays in the learning equation. This exploratory study provides a response to this gap in the research.

There is a plethora of research to suggest that adults' social, educational and personal experiences form a backdrop for their new learning environments (Burns 1995a, Knowles 1990, Merriam & Brockett 1997a). Nevertheless, my own observations and experiences as a workplace trainer, teacher and lecturer were that many educational settings did not contribute to enthusiastic and purposeful learning attitudes from students. A frequent comment from many older adults, for example, was that they believed formal programs of training would be too difficult for them as they had not been in a classroom for up to twenty-five years. Based on my professional reflection on my experiences and observations, I have come to the hypothesis that the major mediating factor influencing participation in, and the quality of, the outcomes from training is self-perception as a learner, or what might be called the internalising of self. As a consequence, this current study explores the question of why adults often believe it will be difficult for them to engage in formal learning, and in particular, the extent to which self-perception plays a vital role in this process.

Context for the study

A little learning is a dangerous thing; drink deep, or taste not the Pierian spring: there shallow draughts intoxicate the brain, and drinking largely sobers us again.

Alexander Pope

The population of Australia in 2009 was 21 million with a workforce population of approximately 10 million (Department of Employment & Industrial Relations 2007). Almost half of the workforce hold University, trade or Diploma qualifications (Department of Foreign Affairs and Trade 2009). In the five years from 2000 to 2005, Australia's workforce grew by 175,000 but projections suggest that the rate of increase will decline over the next two decades to 2030 the annual increase in Australia's workforce will have fallen to just 57,000. In 1999, the percentage of the population of Australia aged over 65 was approximately twelve percent. This is expected

to double to around 25 percent by the year 2040 (Department of Employment & Industrial Relations 2007).

In response to these trends, Australia will need its older workers to remain in the workforce longer and to ensure that their tacit knowledge is transferred appropriately and effectively to new employees. There will also be a need to encourage semi-retired workers to return to work to fill the skills gaps. The recently-announced increase in the retirement age from 65 to 67 reflects the Australian government's acknowledgement of these demographic requirements for the workforce of the future.

Australian education authorities currently implement programs designed to assist learners to easily gain formal recognition of the knowledge and skills that they already possess. These processes for augmenting the number of people seeking formal recognition of their prior learning (RPL) are designed in a large part to increase the numbers of people in formal training and, in turn, to increase the size of Australia's skilled and qualified workforce.

In a report published by the Department of Employment and Industrial Relations (DIER) mention was made of 'almost 70% of [Queensland] employers being already affected by labour and skills shortages' and that 'it is imperative for workforces to develop age-friendly workplaces and keep older workers in the workforce longer' (DIER 2007:1). This report also alluded that older adults seem to have a lower perception of themselves as learners than do younger adults. The report did not, however, comment about the impact self-perception may have upon adults actively seeking out and attempting learning opportunities.

It is expected that sixty percent (60%) of the current labour market has the intention to retire by the year 2015 (DIER 2007) and this, coupled with a recent drop in skilled or re-skilled employees, creates a real workforce skills dilemma for all organisations. The accelerating drop in real terms in Australia's skilled workforce precipitated the launch of a new Occupational Trainee Visa by the Australian Immigration department in early 2009. This visa is designed for people, born outside Australia, who want to improve their occupational skills and thus employment opportunities through training with an Australian organisation or government agency (Department of Immigration and Citizenship 2009b). People utilising this visa can elect to stay in Australia upon gaining their new qualification or to return home with their new skills. This visa and other government initiatives were designed to recruit skilled workers from overseas to help meet the skills shortages in Australia. Many occupations listed on the Skilled Occupations List (SOL) often

carry easier entry requirements into Australia in an attempt to entice qualified workers from overseas (Department of Immigration and Citizenship 2009a).

The options for study in Australia for specific qualifications are initially assessed by an entrance test designed to determine whether required industry levels of literacy and numeracy are held by the applicant. These tests are based on the National Reporting System (NRS) for Adult Literacy and Numeracy. Many existing Australian citizens, however, have literacy and numeracy levels less than those required under the NRS and so, in August 2009, the Australian government provided a media release (Department of Immigration and Citizenship 2009b) detailing its plans for improving the literacy and numeracy levels for all workers within Australian workplaces.

In 2009, the Industry Skills Councils of Australia (ICS 2009) published a report on Adult Literacy and Lifeskills (sic). This report was based on a survey performed by the Australian Bureau of Statistics, and endorsed a significant industry demand for high levels of literacy and numeracy for the workplace, particularly in the context of global markets and much better informed customers. The report stated that most people are facing increased literacy and numeracy demands in every aspect of their lives, including a much greater reliance on information technology and written and oral communication skills. The Industry Skills Councils report also argued that Australia will face a long-term slump in the population of skilled workers if adults cannot be better motivated to attend learning opportunities. It posited that motivation to learn not only implies that the learner realises what is required but also that the person already exhibits the critical thinking skills to investigate, determine and access the best program for their situation. This is compatible with the National Reporting System (NRS) descriptor for minimum entry level to the workforce, which suggests that individuals should be able to indicate their 'own immediate learning needs, short term goals and related (and preferred) strategies' (DEEWR nd:8).

Research examining adult and workplace learning is plentiful; however, there is a paucity of conceptually sound and methodologically rigorous research that addresses the relationship between learner's self-perception and motivation to learn. According to Knowles (1990), motivation is one of the key instruments for self-directed learning. Often, however, workplace training programs are mandatory rather than voluntary, and for many adults, this elicits fear and angst in regard to their perceived ability to succeed in those learning environments.

The fact that adult learners use experiences from their past when faced with new learning situations is not new in the research literature (Burns 1995a, Knowles 1990, Merriam & Brockett 1997a), whereas specific research about the impact of past experiences upon the development of

adult self-perception are difficult to find. Several studies emphasised other aspects such as; that adults utilise their previous knowledge, their prior learning, the current situation, their own selfidentity and their emotional disposition when attempting to match new experiences with past events (Caffarella 1994, Farney 1999, Hanold 2003 & Owen 2004). The effects of self-perception upon adults entering new learning situations are not explicit within these reports however, but the researchers have noted that intrinsic motivation prompts many adults to learn. Burns added that results of learning experiences become permanent knowledge or change only when 'adults receive intrinsic reward with the discoveries they make' (Burns 1995a:256). Highlighting the need for research about self-perception, Burns also suggested that adult educators must be aware of learners' attributes if they are to encourage meaningful and active participation (Burns 1995b). Jung (cited Knowles 1990:40) also recommended that learning experiences should encompass 'the whole of the consciousness', which indicates that knowledge of self-perception would be valuable in providing adult learners with a deeper consciousness of self. Jung also suggested that adults used four functions or four ways of extracting information from their experiences in achieving understanding, namely; 'sensation, thought, emotion, and intuition' (cited Knowles 1990:40).

A different perspective, proposed by Smith (2002:para.15), is that 'self-efficacy' is one of the methods used by adults to evaluate new learning situations and that a 'high self-efficacy' will enable adults to confidently achieve their expectations from the learning environment and subsequently increase their performance and effectiveness on the job. Smith added that when faced with new situations, adults use 'direct experiences and cognitive resources' (Smith 2002:para.15) in appraising the situation.

Self-perception as defined by Rogers (cited in Knowles 1990:1) suggests that adult learners see learning as a 'completely internal process controlled by themselves'. Rogers (1996) also stated that learners perceive new situations with themselves as the centre and evaluate the outcomes from their perspectives only. Bowerman and Collins (1999) reported an alternative position, stating that a person may have a personal image and an understanding of him or herself within his or her [workplace] environment. They suggest that the personal image can be altered with coaching, thus improving the person's ability to learn new skills by 'awakening the will' (1999:297). Echoing the previous literature, Bowerman and Collins (1999) also stated that self-confidence was an important factor in individual learning. Existing literature suggests that self-perception may also be linked to the learner's intrinsic motivation, as well as to the learners' attributes and will or commitment (Burns 1995a, Bowerman & Collins 1999).

The impetus to conduct this research and further explore learner self-perception arose from a formal process of professional reading and reflection I undertook in order to prepare two conference papers in 2004 and 2007 (Kling 2004 & Kling 2007). I came to realise that self-perception was both a consistent and significant factor in many of the conversations – formal and informal – I had engaged in with learners over my twenty-five years as an adult educator. My experiences with adult learners encompasses a variety of settings from government and non-government organisations, TAFE colleges, Schools and Universities, VET accredited training programs, community education programs, sports coaching and online learning environments. Across all of those contexts, self-perception and its link to motivation to learn was a consistent theme. The two dominant beliefs that had emerged through my experiences were: (1) that because of low self-perceptions of their abilities and prior knowledge, many adults are faced with significant challenges in simply taking the first step to enrol in learning programs; and (2) increased self-perception as a learner emerging from successful achievement in a program of study acts as a motivator for adults to engage in further learning events and programs.

Given this context, my primary research interest and goal has been to explore and develop a deep understanding of self-perception and its impact in the field of adult learning. In particular, I have developed a deep interest regarding possible links between perception of self as a learner and the emerging workplace imperative for self-directed learning. My ultimate goal for the research has been to inform and demystify self-perception for educators and learners alike, and perhaps to provide insights and direction that will encourage a higher participation in adult learning generally (Caffarella 1994).

Purpose of the study

The specific purposes of this study are to:

- 1. Identify whether significant links exist between self-perception and adult learners' motivation, self-directedness and learning outcomes;
- 2. Explore the nature and impact of those links;
- 3. Provide insights into whether self-perception influences the learner's predisposition to seek out and value learning.

Key research questions

The key research questions for this study are:

- 1. What experiences most influence the perception of self as a learner?
- 2. What aspects of self-perception promote the development of self-directed learners?
- 3. Can self-perception change, and if so, how?
- 4. Can an understanding of self-perception by a learner improve their learning processes and outcomes?
- 5. Is self-perception linked with conscious interaction?

The particular reasons for identifying each key research question are summarised in Table 1 below:

Table 1 - Research questions and objectives

Research Questions and Related Research Objectives	
Research Questions	Related Research Objectives
Question 1. What experiences most influence the perception of the self as a learner?	To find out whether environmental (historical and situational) factors may contribute to the development of self-perception as a learner - to investigate the relationships between past learning experiences and current self-perception.
Question 2. What aspects of self-perception promote the development of self-directed learners? Question 3. Can self-perception change,	To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning – in particular - applying the learned skill in the learner's work. To investigate whether there are contributing factors which may initiate or alter a perception of self as a
and if so, how?	learner.
Question 4. Can an understanding of self-perception by a learner improve their learning processes and outcomes?	To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs.
Question 5. Is self-perception linked with conscious interaction?	To find out to what extent a positive or negative self- perception is linked to the engagement of learners in learning. Question 5 and the objectives above are cyclical as they return to Question 3 and its related objectives in the formulation of the research outcomes.

Key definitions

There are five key terms used throughout this thesis that need clear definition in order to ensure consistency and clarity of understanding by the reader. The terms are: self-perception; learning; learners; learning environment; and change.

Self-perception is defined for this study as an adult learner's own interpretation and understanding of himself or herself as a learner. It includes the assessment of their own learning styles, their understanding and concepts of what learning entails, their opinion of their own abilities, and their willingness to attempt learning (particularly where learning is not mandated).

Authors, such as Dealtry (2004), prefer to use the term 'perceptive competence' which is generally defined as 'knowing yourself and others' and understanding what you have learned along your path and 'visualising a progressive pathway' (Dealtry 2004:103). Such authors see 'perceptive competence' as a tool to enlighten learners about their own personal uniqueness and, it is in this way that 'perceptive competence' is seen to be closely aligned to the definition of self-perception used in this study. The definition of self-perception used in this study, however, differs from the concept of 'perceived competence' in that it relates specifically to the learner's inner voice and both the conscious and subconscious reckoning of their ability in any learning situation.

Alternatively, authors such as Maybury (2001) relate 'self-perception' to the notion of 'self-perceived self-awareness', which in essence describes the change in a person's awareness of self when they remember 'transformational learning epiphanies' from their past (Maybury 2001:125). The definition used for this study is somewhat broader and more encompassing than Maybury's focus in that it includes the effect of latent and developing self-perception rather than just that of episodic or retrospective epiphanies of self-awareness.

Learning, in the context of this study, is defined as the acquisition of new ideas, task performance, situational responses and tacit information such as facts, figures or specific terms. In this sense, learning embraces improved practical knowledge demonstrated by the improved physical adeptness to carry out tasks. There is little disagreement in the literature about this definition of the term 'learning'.

Learners, for the purposes of this study, are defined as people who actively seek out learning opportunities, who search for answers to questions, who display a thirst for new experiences, and who are self-motivated in seeking out learning opportunities. Learners are also people who are expected to attend training or education programs as part of their employment and are people who may also have a reticence to initiate or attempt learning without some level of concern. Again, there is general agreement in the literature around this definition.

Learning environments, in the context of this study, are defined as any formal or informal setting in which learning takes place. A learning environment can be a place where structured, purposeful learning occurs, but it can also be a place where incidental or unintentional learning occurs by exposure to new information or proximity to others with that knowledge (for example, learning on the job) or by accessing new resources (such as talking to experts or performing online research). This study focuses on just one category of learning environments – workplaces.

Change, for the purposes of this study, refers to the recognition, understanding, and knowing of an altered state by a learner. This altered state may extent to situational, physical or intellectual change as well to social or emotional change. Change can, and usually does, embrace learning new tasks or understanding new concepts, or both.

Importance of the study

The importance of research relating to workplace learning was emphasised many years ago by Elias and Merriam (1980), who suggested that training methods should be developed to ensure enduring learning experiences for adult learners. One of the most perplexing questions for any organisation is how to build organisational knowledge and sustain organisational growth (Stewart 2001). To remain competitive, organisations need to utilise 'the knowledge latent within the organisation itself [which is] the memory and potentiality of employees' (Stewart 2001:147). Similarly, Dealtry (2004) suggested that it is people learning to learn within their organisations that ultimately determine the sustainability of the business as well as their own individual business acumen. This current research study enhances those findings by providing valuable insights about the importance of self-perception to learners and learning, and the impact of that perception on employee motivation and performance.

It is argued that understanding the precursors for adults pursuing and engaging in meaningful learning opportunities will greatly advance the practical application of training in general. This

research study provides insights as well as potential new models that depict how self-perception and self-directed learning are linked in a self-reinforcing framework. The models are designed to assist learners to develop a greater understanding of their own learning processes, and to assist teachers to develop a more targeted and productive understanding of those they teach.

The importance of understanding self-perception and how it is linked to learning was highlighted by Brooks (2004:213), who stated that, 'many of our most guarded beliefs about ourselves and our world ... are inferred from repetitive affective experience outside of awareness'. Understanding the nature, formation and development of learner self-perception, therefore, may not only provide information about the motivation to seek out learning opportunities but may also be a powerful factor in explaining how and why adults function in different learning environments. It is reasonable to assert that learning will be facilitated better if we realise that there is a dialogue with the self and that this dialogue incorporates the feelings and emotions that arise during the learning process (Brooks 2004). Further, Boyd (cited in Brooks 2004) suggested that recognising self-talk has the potential to improve transformational learning – learning that is based on an understanding of one's own tacit assumptions and the expectations we have from the learning event or process. Boyd's theory, however, was based on speculation rather than research. This present study extends Boyd's work by providing research-based insights into the practical application of his propositions.

The growing emphasis on workplace learning and learning theories (Illeris 2003, Hanold 2003, Matthews 1999 & Owen 2004) has seen researchers investigate 'best practice' methods to support learners who are facing new complexities in their work (including the need for multi-skilling) and who need to gain the skills to handle the ever-changing and competitive business world. Diversity, global market trends, new technologies, job rotation and sharing, skills shortages and increasing numbers of mature-age workers, are but a few of the pressures driving workplace trainers to find faster, more successful and more cost effective ways to train and develop staff. Effective workplace learning, however, involves much more than just the formal training and development process – it also necessitates a deep understanding and integration of theory, organisational needs and individual desires (Matthews 1999). How adults feel about themselves directly influences their individual desires and indirectly influences organisational needs through levels of motivation and commitment (Matthews 1999). This study, then, directly contributes to our understanding of effective workplace learning by exploring the practical realities of translating self-perception into effective performance in the workplace.

This study also makes a major contribution to knowledge and practice by providing insights into the thinking undertaken by learners during the learning process, as well as the mechanisms they use to internalise their thoughts in ways that affect their future processes of, and attitudes towards, learning. Matthews (1999) found that not only are the issues of the organisation and its values and goals reflected in the training and development needs of the workers, but that the individuals' subjective issues such as attitudes, commitment, motivation and self-image are particularly important for any learning to be successful (1999). Similarly, Ballantyne (2000) highlighted the importance of 'self' in the learning process and, in particular, the importance of using past learning experiences to inform future processes. Biggs (cited in Ballantyne 2000:264) added that how learners perceived the learning environment would arouse or inhibit their approach to learning and that the 'factors present in the learning environment' are seen in 'light of their [own] personal characteristics'. Biggs (cited Ballantyne 2000:267) also stated that knowledge of this will help determine the effects on students and suggested that important associations existed between conceptions and approaches to learning. This current study explores the nature of those associations through case study methodology.

The necessity to understand and accommodate for employee backgrounds before being able to understand the 'dynamism in the [learning] encounter' (Illeris 2004:432) has been highlighted as an important issue by several writers (Amar 2004, Billett 2002 & Illeris 2004). However, it is beyond the scope of a single exploratory study such as this to explore all of the dimensions in a learner's background that may influence self-perception and learning processes in the workplace. Nevertheless, the current study does – through the way its, albeit limited, sample can be partitioned on the basis of age, gender and family background – provide some initial insights into this issue. In particular, the study is able to provide some important insights into the influence of age on learner self-perception. Amar (2004), for example, has highlighted the importance to a national economy of attracting, retaining and engaging particularly young adults to learn on the job, and this study is able to provide some 'real world' data relevant to that issue.

Research design

This study employed a qualitative research paradigm in which the focus is on developing a 'rich' understanding, based on the experiences of participants, of why things happen and the meaning that participants themselves have ascribed to events. As Creswell (1998) suggests, the qualitative paradigm is about exploring and understanding rather than describing and explaining. Its primary concern is what an issue or event means to the individuals involved (Neuman 2006).

The theoretical perspective employed for this study was 'Grounded Theory' (Strauss & Corbin 1998:12), which is "theory that is derived from data systematically as it is gathered and analysed through the research process". Grounded theory is inductive rather than deductive in nature in that inferences are drawn from the data after rather than before it is collected. Using a Grounded Theory perspective will deepen "insight, enhance understanding, and provide a meaningful guide to action" (Strauss & Corbin 1998:12).

A multi-method design was used for the study involving semi-structured interviews, questionnaires and participant observation. Semi-structured interviews involve a set of essentially similar open-ended questions being asked of each participant in the study. Open-ended questions allow respondents to answer in whatever way seems relevant and appropriate to them; that is, they are questions that largely prevent the researcher from directly influencing the exact focus or nature of the response, allowing the respondents themselves to determine what is relevant and important. Interviews occurred over a period of sixteen months, with the interview guide developed in accordance with principles proposed by Minichiello, Fulton and Sullivan (1999).

Participant observation is drawn from the field of ethnography, and involves the researcher immersing herself in both the environment and culture of the participants for the purpose of making a qualitative analysis of events, behaviours and the setting (Creswell 1998).

A major strength of participant observation is that issues and phenomena are viewed from the 'inside out', rather than the 'outside in'. In practice, Neuman (2003:76) proposes that participant observation involves the "researchers... spend(ing) many hours in direct personal contact with those being studied" in order to understand actions and events in their context and to acquire an in-depth understanding of how the participant creates meaning in everyday life."

Data analysis involved interrogation of the full data sets (notes of interviews, Questionnaire responses, and observation notes) in order to identify and report both the unique and common issues and themes provided by respondents (Smith 2004).

The sample for this exploratory study involved 66 participants (30 female, 36 male) undertaking the same year-long public training course with the same training provider. The sample had an average age of 41 years, along with a wide variety of work backgrounds, qualifications and life experiences. The decision was taken to use this sample for two major reasons: first, it involved a relatively large group of people with a wide variety of backgrounds and experiences of formal learning, and thus significantly different bases on which to develop their self-perceptions as

learners; and second, the use of a single class allowed the researcher to maximise interaction with participants and to control for extraneous variables.

The methodology used for the study is discussed in detail in Chapter 3.

Limitations of the research

With any research there are limitations and parameters with restrictions often outside the control of the researcher, and in that respect, this research is no different.

A major limitation on this study was time. Many of the issues worthy of investigation required longitudinal data collection and analysis beyond that allowed for completion of the award, particularly when the researcher is a part-time student with her own work commitments. It was for this reason that the study has been promoted as exploratory in nature – one that identifies issues and possibilities rather than one that elicits definitive models and conclusions. However, notwithstanding limitations of time, data saturation for the focus of this research attained at a level satisfactory for an exploratory study by utilising a qualitative, purposive sampling method (Minichiello et al. 1995). For example, if after seven interviews had taken place there were essentially similar themes and concepts identified, and these themes and concepts were compatible with the researcher's own field notes, then saturation was considered achieved. One limitation to this method, of course, is that saturation is dependent upon the author's interpretation of reiterated themes in the interview data (Minichiello et al. 1995).

Another major limitation of this study was sample size. For quite pragmatic reasons of time and research money, this research was limited to a single case study investigation of the issues, and hence the capacity to generalise its findings is also limited. The study was limited to a sample of participants chosen purposively from those attending a vocational training course conducted by the researcher. As discussed previously, the limited sample size restricted the nature of the study to an exploratory investigation that focussed on identifying issues and insights rather than drawing firm conclusions.

The researcher: personal background, assumptions and beliefs

As with all qualitative research projects; this study is inevitably subject to the bias of the researcher, particularly as her thoughts and perspectives would have been conveyed – explicitly or implicitly – through her interactions with participants in both the research and the learning environments. Further, the researcher brings to this study a set of beliefs and values developed over time from her own experiences that will inevitably influence the interpretation of the data (Guba, in Denzin & Lincoln 2005).

The researcher's earliest memories extend back to her first years of school with experiences throughout most of the curriculum-based school system. These experiences were galvanised by the progression through higher education and workplace learning environments. All learning settings provided many opportunities to form judgements of how the 'self' behaves in each setting. These experiences have shaped the overall sense of how the researcher believes others will behave and which drove the interpretation of observations of participants in this research. This, according to Denzin and Lincoln (2000:11) is how we make judgements related to our own images of the world and whether research data says something to us. Interspersed throughout the researcher's memories is the excitement felt with prospects of success mingled with the anxiety of failures. It is these memories that influence the discovery of findings within the research data (Denzin & Lincoln 2000:11).

As is common to qualitative research, the interpretive, naturalistic approach utilised in this research included making sense of the natural setting; turning introspection, interview, stories and interactions into meanings in an attempt to represent the real world. Influences related to the researcher's exposure to adult learning theories as part her employment in the adult training discipline are also evident. Several of her students' stories suggested they attempted to familiarise new information by achieving an understanding of themselves within their current surroundings based on previous events. Other students also declared their interaction in past learning environments as indicative of their current self-perceived ability to learn new skills. For these students their formal results confirmed their self-perception, yet often in direct contrast to the perception of their successes from the researcher's observations. Similarly, students from both university and workplaces learning environments who exhibited a negative self-perception prior to entering the learning environment returned disappointing results. This apparent impact of self-perception was observed regardless of age, culture or gender of students. Likewise, from Shield's research, student identity was reported as being related to the student's sense of self-competence and, in turn the sense of self-worth (Shields 1995:10).

Perhaps, further research into the influencing factors upon the development of learner self-perception will provide adult learning practioners with greater understanding of this phenomenon and facilitate better learning outcomes. More importantly, with the existing, and long-term skills shortage, encouraging adults to continue to learn at work may be vital in retaining the tacit knowledge of the Australian workforce and may stem the loss of skills. Rich descriptions of the social world are valuable in qualitative studies (Denzin & Lincoln 2000:164) and to that end this research follows the established and recognised interpretive paradigms as extrapolated further in Chapter 3.

Structure of the Thesis

Chapter 1 of this thesis 'sets the scene' by providing the context and purpose of the study, the key research questions pursued, definitions of key terms, the research design, the importance and limitations of the study, and a background profile of the researcher.

Chapter 2 reviews the current literature with relevance to the key research questions, identifying not only what is already known or believed, but also the current gaps in the research.

Chapter 3 provides a detailed discussion of the research methodology used to collect and analyse data for this study.

Chapter 4 presents the data analysis and research findings.

Chapter 5 discusses the implications of the findings and provides conclusions as well as suggestions for further research.

Appendices A, B, C, D, E, F, G, H, I and J, cover:

- A- Participant consent forms
- B Participant interview coversheet and interview questions
- C Participant in-depth interview questions
- D Online survey questionnaire
- E Survey participant demographics
- F Interview techniques and alignment to premise
- G Interview recordings
- H Interview observation notes
- H Survey responses for Questions 15 to 19
- I Survey statistics frequency distributions for Ouestions 1-14, respectively.

CHAPTER 2 - Literature Review

Introduction

The purpose of this chapter is to interrogate the existing literature and research in order to provide information and insights relevant to the five key research questions elaborated in Chapter 1. As stated previously, there is a plethora of research in the area of adult and workplace learning, including into areas such as adult learner motivation, the evaluation of competence and self initiated learning. The review of the literature, however, has revealed a paucity of conceptually sound and methodologically rigorous research and thinking regarding the link between self-perception and learning in the context of adult education. Smith and Clayton (2009:29), for example, note that there is a "lack of any rigorous longitudinal research in this area", while the Australian Position Paper to the OECD on informal and non-formal learning (Misko et al. 2007: 110) notes that while "there have been some excellent research studies undertaken [in Australia] on this topic....the number is limited and the questions still to be answered are numerous".

Much has been written in the field of psychology about self-perception, which generally is seen to refer to notions of pride, self-esteem, and feelings of knowing and familiarity (Laird 2007). Psychologists, however, are divided over whether self-perception is the driver of our behaviour, or whether our behaviour provides us with the information and perspectives from which we construct our self-perception (Gilovich et al. 2006). The reality is that the argument is somewhat a 'chicken and egg' exercise, because what generally operates is a continuous cycle in which behaviour drives self-perception, which in turn drives behaviour.

A consistent theme in the literature is that people often have low self-perception as a learner because they do not appreciate fully the value and extent of what they have learned through life and work experiences – variously referred to as experiential or informal learning. Research by Livingstone (2006), for example, found that the workers he interviewed consistently denied that they had knowledge and skills that he had formally observed them employing in their workplace. Similarly, Hager (1998:533) notes that: "learners themselves, influenced by prevailing assumptions about education and knowledge, are often unaware of the significance, range and depth of their informal learning".

Conducting a review of the literature that discusses the adult learner in direct relation to their perception of self as a learner is challenging owing to the fact that existing literature on adult

learning is largely embedded within and across a variety of topics such as motivation, learning styles, workplace training, higher education and psychology.

Adult Learning Theories

This section examines the major theories and models of adult learning and considers the extent to which self-perception impacts on those theories and models. It should be noted, however, that researchers are hindered in their attempts to identify how adults learn because, according to Merriam and Caffarella (1999), there is no single theory that explains adult learning.

The experiential learning model developed by Kolb (1984) argues that the experiences of learners are central to the nature and quality of learning outcomes. Kolb suggests that learners decide whether and to what extent to engage in learning by considering their experiences in the learning environment through either feelings or cognition or thoughts. Consequently, he views learning as 'the process whereby knowledge is created through the transformation of experience' (Kolb 1984:41). For Kolb, learners experience the environment through either doing and watching or thinking and feeling. Their experiences are either immediate or concrete and they form the basis of both a person's reflection and observation. In turn, the person's reflections guide the person and their actions within new learning environments. It would seem to follow, then, that the development of a perception of self as a learner may be quite well aligned to the explanation of experiential learning and, in particular, the emphasis on a person's actions, following the reflections of previous experiences. It would also seem to follow that what the person feels or thinks about a new learning environment may be dependent upon their previous experiences and the formation of their own self-perception within those learning environments.

Kolb's theory included that one of the main aspects constituting learning is 'transfer' which he argued occurred through a four stage learning cycle: integrating experience; perception; thoughts; and actions (or behaviour). According to Kolb's model, this process then continues as a continuous spiral, with an increasing level of complexity as each pass of the spiral occurs. Learners become aware of the environment through a process based on how they comprehend the situation (Kolb 1984:43). Further, learners shape and interpret the environment either through internal reflection or through their actions and behaviours. Significant to the current research study is Kolb's suggestion that learners who employ internal reflection may inadvertently concentrate on avoiding failure and therefore miss the opportunity to learn. Alternatively, Kolb suggests that people who predominantly use action as their tool to assimilate new information

may similarly miss the opportunity to learn. This suggests that effective learning, in Kolb's view, is about establishing the appropriate balance between behavior and internal reflection.

Kearsley (2010) contends that contemporary theories linking self-perception, motivation and learning draw heavily on the early Self Actualisation and Existence Relatedness Growth (ERG) theories of Maslow and Alderfers respectively. Maslow's self-actualisation model suggests that there are five hierarchically-arranged levels of need, each of which must be satisfied before moving to the next. The five levels are: physiological, safety, social, self-esteem and self-actualisation. Of particular importance to this study was Maslow's assertion that internal – not external – motivators are the most effective in promoting a commitment to learn. External motivators include better jobs, promotions, and higher salaries. Internal motivators include self-esteem, recognition, better quality of life, increased job satisfaction, greater self-confidence, and self-actualisation. It is reasonable to assert that what Maslow was implying is that those motivators that have the greatest impact on out perception of 'self' as learner are most likely to motivate us to engage in further learning.

Alderfers later compressed Maslow's theory into three hierarchical levels: existence; relatedness and growth (Kearsley 2010). According to his theory, and depending upon a person's situation, and in some contradiction of Maslow's sequential staged approach, the movement between the three levels may oscillate forwards or backwards depending on circumstance. This suggests that, where existence is met and relatedness is apparent, the person may 'naturally' seek growth or that the opposite may occur and that growth is not considered where either of the two previous levels are compromised. The issue of 'relatedness' also introduces the notion of perceiving ourselves largely on the basis of how we believe others perceive us – a notion pursued in the current research study.

O'Connor (2007) conducted a detailed analysis of the contemporary relevance of the Maslow theory, and concluded that Maslow's 1943 hierarchy of needs is 'taken out of context and offered in a too narrow perspective'. In particular, O'Connor argues that Maslow did not intend the interpretation of each step in the hierarchy to be in an 'all-or-none relationship to each other' and, in fact there may be 'several needs operating simultaneously' (O'Connor 2007:742). The critical inference to be drawn from all of these authors, however, is that personal growth always involves self-confrontation (O'Connor 2007), and that self-confrontation necessarily involves reflection on experiences and achievements which, in turn, inform the perception that people have of themselves as learners.

The theory developed by Boud and Solomon (2003) suggests that we develop (and name ourselves as learners) by interpreting and understanding our identity within the norms and values that exist in workplace environments and in other's impressions of us. Similarly, Wojciszke (2005) theorised that we are prone to pursuing and safeguarding our own interests by either attempting or avoiding situations of a positive or negative (perceived) affect respectively. In a similar vein, O'Connor (2007:28) suggests that learners 'construct objective and subjective shyness' when they encounter new learning situations.

Probably the most influential theory of adult learning and the processes for motivating adults to learn is the theory of Andragogy developed by Malcolm Knowles (1990). A central theme of Knowles' adult learning principles is that the nature and quality of adult learning is strongly influenced by the prior experiences and achievements of the learners, and in particular, by the perception of themselves as learners that those experiences and achievements cultivate. Knowles argued the importance of previous experience and achievement from two perspectives: the power of success as a motivator of learning, and the 'personal comfort' associated in applying learning in the context of what is already known and experienced. Knowles also believed that what he termed 'self-concept' as a learner is significantly determined by the perceptions that others express about the learner; that is, that much of our self-perception as a learner is determined by what we think others think about us.

This belief is supported by research by Ryckmann (1993) who found that our self-concept as a learner is related to the regard that others exhibit towards us as learners. Ryckmann also concluded that evidence generally supports the proposition that people learn better if they perceived threats in the learning environment are low, and they have sufficient self-perception to 'take on' what threats are there. The findings of a study by Illeris (2003:174) support this view, noting that "if something occurs that the individual experiences as defeat, humiliation or other negative experience ... very quickly a thick wall of defence can be mobilised" that ensures that the individual avoids engagement in learning".

Knowles' theory is based on the belief that adults are self-directed and self-resourced, and learn best when the learning event is presented in the context of real world applications. Teachers of adult learners, argues Knowles, should make "an intellectual case for the value of the learning in improving the effectiveness of the learner's performance or the quality of their lives" because, he says, learners have a "deep psychological need to direct their own learning processes" (Knowles, 1990:58). He further asserts that experience is a major contributor to the self-identity of adult

learners, and that if the learning processes ignore or devalue the students' experiences, "they perceive this as not rejecting just their experience, but rejecting them as persons" (p.59).

In a similar vein, Biggs (2003:11) argues that adults become 'ready to learn' when they experience "a need to know or do something in order to perform more effectively in some aspect of their lives". Biggs, however, goes on to argue that the capacity of adults to be a 'powerful resource for their own learning' is directly linked to the person's perception of 'self' as a learner because the ability to seek out and find unambiguous information may be difficult if adults were not confident in their status as learners. Further, Biggs asserts that in order to interact in the learning environment when resourcing relevant information, adults need to collaborate with other adults – something that is very difficult if they have low self-perception as a learner.

The Australian Government Position Paper to the OECD on Non-formal and Informal Learning (Misko et al. 2007) found strong evidence of the validity in practice of the learning theories posited by Knowles and Biggs, providing a wide range of examples to demonstrate that adults guided through a process of self-reflection "often come to realise just how much they already know and can do, and this enhanced self-perception can give them the confidence to enrol for a qualification or training programme that they otherwise might not have attempted, or at least would have approached with trepidation" (p.116). The Report went on to argue that because of low self-perception as learners, many adults required significant encouragement and support in order to develop their self-perception as a learner to a level at which they were prepared to at least consider enrolling in a formal learning program. Self-perception, the Report argues, is "a key element in motivating adult learners to achieve success in any learning programme" (p.116). These findings are supported by Smith and Clayton's 2009 research into participant insights and perspectives of adult learning. Smith and Clayton concluded, for example, that "the most valuable part of recognition of prior learning [to the adult learner] is not the credit granted but rather the confidence and self-esteem they gained by reflecting on what they had already done and learned" (p.20).

Existing adult learning theory, then, argues for a direct relationship between the self-perception of vocational learners and the nature and quality of the vocational learning with which they engage. The theoretical models of adult learning also posit that guided reflection is one of the most powerful processes for improving the level of self-perception as a learner. These findings are well summarised by Velez (2006:15) who noted: "you cannot effectively motivate students extrinsically who lack intrinsic belief in themselves.....self-perception is not a quality given, it is an attitude cultivated"

Perspectives from the research

Analogous views in relation to adult learners and self-perception are many in the literature. This section presents a representative sample of those views, some of which are based on conducted research while others are based on conjecture and rational analysis.

A 2003 study by Boud and Solomon reported the interesting finding that vocational learners often do not recognise when they are learning, or indeed, what it is they have learnt. This finding is potentially very significant, because if self-perception is best enhanced by past experiences and successes as a learner, it is of considerable concern that individuals may not recognise many of the relevant learning experiences and achievements they need to enhance their self-perception. Boud and Solomon suggest that deciding and naming yourself as a learner is not a simple matter and ask the question: "If a person understands something they do as learning, do they therefore understand and identify themself as a learner?". The Boud and Solomon study focussed in particular on the question of what would happen to an employees' identity as a worker if they are simultaneously labelled as a 'learner'. Interestingly, they found that for many workplaces, the act of naming oneself as a learner carries the implication of novice worker; that is, learning is seen as job preparation, not continuous improvement.

Similarly, Billett (2002:11) suggested that "workplaces respond to exploitive and discriminatory practices" with regard to 'social justice' and that concerns such as 'social inclusiveness' and 'professionalism of practice' are not outcomes of workplace learning". Billett infers that the experiences that workers are 'afforded' are "shaped by power and political interests and forces" (p.11), drawing a parallel with some of the findings from the Boud and Solomon study (2003).

The inference that can be drawn from these authors is that adult workplace learners may suffer detriment if they deliberately name themselves as learners (Boud & Solomon) and conversely, may face discriminatory practices if not seen as part of the controlling political environment and perhaps this extends to being known as one of the more 'competent' employees (Billett). It would follow, if these perspectives hold, that the processes of defining learners and their traits may have a direct bearing on how they, themselves, view their own competence, thereby potentially altering (and improving) the environment they face within their workplaces. If, as Billett suggests, social inclusiveness plays no role in the position of workers, then perhaps anyone who has a low self-perception of themselves as a learner will also be at high risk of those discriminatory practices also mentioned by Billett.

In 2004, Bauer et al. conducted an exploratory study into the relationship between epistemological beliefs and learners appraisal of their workplaces as effective learning environments, postulating that "adults conceptualise their learning according to their epistemological beliefs" (p.3). Similarly, Chan (2002) conducted exploratory research in Hong Kong into the relationship between personal beliefs about learning and learning capacity, and the approaches used for study. The findings of both studies were far from conclusive, but nevertheless, were strong enough to recommend the need for more rigorous research into the influence of self-perception on learning processes and success.

In 2005, Wojciszke conducted research into the concepts of morality and competence and found that 'social information processing' depended upon the "evaluation of [the] perceiver's current goals" and that this processing most frequently depended upon the criterion of 'self-interest' and 'avoidance' in an effort to "preserve the perceiver's immediate well-being" (p.156). These findings strongly suggest that self-perception is integral in the evaluation of self and in forming an awareness of self for social interaction, competition, reward, growth and existence within the complex and often stressful social environment of the average workplace. Wojciszke stated that "self-perception process are strongly saturated with evaluations and other affective processes" and he went on to suggest that the evaluative responses are often "unconscious and automatically related to behavioural tendencies" (p.162).

The impacts of self-perception, as defined in this study, are clearly linked to those described by in the following statement:

...since attitudes (including self-attitude, i.e., self-esteem) are basically affective phenomena...[and]...self-ascribed competence is...strongly linked to self-esteem [and that]...own competence fosters stronger affective responses than own morality

(Wojciszke 2005:178).

Wojciszke proposed that morality and competence are two predominant stereotypes for leadership, as perceived in the mind of the 'evaluator'. He found that morality and competence were replicated over six countries as distinct stereotypical evaluation criteria in forming an opinion of leadership and the evaluation of positive or negative desirable traits in another. Interestingly, Wojciszke, drawing on parallel work by Fiske et al. (1999), argued that the two basic dimensions responsible for stereotyping others were warmth and competence. Competence as an attribute, whether seen as a stereotype or leadership quality – is often observed as a principle element of adult learning and workplace learning research. It was found that a person would

avoid contact with a colleague who was perceived as having both negative and positive attributes as a strategy to avoid being exposed to ambiguity. Of importance to the focus of this research is the statement:

...when selecting information, perceivers (are generally more interested) in morality than competence related qualities of the perceived person.....[but] when the perceiver's goal pertains to the target's competence (as in the course of employment decisions) the [perceiver] will be highly tuned to information on the [target's] abilities [competence]

(Wojciszke 2005:167).

The competence or perceived competence of an individual and their portrayal of that competence may, therefore, be very much affected by the notion of self-perception as a learner, and thus in turn, personal assessments regarding the ability to learn (or to become competent). As a consequence, Wojciszke (2005:175) suggested that:

...since competence is a typical agentic quality and such qualities are highly valued in individualistic societies, they probably constitute the core of an individualistic self-identity, and this may explain why self-esteem appears in our research so strongly correlated with self-perceived competence.

Research by Okukawa (2008) found that adult learners construct meaningful experiences from learning environments using their own individual constructs. Okukawa suggested that some of major the psychological factors pertaining to learner's constructs included: self-concept, attitude toward learning, and personal values. He found that learners' reflection on self-image and their changed self-concept were consistent with his definition of what he interpreted as meaningful and, in this research, is compatible with the definition of perception of self as a learner. The learners in Okukawa's research continually exhibited a desire to improve the low value they believed were perceived of them by others (Okukawa 2008). Further, he found that the "reflection on self-concept and self-direction in learning...supported by intimate human relations with teaching staff...[was] crucially important in developing meaningful learning experiences for learners" (p.56).

Harrison (2003) suggested that the learner's role is to capture and use the knowledge of the teachers, and the role of the teacher is to assemble the knowledge into digestible chunks. He stated that the "image of knowledge as an entity which exists outside ourselves, floating free of context, is deeply embedded in our habitual ways of thinking" (p.5). Harrison's analysis suggests that knowledge assimilation may be dependent upon the teacher setting up a learning environment

that is conducive to both encapsulating and disseminating knowledge. This is not necessarily in conflict with Okukawa's view that knowledge transfer depends upon the intimate relationship which the trainer builds with the learner, because the relationship with the learner may facilitate the establishment of the learning environment, and the establishment of an effective learning environment may facilitate the development of the relationship between learner and teacher.

The offer of support from experts in workplace learning, according to Billett (2002:38), may be construed by some individuals as "being welcomed and supportive guidance or as an affront to their competence", which would also depend, perhaps to some degree, upon that individual's perception of himself or herself as a learner. Billett claims that learners might engage in guided learning activities (such as mentor programs) according to what they feel as the 'intent' of the program. For example, he suggests that, where workers perceive the delegation of more responsibility to them, they may be skeptical of attending the training and, if they believe they have more knowledge than the mentor, they may reject the offer of support entirely (Billett 2002). As a suggested extension to Billett's report, and as is also integral to this study, lead to this investigation of how individual's perceive their capacities and what influences the development of their perception. Billett suggests that understanding the impact of the individual's capacities and how that interacts in engaging learners will facilitate better workplace learning practices.

Dealtry (2004) takes a somewhat different perspective, arguing that one of the most important factors in learning is for an individual to understand and reflect on the learning-to-learn experiences they have gathered and to become competent in managing their own personal learning process. Dealtry further surmised that "learning to become an effective self-directed learner is probably the greatest intellectual and psychological challenge that an individual can face in a lifetime" (p.9). This implies that the process to becoming a 'savvy learner' (Dealtry 2004:103) is not a simple and easy path. If a learner has already developed a sense of self as a learner, perhaps this progression suggested by Dealtry will be less difficult however, where a perception of self as a learner is low – perhaps the pathway becomes extremely challenging. The learner's development into a 'savvy learner', then, may be quite dependent upon the 'bromide' of characteristics embedded in the learner's own psyche, which is defined for this study as learner self-perception. As Dealtry concludes; acquiring a strong self-perception means that learners "will eventually own...and become accountable for their learning efficacy [and] be on the road to realizing (sic) their full potential" (p.109).

Contributing to the research on learner's perception of self as a learner is the work of Donnon (2001) who wrote that there are "amongst individual students, with corresponding low rankings of academic achievement...greater dissimilarities between [their] perception of education achievement and other differentiated conceptual meanings"(p.2). The research examined how meaning is differentiated between individuals and their individual schemata and how the relationship between this and their approaches to and successes in an academic environment exist. Elaborating on the existing theories it was suggested that critical to determining how individuals differentiate meaning through learning are the concepts of self-interpretation, reflection and performance. Adult learners bring to the learning event their own perceptions and frames of reference to the process of learning when defining these experiences for themselves (Elias & Merriam 1980). The three main components of a developmental learning process in a learner are: the impression of one's self worth as defined by the emotional state of one's mind; an understanding of one's adaptive ability in achieving goals; and the person's underlying values, beliefs and interpretations developed in light of their personal life's experiences. The different meanings learner's place on the learning outcomes may be an important aspect to study when determining the driving factors for learning motivation, approaches and subsequent learning outcomes. Donnon's stated goal for his research was to demonstrate that the meaning a learner brings to the process of learning contributes to their approach to learning and that the perception of self as a learner that one holds may also be a contributing factor in the development of this meaning. He hypothesised that the development of self as a learner is a precursor to the development of the meaning the learner brings to the process of learning and in identifying "personal and social-related concerns that are inhibiting or supporting [learner's] academic success" (Donnon 2001:6).

The research emphasises the liberation and consciousness of not only an individual in understanding their own learning identity but also a collective recognition of social constructs of reality as viewed by groups of people, and displayed as a social awareness. All meaning is context dependent and that as a consequence self-perception could, therefore, be quite dynamic. Approaches to completing learning tasks are directly related to the corresponding attitudes, intentions and motivations of the learner and these aspects are "known to dictate whether or what one chooses to learn" (Donnon 2001:54). Donnon suggests that:

...one's functional routines as a learner are based typically on an operational imperative of self-motivation, and an immanent need for a sense of congruent meaning, as one negotiates individually and participants collectively in a formal educational setting

(Donnon 2001:156).

The notion of context dependent meaning derives from the Mezirow's Theory of Transformative Learning (1997) which suggests that for learners, the beginning of learning is a disorienting dilemma and the end a change in the individual's perspective of self. Transformative learning environments are described as where individuals are able to become critically reflective of the learning and, as groups, search for a common ground or synthesis of their differing points of view (Mezirow 1997). If transformative learning occurs to individuals within groups, then the outcomes of that may depend on the dynamics of the group. In turn, the dynamics of the group are very much linked to each individual's perception of himself or herself within that environment, as well as their own competence.

Mezirow (1997) argued that the perception one has of 'self as a learner' impacts upon the environmental conditions for transformational learning. Transformative learning, he proposes, is based on how people communicate with each other and how each person's ability to shift his or her views to become more autonomous as a person reflects the learning of the group as a whole. The ability to interact in a group-learning environment and to gain 'autonomy' may often be impacted by the person's perception of self as a learner within that particular learning environment.

Graham (2002) undertook a study with a sample of adult learners into the transfer of learning from research. He found that one of the greatest challenges for learning facilitators is to facilitate "desirable transfer where learners manifest appropriate application and reasonable consistency over an acceptable period of time" (p.2). The successful transfer of learning, he found, could be unsettled by the dynamics of the person's workplace, the person's past learning experiences, and a range of relevant societal influences (Graham 2002). What is of significant relevance to the current study is that Graham's implicit definition of 'unsettling dynamics' was anything which undermined one's self-esteem and positive self-perception. Graham (2002:62) suggested that "learners carry within them a cognitively constructed inner world that is analogous to, but a greatly simplified and highly subjective version of, their external world". He also spoke of how we bring our "epistemic, sociolinguistic and psychological meaning perspectives" (p.62) to the learning environment and, for example, a woman growing up in a culture where women's roles are defined as submissive will mean she will evaluate her social position in a learning environment as similar. Significant to the learning process, is that learners will go through a process of critical reflection and will search for assumptions to match their own ideas but will resist any processes that are different from their own. The "assumptions learners take into the learning environment are entrenched as they have developed over many years" (Graham 2002: 68). Learners, suggests Graham, will instinctively tend to reject breaking down their own

assumptions as it is easier to reject new assumptions than rework their existing ideas (Graham 2002).

The perception of self as a learner is linked, explicitly or implicitly, by much of the literature to the behaviourist paradigm in that the learner develops their concept of self through active behavior-based processes of doing, thinking and feeling. There is a duality in the learning environment, one within the learner where they are identifying and examining the self in respect of the other, and the other in the social environment where they are developing an understanding of 'self' through their interactions with others. Schuller et al. (2002:14) reported that "the most fundamental and pervasive benefit from learning of every kind is a growth in self-confidence". They suggested that learners with enhanced confidence will be able:

- to make sense of their own personal experience
- to put forward their own ideas
- to acknowledge mistakes
- to confront problems rather than hide from them
- to challenge the views of others
- to ask for help
- to accept the views of others even if vastly different from their own and may mean changing their own viewpoint
- to put themselves in unfamiliar situations.

(Schuller et al. 2002:4).

The Schuller study sought to trace possible links between people's experience of schooling and the development of self-confidence, or what they termed their 'subsequent trajectories'. Schuller et al. found that learner participation and motivation are directly linked to their previous achievements and enjoyment of learning, postulating that perception of self as a learner is directly correlated with previous successes at learning (p.17). They suggested that successful engagement in learning develops in adults 'a sense of one's own identity ... an insight into their own personality and dispositions.... [and] a valuing of the 'self' more highly" (Schuller et al. 2002:52). These outcomes were stated as both positive and negative effects, depending upon the success of the learner within the learning environment.

Research undertaken by Waller (2005) found that students, particularly those labelled as failures as children, would 'reframe' aspects of their identity upon their return to education as an adult and this return was often viewed as a mixture of resentment, regret and a sense of wasted opportunities. Waller spoke not only of the learner's desire to make good as an adult learner but the subsequent further damaged sense of self-esteem for those who were unsuccessful on the

course. The impact upon those who could cope with the challenges, according to Waller's research, is a significant strengthening of a student's learner identity.

Prior to Waller's research, Dwyer (2001) looked at what he called 'successful training strategies for the twenty-first century', and suggested that:

...an ideal learning environment has the qualities of:

- being emotionally safe
- being free from intimidation and rejection
- being high in acceptable challenge
- having active participation; and
- being a place where learners experience a relaxed alertness. (Dwyer 2001:312).

Dwyer investigated the effect on learners who were exposed to environments that they perceived to be threatening and found that the thinking process generally constricts and diminishes. His explanation was that learners may experience symptoms of flight or fury, with significant negative impact on their perceptions of self-worth (Dwyer 2001:312). The emotions often experienced by adult learners emanating from a fear or experiences of failure are ingrained in memory, and "although these feeling may be suppressed, they cannot normally be completely erased" (p.312).

From a different perspective, Athanasou (2005) suggested that there are two key factors that people consider in their evaluation of training: the social aspects of learning; and their own self-evaluation of success. The problem, according to Athanasou, is that people may not have an accurate evaluation of self and that they may tend to underestimate or overestimate themselves. People, he suggests, self-assess in order to determine their potential and future responses to situations and, in particular, their likelihood of success. In the process, they may "rate themselves more favourably than they should" (Athanasou 2005:297). The possibility of self-evaluation being a form of self assessment to assist people in forming an indication of what they have learned, and of it being a valuable tool in the interaction between student and teacher by providing feedback to the student about the learning standards, is a consistent theme in the adult learning literature. A general belief expressed is that if the perception of self were less or greater than the expected standard, or the formal educational level, this may impact greatly upon the successful learning outcomes for the individual. It is for this reason that Athanasou recommends self-evaluation as part of a learner's development and achievement is a highly valuable component to include in adult learning programs.

The relationship between self-perception and learning is something intrinsic to the human species that has evolved over thousands of years and while the ways in which memory and learning are linked still elude science, what is clear is that the outcomes of learning are stored in the central nervous system and become a schemata or pattern for our learning behaviour behavior.

According to Illeris (2004), the system of memory includes three dimensions: the thinking process (cognition); how the person feels (emotion); and resulting behaviour (societal). Positive learning, says Illeris, occurs when these three dimensions are in balance or 'harmony'. Alternatively, learner motivation is diminished when the 'triad' becomes unbalanced (Illeris 2004). The triad becomes 'unbalanced' when the learner makes incorrect or distorted assumptions about his or her learning. This, says Illeris, explains why learners often resist learning in order to protect themselves from an uncomfortable situation. Illeris (2004:176) highlights the relationship between learning outcomes and the perception (pre-understanding) of a person entering a learning environment:

...one develops some general pre-understandings within certain thematic areas and, when one meets with influences within such an area, these pre-understandings are activated so that, if elements in the influences do not correspond with the pre-understandings, they are either rejected or distorted to make them agree.

Many years before the work of Illeris, Schein (1996) investigated what he termed a person's 'career anchor' (p.2) and suggested that a person will estimate their career possibilities utilising 'his or her self-concept...[and] self-perceived talents and abilities' (Schein 1996:2). Others have suggested that learners' self-awareness is built from an underlying understanding of what may cause them to flee (the flight mechanism) and what they consider as conflict and potentially damaging to the self (Schein 1996 & Maybury 2001). Human behaviours, feelings and motivations are responses of both a learned and intrinsic nature, implying that self-perception may be determined by personality formed by both heredity factors and environmental influences (Maybury 2001). From this perspective, self-perception can be viewed as a component strongly rooted in the psyche of the adult – one that can or may alter with the person's performance in and exposure to new learning environments. As previously discussed, people have different perceptions of their own abilities (or perception of self in a learning environment) which are related to the incidences of training they received and the nature of the outcomes they received from these sessions. Acknowledging the importance of these questions, Orpen (1999:21) suggests that more research is needed to identify what he calls 'the limiting conditions of the mediating affect of self-efficacy', or in simple terms, the impact of self-perception on learning.

Research by Parker (2005) found that predominantly personal, behavioural and environmental events interact to influence learners' impressions of themselves in learning environments. He concluded that the otherwise added effect of the environment is mediated by the personal constructs developed by the person's experience and their "current behavioural tendencies" (p.1022), so that personal experiences have a more dramatic effect upon self-efficacy than that of the environment. Parker also concluded from his research that although a person may know what actions to take to perform a particular task, the person must have a belief in themselves and their ability to perform (that is, an appropriate perception of 'self' as learner) prior to attempting the task. Self-efficacy, according to Parker (2005) is related to those beliefs a person has about their capabilities and whether they can perform at a certain level and the affect their capability has on their existence. Parker's conclusions suggest that if having the confidence to put learning into action is vital to a successful learning outcome, then self-perception of self as a learner may be fundamental to the person originally attempting to learn new tasks, and in fact, perception of self as a learner may be implied well before they have developed the self-efficacy to action the attempt.

MacLennan (2008) was concerned with her experience that many people seem convinced they are simply not able to learn particular things. As a consequence, she embarked on a research project in which she personally undertook a program of learning that she believed would be impossible for her to complete successfully. Her aim was to understand the thinking and decisions processes as a learner when confronted with an overwhelming learning challenge. For MacLennan, 'learning is a process of perception that requires us to replace many processes of perception already ingrained in our minds and, viscerally, in our bodies' (MacLennan 2008:397). In simple terms, MacLennan's basic hypothesis was that believing that you cannot learn may remove any logical reasoning suggesting that you could learn. Learning, she argues, "cramps your feet, makes you dread, makes you feel less, makes you feel incompetent, makes you question yourself, [and] undermines your self-confidence' (MacLennan 2008:397). Understanding the process of developing a perception of self, she argues, includes knowing how we may go wrong, and understanding how our perception of what may go wrong is a form of internal conflict and where and when we may think irrationally or illogically about ourselves. The conclusion is that having a perception of our inability to perform a task may override and be stronger that our will to try, no matter how consciously powerful that will may be.

Many years before MacLennan, Shields (1995) looked at the link between identity, attributions and self-esteem for adults returning to study and found that people "tend to take credit for their successes but deny responsibility for failures" (p.262). Shields also found a general tendency,

especially for those people with lower occupational statuses, for the perception of self in the learning process to be linked to personal development and career or occupational advancement. Student identity, Shields found, is often related to the sense of pride, social competence and of fulfillment of personal pursuits.

Research by Kling (2004) found that when adult learners speak of memories, of school experiences, of experiences as an adult student, the language they use often conveys "a recurring displeasure with restrictive, inflexible and 'spoon-fed' (sic) learning experiences" (Kling 2004:16). Kling also found that adult learners frequently attribute "previous exposure to, and experience with, early learning environments [with] their existing attitude to learning" (p.18). Participants in Kling's study consistently mentioned their level of motivation to continue study as being based on "self-initiated career change, promotion (or the prospect of promotion), pleasure, self-improvement' and to 'ensure current knowledge' for their job" (p.19).

The aspect of learning in relation to workplace currency, particularly when linked to a desire for promotion, is a consistent theme within much of the research and often seemed to precipitate learning. The research study by Shields (1995), for example, investigated in part the phenomenon of learner self-efficacy within a workplace setting and returned many positive correlations with levels of adult self-esteem and job status. Similarly, Bennett (2004) found that learner goal activities were initiated to acquire better jobs, to achieve career development opportunities, to meet new people or to relieve boredom and also just for the pleasure of learning. Further, Bennett found that what motivates students to enrol in formal learning programs is related to their perception of their own academic ability developed from a positive learning history. Where, however, low self-esteem or low perception of academic ability were formed, Bennett found that students were less likely to enrol in further study.

On a similar theme, Wlodkowski (2004) suggested that creating motivating learning environments for adult learners was a challenge due to the variety of perspectives, experiences and different ways of understanding they bring to the learning event. Wlodkowski developed a model which suggests that several conditions are required for adults to develop an intrinsic motivation for learning, including "a respectful learning atmosphere, a 'favourable disposition', and ensuring the learning was something of value to the learner" (Wlodkowski 2004:146). Wlodkowski also argues that successfully engaging learners in the learning environment also includes emphasising the relevance of the learning event to the learner and providing the learner with some challenge. He believes that learner experiences are both conscious and subconscious, and that their memory of learning environments, if positive, enhances their engagement in subsequent learning

environments. Wlodkowski (2004:146) suggests: "if subconscious association with the [learning environment] itself is positive...motivation to learn...is compelling". Resulting impressions about the learning environment, he argues, are 'multidetermined (sic)...from cognitions, feelings, and actions that are inseparable from memory" (p.146). Wlodkowski's work, therefore, strongly supports the thesis of this study: that perception of self as a learner impacts upon and underlies the motivation to learn as well as the learning outcomes. Adults have to see themselves as personally endorsing their own learning, and people strive to determine their lives as an expression of their deepest beliefs and values. Learning is no exception.

Research conducted by Coutinho (2006) found that "self-efficacy was the strongest predictor of performance" (p.1). She suggested that researches have tended to focus individually on variables such as metacognition, achievement goal orientation, learning style and self-efficacy in relation to performance, rather than considering the way these variables interact to form a single learning framework. Coutinho suggested that self-efficacy refers to the learners' belief in their ability to perform a task, and that students will expend the effort to perform a task if they believe they have the ability to complete it. Further, she suggested that "people with minimal or inflated self-efficacy tend to perform poorly...relative to people with optimum self-efficacy" (Coutinho 2006:4). For Coutinho, metacognition is best described as a student's perception of their progress in class – a perception, she says, that could alter their study habits considerably. In this sense, metacognition is closely related to self-perception in that it directly relates to the adult's knowing of oneself as a learner and of their perception of their ability to perform certain tasks.

Apte (2009) explored a framework with which to assist in transformative learning outcomes for participants by enhancing reflection of facilitators. He investigated the affect of facilitators attempting to shift participants' frames of reference by using provocative empathy, conversation, ideas, and questioning to evoke a new realism for participants in the learning environment. Apte found that facilitators are "continually making choices about how to navigate through the perception of participants and their ideas, and confirming, stretching or challenging participants' frame of reference' "(p.179). He concluded that facilitators must become "empathic provocateurs" who understand the relevance of a participant's existing "personal history [and] personal stories" (p.180). It can be argued that, for participants with low self-perception as learners, transformative learning may be more confrontational than Apte suggests, and that people with high self-perceptions may be better disposed to interact, discuss, debate and defend their existing ideologies more fervently than participants with lower self-perceptions. Acknowledging this possibility, Apte proposed various solutions including, talking about the change, staying with the participant during the change (pacing the response), assisting the development of a new

perspective and supporting the participant through "tentative steps and experimentation" (Apte 2009:185). Apte also acknowledged that a key aspect for facilitators driving transformative learning is that they may also experience their own transformative learning and may have to alter their own assumptions and accept new emerging possibilities. Consideration of both the facilitator and participant are essential to the development of successful learning outcomes and both are important in the learning equation.

Pfahl and Wiessner (2007:9) investigated the capacity of adult learners to evoke the "meaning of their lived experience through storytelling", suggested adult learners may advance their development. Story-telling, they argue, not only assists the learner but provides facilitators with a powerful understanding of the learner's history (p.10). The premise is that by using the human tendency for listening to and telling stories, the communication between learner and facilitator transgresses any awareness of power in that relationship. This is particularly important as story-telling alleviates the literate requirements of written expression, providing a greater capacity for interaction by all in the learning environment, regardless of level of literacy. Pfahl and Wiessner suggest that story-telling is "unrelated to educational level" (p.11) and is particularly relevant for a group with diverse backgrounds and experiences. They suggest that what story-telling establishes is a "conscious perception of reality through direct and indirect participation in events" (Pfahl 2003:507 cited in Pfahl & Wiessner 2007:10). For Pfahl and Wiessner, story-telling is a powerful mechanism for building self-perception as a learner, and in turn, for enhancing learning outcomes.

Stone (2008) investigated the impact of university study on a group of mature-age students. Stone's research participants were predominantly from lower socio-economic backgrounds with minimal education or positive experiences with study. Using a qualitative, narrative research paradigm with in-depth and semi-structured interview techniques, Stone found that many of her participants expressed their feelings in terms such as "anxious...out of my depth...frightening...very overwhelming..." (p.275). Lack of encouragement from family, a general expectation for women to marry at a young age, and a sense of not being 'smart enough' were consistent findings from Stone's research. Further, reference was made by most participants to the incidence of negative schooling memories impacting upon their perception of self as a learner. An interesting assertion made by Stone (but not able to be directly addressed in the current study) is that the impact of negative support and personal concept is more evident among women than men.

In 2008, Daniels published an article reporting her post-doctoral research involving mature-aged women in VET. Daniels, like Stone, chose to investigate her topic through the use of stories and narrative inquiry. Of relevance to this study were her conclusions that learning success was heavily influenced by "previous negative experiences of education" (p.97) and that "learning is a contextualised experience, developed in negotiation with other parts of people's lives" (p.101).

Research by Helterbran (2007) specifically investigated informal learning for mid-life learners with less than a degree in education. Helterbran probed mid-life learners' beliefs with regard to self-direction, motivation to learn and self-efficacy, by examining their attitudes to their own learning. He concluded that adults predominantly seek learning for "an enhanced self-image" and for "forging their own learning paths" irrespective of their past learnings (p.15). He also concluded that adult learners exhibit "an overarching belief that they were generally efficacious" when speaking of their career strivings, and the uncertainty or fear of learning (p.12). Interestingly, Helterbran concluded while adult learners display an ability to recognise when tasks are beyond their control, motivation and cognitive or physical abilities, they do not consider this to be a demonstration of a low or negative self-efficacy but rather to be a positive affirmation of their capacity to understand their personal limitations. In contrast to most contemporary literature, Helterbran concluded that adult learners do not exhibit any diminishing enthusiasm for learning regarding age, life experiences (crises) or occasional lapses in confidence, and in fact argued that the reverse is evident in that learners tend to hone and redirect their efforts, with mistakes being viewed (retrospectively) as positive learning opportunities. Again contrary to most of the literature, Helterbran also found supporting evidence that previous disappointments "acted as a 'springboard' to stimulate more effort" (Helterbran 2007:12).

Dack et al. (2009) suggest that 'self-efficacy, causal efficacy, self-esteem and self-evaluations about areas of a person's life' are prone to positive or negative conditioning. For them, the relationships between actions and outcomes are noted as determinants for the development of a 'cause and effect disposition' from the event. They also suggest that the originating situations or relationships may be manipulated and alter the degree of cause and effect by the individual, consistent with the concept of 'learned helplessness' (Dack et al. 2009). These findings raise the question whether learned helplessness could be linked to the development of negative self-perception. Hamm (2009), for example, suggests that the traditional development of personality (his definition of which is very close to that of self-perception as used for this study) primarily is influenced by family, culture and social involvement. He goes on to argue that the disillusion of the family unit may place more emphasis on the role of societal norms in the development of personality and self-perception, and indeed, may provide significant opportunities to develop as a

learner through "potentially traumatic disappointments, and learning of frustration tolerance necessary for self-differentiation' (Hamm 2009:58). The concept of identity for adults, he argues, is the projected image of self, and if that image and self-realisation has developed without supporting family structures, then representation may be enhanced as a form of protection. A person who exhibits a confident and outwardly self-effacing persona may, in fact, have low self-perception, and may simply be presenting "a sort of psychological window dressing' (Hamm 2009:59).

Informing the research questions: conclusions from the literature

The key research questions for this study are:

- 1. What experiences most influence the perception of self as a learner?
- 2. What aspects of self-perception promote the development of self-directed learners?
- 3. Can self-perception change, and if so, how?
- 4. Can an understanding of self-perception by a learner improve their learning processes and outcomes?
- 5. Is self-perception linked with conscious interaction?

The primary purpose of this literature review was to interrogate the existing literature and research in order to provide information and insights relevant to the five key research questions. This section summarises the key information and insights gained through that interrogation of the literature.

In the review of the literature I presented significant and relevant links from a broad range of writings. Several of the key concepts exploring links between perception of self as a learner and learners' experiences are summarised below. One of the elements found were the implications in the person's power or status within the workplace according to others' perception of their acumen. Boud & Solomon (2003) found a person's own impression of himself or herself as a learner, and the naming of such, may negatively impact upon their repute within their organisation. Wojciszke (2005) suggested our self-concept and understanding of our own competence (as a learner) may be linked to that which we perceive others have appraised as our ability and that this may guide us to attempt learning as part our self-interest and immediate well-being. A related aspect of self-concept, suggested by Okukawa (2008) pertained to learner's constructs of attitude to learning and personal values. It was also noted that the motivation to learn may be linked to perceptions of

existing competence as well as the scepticism for the reasons behind training and, in particular, how this may be reflected in increased workplace responsibility (Billett 2002). The concept of knowledge as free-floating and accessible by exposure to the environment rather than a consequence of the training (Harrison 2003) also has relevance as it may depend upon the learner's perception of their ability to learn from an information rich environment.

Learning to learn appears to be a challenge for most people (Dealtry 2004) and the 'knowing of having learned' may only be half the journey with the meaning one brings to the process of learning also having an impact upon the approach to learning. 'Meaning' is also context dependant and may not only impact upon the learner's understanding of their own sense of self and identity and the value they place on the self but may also affect self-esteem and learner identity if undertaking the study as a mature adult (Waller 2002). The development of identity or self-efficacy may rely upon the incidence of formal training and may have a mediatory effect on learning (Orpen 1999) and its development also appears to be related to both the innate and learned sources (Maybury 2001). There is evidence that self-concept is used in the estimation of career options (Schein 1996) with adults attempting to control and safeguard themselves in learning environments using intrinsic defence mechanisms (Illeris 2004). Other links to learner self-perception appearing in the literature strongly suggested self-efficacy is related. As far as Orpen (1999) was concerned, self-efficacy has a mediating affect upon the learner and, many years later (MacLennan 2008) spoke of self-efficacy as a learning process of perception. MacLennan suggested that failure occurs due to the irrational thoughts of the learner (MacLennan 2008). MacLennan, comparatively to my own interpretation of self-perception suggested those irrational thoughts are ingrained in a learner's mind. In my own previous research (Kling 2004), I also found evidence of links between learner history and current perceptions of ability. My interpretation of the data was that a person's self-perception would play a part in their seeking out and attempting new learning. My findings were also comparable to those of Bennett who, at the same time (2004) found that a positive learning history contributed positively to a person's likelihood for enrolling in academic study, as was the opposite effect. Wlodkowski's (2004) findings supported the emphasis of the self in the learning environment where he suggested links to memories of past learning environments as intrinsic and which develop subconsciously in association with the positive (or negative) experiences of the learner. He found these perceptions affected learners' current learning situations.

The literature suggests that being exposed to numerous positive learning situations would allow a strong self-efficacy to develop, and that where more experiences are negative or unsuccessful this may also be reflected in future learning episodes. However, we have also seen that the affect of

positive influences such as successful episodes and positive teaching methods may supersede the negative effects on a higher ratio than the actual events. This suggests that where we may include good teaching techniques, engage and perhaps challenge learners, while providing a positive supportive environment, a progressively more positive self-efficacy will result (Coutinho 2006, Nielsen 2008 & Apte 2008).

Several emphases were noted from the literature for both mature-aged learners and, in particular, women. Daniels (2008) found that the learning is often based on a complex merge from many aspects of the person's past and often these were negatively tainted with previous experiences of education. Coupled with those results, Daniels (2008) commented on the added impact of inequity for women in the VET sector. Similarly, feelings of fear and lack of encouragement or support from immediate family was concluded from Stone's research (Stone 2008). The impact of past histories on self-efficacy was also found to be of little effect for some adult learners. Learners with a sense of their own efficacy and an understanding that all events contribute to growth, in fact, perceived negative events, mistakes and setbacks as opportunities for development (Helterbran 2007). Suggestions of self-perception with relation to learned helplessness and a portrayal of inflated self-image have some implications in the development of self-perception according to (Dack et. al. 2009 & Hamm 2009). Clearly, there is a degree of complexity about adult self-perception and the affects upon learners not elucidated fully within the research literature.

The emphasis of positive learning experiences and self-directed learning was also important to Hogg (2007) who described as his own learning journey from an engineer to an adult trainer. Hogg (Hogg 2007:25) stated training is often conducted without specific guidelines, and by people 'with specialized (sic) knowledge but little background in adult education'. Hogg suggested that what often happened was an unguided effort to foster self-directed learning. He stated the 'the problems associated [with] education and human psychology' are more complex than 'exact numbers [or] clearly quantifiable data'. I mention Hogg's self-reflection as it demonstrates that adult educators, apart from also being learners, often develop an understanding of self-perception with insight into their own learning history based on their experiences as an educator. Hogg's statements aligned well with the current results and my own understanding of self as a learner when he stated:

"I have had more formal university classes in areas outside of engineering even before beginning the Adult Education program. I had expected to be more prepared than most to move rapidly into another field of study" (Hogg 2007:26).

Hogg's summary of his own journey as an adult learner showed alignment with the development of self as a learner, when he commented 'it has been a challenge and it has refreshed my perspective' (Hogg 2007:26).

Interestingly, in her article on alternative approaches to workplace assessment, Timma (2005) suggested that it is often the assessor (in the VET environment) who uses their impressions and interpretation of competence in determining the competence of others. Would this suggest therefore that an assessor's impression of self as a learner may also reflect that which they would like to see demonstrated in others? When determining the competence of others, can we remove the subjectivity and humanness in the equation or is this what makes a realistic assessment? Timma (2005) stated that the process of determining competence could only be made by assessors who have become skilled in making valid and reliable judgements and she proposed a model (for in-house assessors) which included ongoing observations and discussions of the employee's and skills transfer (Timma 2005). I suggest that in the assessment environment the (self) perception of the learner is under the greatest scrutiny (by him or herself) and will, therefore, play an extremely important role in their negative or positive outward presentation of confidence, skill and competence. This is what I suggest an inexperienced assessor may notice perhaps which further describes that which was suggested by Timma (2005) as the assessor's impression. I pose the following questions and statements in my analysis of the literature. Could it be that within the assessment of competence from another's perspective; lies the learner in all of us, and our selfperception? As I believe, could our self-perception unconsciously affect our development whether or not we are also assessors assessing the work of others? Findings drawn from the both qualitative data analyses and survey results found that self-perception develops from either (or both) positive or negative historical or situational events specific to either past and current learning experiences, or both.

Summing up

In summary, the literature review revealed several significant and relevant messages and findings. Much of the literature suggested learner self-perception is linked with many aspects of the adult learning environment with motivation and psychology featuring often. The perception of self as a learner was found to be governed by bi-directional cycles where either self-perception would drive behaviour or that behaviour was the driving force for the development of self-perception. Learners' reflection of their experiences from their immediate environment and past experiences determined the person's self-reflection evolving in increasingly complex processes. Reflection was found to be related to the behaviour exhibited in learning environments, which again drove further reflection of behaviours in subsequent learning events. A balance between behaviour and reflection was suggested as the formula for effective learning. Learners' lack of understanding of what constitutes knowledge and skill coupled with assumptions that may overlook the significance of informal learning was seen as a precursor of low self-perception and several internal and external motivators were found to contribute to the motivation to learn. A significant contributing factor in the development of self perception as a learner was suggested to be those motivators which encouraged learners to engage in further learning.

The threat perceived from new learning environments and the learners' perception of self were found to be related and an indicator of whether the person would initially attempt the learning. Arguments were presented which suggested adult learners are driven to direct their own learning and are self directed to learn when the learning is linked to their need to know something or perform new tasks. It was also found that those qualities driving adults to seek learning resulted from a cultivated intrinsic attitude rather than an extrinsic motivation. Yet conversely those adults with a lack of confidence in their ability or self as a learner were less likely to successfully seek out relevant learning opportunities.

One of the key elements found was that developing the self as a learner may be dependent upon the person knowing what actually constitutes learning. Yet, conversely, naming oneself as a learner was seen to carry implications of being a novice which could adversely affect the person being included in the environment. A differing finding suggested that the portrayal of competence would demonstrate the notion of self-perception and competence which were both correlated to self-identity and self-esteem. Thus the personal assessment of adults regarding their ability to learn was seen as a duality.

It was suggested that one of the greatest challenges for adults learning to learn was to be able to construct positive reflections from their learning experiences. Several aspects related to the perceptions of self as a learner and which may increase this challenge were framed as being adaptive, in achieving goals and in interpreting the impressions of self and self-worth within a learning environment. The ability to form these impressions was found to be related to the persons' consciousness of self as part of the social constructs that may exist in a given environment. It was found that this awareness may be context driven and therefore not a static situation adding more complexity to the behaviour the learner exhibits in the environment they are faced with. This was also found to impact upon the learner choosing to learn and one's ability to gain autonomy within the learning environment. Many authors suggested that a desirable transfer of skills was related to the societal influences within learning environments.

Another term within the literature was self-confidence, which was framed as the ability of learners to put forward their own ideas, to recognise areas for improvement and for being able to ask for help and to be able to challenge the views of others. Correlated strongly with confidence was the person's perception of self, formed by previous successes in learning environments. However self-confidence could be counteracted where the learner makes an inaccurate evaluation of self, either overestimating or underestimating himself or herself. It was also found that learners will reject or distort what does not correspond with their own evaluation of the environment in an attempt to make the situation match their impression of self.

Self-efficacy was found to be linked to a learner's belief in their ability to perform and a high self-efficacy was linked to both the confidence to seek learning opportunities and achieving successful learning outcomes. On the other hand it was found that people may convince themselves they are unable to learn and as a consequence this may override their will to try and early learning experiences were found to be an indicator for the perception of ability. It was found that the development of self-efficacy or self-perception may have a mediatory effect on learning and which may also be responsible for learners' current perceptions of ability. However being exposed to numerous positive learning events may be a precursor for the development of a strong self-efficacy. It was also found that learners with a positive self-efficacy may perceive negative events simply as mistakes, setbacks or an opportunity to develop. Overall it appears the development of a perception of self as a learner is a complex merge of many aspects and that this degree of complexity is yet to be fully explored within the research literature.

The following chapter, Chapter 3, provides an explanation of the methodology and research design adopted for this study.

CHAPTER 3 – Methodology and Research Design

Introduction

This study investigates the relationship between self-perception and adult learners' motivation, self-directedness and learning outcomes. Little previous research has been identified that relates to the nature and impact of that relationship, and so the research described in this thesis is an exploratory case study that primarily seeks to provide insights into whether self-perception influences the learner's predisposition to seek out and value learning. As a consequence, a constructivist-interpretive qualitative paradigm which incorporates significant elements of grounded theory, ethnography, symbolic interactionism and phenomenology was chosen for the research methodology. This approach is preferred because it focuses on exploration and understanding rather than on description and explanation (Creswell 1998:15 & Chamaz 2005:508).

Interpretive research

The qualitative interpretive approach to social science research focuses on developing an "empathetic understanding of the everyday lived experience of people in specific settings" (Neuman 2006:75). It is based on the philosophical perspective that social life "exists as people experience it and give it meaning" Neuman (2006:77). As Minichiello et al. note (2000:10): "Qualitative researchers seek to uncover the thoughts, perceptions and feelings experienced by informants. They are most interested in studying how people attach meaning to and organise their lives, and how they, in turn, influence their actions".

Qualitative interpretive research uses inductive reasoning as opposed to deductive reasoning which characterises the positivist paradigm. Its focus is on feelings, emotions and reactions as reported and explained by the participants of the research. As a consequence, this study does not begin with an hypothesis to be tested (as is characteristic of the positivist paradigm): rather, it begins with a topic to be explored using inductive reasoning. Interpretive researchers collect and analyse data using a range of qualitative tools in order to construct a model or theory. Neuman (2006:76) describes this process as a "systematic analysis of socially meaningful actions" through interviews and observation in order to achieve "understandings and interpretations of how people create and maintain their social worlds". Interpretive qualitative research, according to

Minichiello et al. (2000:10), allows the researcher to "gain access to the motives, meanings, actions and reactions of people in the context of their daily lives".

Symbolic interactionism

The association of the interpretive paradigm with symbolic interactionism dates back to the Chicago School of Sociology in the 1920s (Minichiello et al. 2000:2). Symbolic interaction is a distinctive philosophical approach that emphasises the role of meaning in social experience (Chenitz & Swanson 1986:ix). The focus for symbolic interactionists is on the meaning that people attach to events. How a person attaches meaning is personal to each individual, and determines their response to the events the person encounters.

Mead (cited in Chenitz & Swanson 1986:4) suggests that "it is in social interaction that the individual achieves a sense of self." According to Blumer (1969:2), there are three criteria that govern this interaction:

- 1. human beings act toward things on the basis of the meaning things have for them;
- 2. meaning of such things is derived from, or arises out of the social interaction that one has with one's fellows; and
- 3. these meanings are handled in, and modified through, an interpretive process used by the person in dealing with the things he encounters.

Symbolic interactionism asserts that people create meaning from their experiences through social interaction with an event or person in a particular situation. The symbolic interaction researcher needs to have an understanding of the world of the participants so that they can "learn their interpretation of self in the interaction and share their definitions" (Chenitz & Swanson 1986:7).

Grounded theory

Grounded Theory is an approach in which theory emerges iteratively and systematically from the data collected. This is in contrast to empirical research approaches in which a theory is postulated or hypothesised, and then data are collected to test or validate the theory. Strauss and Corbin (1998: 12) contend that theories that emerge through a grounded research approach "are likely to offer insight, enhance understanding, and provide a meaningful guide to action". The following elements define a grounded theory approach (Strauss & Corbin 1998:9-10):

- a). the need to get out into the field to discover what is really going on;
- b). the relevance of theory, grounded in data, to the development of a discipline and as a basis for social action;
- c). the complexity and variability of phenomenon and of human action;
- d). the belief that persons are actors who take an active role in responding to problematic situations;
- e). the realisation that persons act on the basis of meaning;
- f). the understanding that meaning is defined and redefined through interaction;
- g). a sensitivity to the evolving and unfolding nature of events (process); and
- h). an awareness of the interrelationships among conditions (structure) action (process) and consequences.

Grounded theory is usually part of a mixed-method research design as it primarily complements other research methods, rather than replaces them (Chenitz & Swanston 1986). In particular, grounded theory is usually interlinked with two other qualitative approaches: phenomenology and ethnography (Creswell 1998).

Phenomenology

The focus of phenomenology is on the meaning that people themselves attach to everyday events. As such it supports the symbolic interaction paradigm. Carole and Swanson (1986:4), suggest that: "Both phenomenology and symbolic interaction are concerned with the study of the inner or 'experiential' (sic) aspects of human behaviour, that is, how people define events or reality and how they act in relation to their beliefs".

Phenomenology focuses on how human beings understand their world through direct experiences. Reality, therefore, is different for each individual, and depends on the way that each individual has interpreted experiences and events. For phenomenologists, truth is a product of direct experience, even though the experiences are themselves personal and subjective (Littlejohn & Foss 2005). Feelings, emotions, aesthetics, previous experiences, knowledge and institutional culture, as well as cognition all interact to create meaning (Gubrium & Sanker 1994). The

meanings that individuals attach to events may not be similar nor necessarily accurate in the objective sense. Discrepancies and paradoxes existentially represent reality for the experiencer. The primary aim of a phenomenology, therefore, is to discover and describe the meaning that the experiencer attaches to the experience.

Ethnography

Like phenomenology, ethnography focuses on direct interaction within a natural setting in order to learn about and understand their activities, actions and experiences. Neuman (2006) suggests that people display their culture best in their natural settings through what they say and do. Ethnography, he says, is about making explicit the tacit knowledge that individuals use everyday in everyday settings. It is about making inferences that go beyond what is explicitly seen or said to what is understood as meant or implied.

Ethnographers use rich, detailed description of how individuals make sense of their activities and environment in a quest to describe explicit or tacit cultural knowledge (Geertz 2003). Ethnomethodology requires the researcher to immerse herself deeply in the culture under investigation in order to develop an understanding of the norms and the assumptions that define what people do. It is based on the axiom that observed behaviour, of itself, does not convey meaning. Rather meaning must be inferred and thus must focus on what is intended or implied. In a sense, ethnographers deconstruct events and behaviours and then put them back together in a way that makes explicit tacit cultural knowledge.

Case study

Stake (2000:436) defines a 'case' as a "specific, unique, bounded system" that becomes the basis for purposeful sampling and qualitative inquiry. Case study, he says, "is not a methodological choice but a choice of what is to be studied" (Stake 2000:435). Case study involves collecting comprehensive, systematic, and in-depth information about the system under investigation.

Case study research is based on analytic rather than enumerative induction (Neuman 2006); that is, the focus is on capturing the complexity of a single or small number of cases rather than the capacity to generalise to all or most cases. Case study research emphasises the depth rather than breadth of knowledge and understanding. It is about "the particularity and complexity of a single

case, coming to understand its activity within important circumstances" (Stake 1995:xi). Case study research seeks to "demonstrate a causal argument about how [certain] forces shape and produce results in particular settings" (Walton 1992:122).

Exploratory case studies are conducted when "researchers lack a clear idea of the problems they will meet during the study ... or need to develop concepts more clearly" (Cooper & Schindler 2006:143). Exploratory case studies are particularly useful when there has been limited previous research around a topic, where speculation and theory rather than evidence currently informs thinking. Exploratory case studies can provide powerful insights that can guide subsequent detailed research.

Sample

Purposive sampling was used to select potential participants for this study. The aim of purposive sampling is not to select a representative sample of the population under investigation, but rather "to identify purposive cases that represent specific types of a given phenomenon" (Minichiello 2000:140). The sample for this study was purposefully selected on the basis of adults who may have had experiences with learning. Participants with at least five years work experience, and who were currently, or had previously been, involved in a learning program related to their work, were selected. The exclusion criteria were based on the same conditions. For convenience, the sample was drawn from participants attending training conducted by the researcher. In order to select as diverse a sample as possible, participants were selected from a cross-industry training program.

After purposively choosing the initial set of potential participants for the study, theoretical sampling was then used to guide data collection. Participants were selected from the purposive list as the inquiry progressed, and not in a predetermined order.

Strauss and Corbin (1998:201) define theoretical sampling as:

Data gathering, driven by concepts derived from the evolving theory and based on the concept of making comparisons, whose purpose is to go to places, people, or events that will maximize opportunities to discover variations among concepts and to densify categories in terms of their properties and dimensions.

Theoretical sampling is a process that continued throughout the study, where analysis guides the sampling process and data collection (Strauss & Corbin 1998). Purposive sampling allowed the researcher to derive categories of interest for the study. Subsequent theoretical sampling allowed the researcher to verify, develop, densify, and refine those categories (Strauss & Corbin 1998). The sampling was guided by the concepts that emerged from analysis and that appeared to have relevance to an inductively emerging theory (Strauss & Corbin 1998).

Theoretical sampling involves the observation of groups with a view to extending, modifying, developing and verifying theory (Burgess 1984, cited Minichiello et al. 2000). Theoretical sampling, according to Denzin and Lincoln (2000) assists the researcher in defining the properties of the categories and to identify the context in which these are relevant. Further theoretical sampling extends to specifying the conditions under which the categories may expect to be visible, suggesting that the sample may include environments and events which support the development of theory (Denzin & Lincoln 2000).

Over a twelve-month period participants attending a public training course were invited to participate in the research. Participants had no prior contact with the researcher, or prior knowledge of the nature or purpose of the research study. The public training program was a cross-industry standard and not aligned to any particular industry, so participants from a broad representation of the workforce attend the course. Potential participants were provided with a cover letter detailing the intention of the study, a consent form, a list of possible questions, ethics approval notification and complaint information (Appendices A and B). The final sample size employed during the period of the study was 66, comprising 30 females and 36 males. Biographic details were provided by the 60 respondents who completed survey questionnaires during the study. Appendix E provides a table detailing the characteristics of the 60 members of the sample who completed surveys questionnaires. The key features of the sample are:

Number of respondents was 60, all members of the same public cross-industry training program

- Median age of the sample was 41 years
- 50% of the sample was female and 50% female
- 51% of the sample were business people (white collar workers)
- All of the participants were in some level of employment. 93% of the sample were in full time employment. Three participants (5%) were in part-time employment, and one participant was in casual employment.
- 68% of the sample had been employed for more than ten years

• 25% of the sample held a Certificate as their highest qualification, 11.5% a Diploma, 21.6% an undergraduate degree, 21.6% a post-graduate degree, and 20.3% a Senior School Certificate.

Data collection

Data collection for this study included in-depth interviews with the sample of adult learners, researcher observations, and survey questionnaires.

In-depth Interviews

Chenitz and Swanson (1986) defines an interview as an extended conversation for the purpose of collecting and validating 'rich' data. The aim is to gather personal narratives obtained in the "social, dialogical context of the interview" understanding that the language between the participant and the interviewer "is not exclusively public and true" (Tanggaard 2009:1500). Similarly, Kaufman (1994) suggests that the purpose of conducting an interview is to collect information in the participants' own words in order to elicit description and detail. Interviews assist the researcher "to acquire an in-depth understanding of how the participant creates meaning in everyday life." (Neuman 2003:76).

In this study, the researcher used the unstructured recursive model of interviewing and questioning as suggested by Minichiello et al. (1995:81) as "close to the ideal form of research for those researchers who follow the interpretive approach". The defining characteristic of this form of interviewing is the informal conversational tone used by the researcher with the interviews themselves best described as 'guided discussions'.

Rapport building is a critical process if the interviewer is to understand and identify with the participants' world. Bandler and Grinder (1979, cited in Minichiello et al. 1995:80), for example, argue that:

Rapport with another person is basically a matter of understanding their model of the world and communicating your understanding symmetrically. This can be done effectively by matching the perceptual language, the images of the world, the speech patterns, pitch, tone, speed, the overall posture and the breathing patterns of the informant.

Good rapport with the researcher allows the participants to feel more comfortable when communicating, and thus more likely to reveal their feelings, in part because they will consider that their thoughts and ideas will be respected and valued. This, in turn, increases the quality and authenticity of the data collected (Minichiello et al. 2000).

A number of authors (Strauss & Corbin 1998, Minichiello, Fulton & Sullivan 1995, & Kaufman 1994) argue that interviews should be given structure and direction through the use of an interview guide which contains a set of general questions, topics and issues. The interview guide is, however, just that – a guide. The researcher must be ready to make significant amendments to the guide as the interviews progress and new concepts emerge. As Strauss and Corbin (1998:205) note: "To adhere rigidly to initial guidelines throughout a study as is done in some forms of both qualitative and quantitative research, hinders discovery because it limits the amount and type of data that can be gathered".

Interview strategies are critically important for encouraging participants to continue talking or to explain in more depth. Minichiello et al. (1998) recommend the use of a recursive model for indepth interviews that incorporates a conversational approach, a respect for the individual nature of each participant, and a process where the content of each prior interview influences the direction of each subsequent interview. The major strategy employed to guide the interviews in this study was 'funneling' (Trochim 2000). This involves the interviewer initially using broad, open questions on the general topic area, and then increasingly refining the questions to obtain more specific information in order to understand specific issues at deeper and deeper levels (Swanson 1986).

Another interview strategy used for this study was story telling. Story telling allows participants to retell past events in their own words and on the basis of the aspects that have embedded themselves most in their memory. The data from story telling is "often rich and descriptive [and] valued precisely for its closeness or fit with reality" (Minichiello et al. 1998:85).

A number of probing questions were used to support the above strategies. Probing questions are designed to motivate participants to give more information or detail. The most commonly used type of probe is the 'nudging probe' (Minichiello et al. 1998) which involves the interviewer remaining totally silent or making 'encouraging sounds' such as "mmm" or "ahh". Other nudging probes include those that ask for the next event, for example "...and then?" or "tell me more", or those that ask for more detail or clarification, for example, "I don't quite understand. Can you

explain?", or those that request explanation, for example "Why? How come?" (Schatzman & Strauss, cited in Swanson 1986:72).

In-depth, semi-structured interviews were conducted on a regular basis from May 2006 to March 2008 with a sub-sample of seven participants. Four people volunteered to participate in the interviews and another three were purposively selected and agreed to participate. As each participant was provided with the Participant Consent Form (Appendix A) and the Participant Interview Coversheet (Appendix B). These forms described the research and the expectations of the participants in detail. Five participants were interviewed in the training rooms where they indicated they felt comfortable, while two participants requested interviews to be conducted in their own workplaces due to travel constraints.

Interviews were structured around the following common set of introductory open-ended questions:

- 1. Can you tell me, in your own words, about your past and current experiences of learning generally and learning on-the-job?
- 2. Tell me about your learning at work and how you embarked on learning opportunities how did you feel?
- 3. Tell me about you and your learning history at work or otherwise.
- 4. Tell me about your workplace learning opportunities how did you feel prior to, during and after the learning?
- 5. Tell me about your history with learning go back perhaps to school or your recent adult learning how did you embark on the learning, and how did you feel?
- 6. Tell me about yourself as a learner tell me what you do when you are faced with new learning experiences?

Appendix G provides a detailed mapping of the interview questions, providing the rationale for each question, its links to the research questions, and the particular information sought by the interviewer.

Information was collected during the interviews by both an audio recording device and by note taking by the researcher.

Observation

In addition to in-depth interviews, the researcher acted as a participant observer of participants both during their training course and during their interviews (with respect to 'body language'). This allowed the researcher to collect parallel data to that formally obtained in the interviews as well as to observe the context and behaviour of participants with respect to learning. Davis (1986:64) argues that:

The basic premise underlying field research is that there is interconnectedness between the environment in which a phenomenon occurs and how that phenomenon is perceived and experienced by those in the environment.

Participant observation is about observing participant behaviour and responses in the environment in which they usually operate, rather than in 'experimental' researcher-contrived environments. A participant observer explores social meanings and multiple perspectives in their natural environment (Neuman 2003). In this research participants are observed in either their training or their workplace environments.

The researcher can adopt a range of roles for participant observation, from the 'outsider looking in' to "being a complete insider who has 'gone native' " (Creswell 1998:125). In the course of this study, the researcher gradually changed roles as her role as researcher became more accepted and integrated into the lives of the participants. She moved from an outsider, observing in a strongly objective manner from an outsiders perspective, to an insider who had to a significant extent become socialised into the participants' culture and thus was able to perceive events from a significantly different point of view (Neuman, 2003).

This approach, recommended by Creswell (1998), is common in ethnographic studies.

Observations were made of the behaviours, body language and social and learning interactions of all people involved in the study, and in particular, those involved with the in-depth interviews.

Guiding questions for the observation included:

- What factors appear to enhance or undermine self-perception as a learner?
- What factors appear to motivate adults to engage in effective learning?
- Does there appear to be a relationship between self-perception and the nature and quality of learning outcomes?
- What appears to be the role of context?
- What learning model appears most likely to motivate adult learning and why?

In the particular context of the interviews, the important focus of observation relates to the ability of the interviewer to reconstruct the participant's reality through the process of listening to verbal accounts of their experiences and 'seeing' events in tandem with the participant's descriptions. Throughout the interviews, the researcher observed the body language and sub-verbal language represented throughout the interview. 'Sub-verbal language' refers to the fluctuations in tone, pitch, pace, projection and tense evident in the descriptions participants provide of events in past or present environments. These aspects were recorded after all interviews as observation field notes. This method ensured the ethnographic context was maintained and also added to the contextual description and analysis.

Survey

Survey results were gathered through an adaptation of Osgood's semantic differential scale technique (Millon, Lerner & Weiner 2003) with Appendix D providing the survey questionnaire. The scale was reversed from the first question as a stop-check ensuring participants were reading the questions. Bipolar scales based on semantic opposites and the relevant intervals devised for this research are outlined below for online surveys questions, and including examples of several semantic descriptions. Survey results were analysed and coded similarly to that of the interview data but are also presented with graphs depicting both descriptive statistics and correlations within and between data.

Table 2 - Semantic differential scale and survey questions (presented below) provides an overview of the survey questions and a brief description of the intervals within the range for each question. The semantic descriptions are general examples of the upper and lower concepts underscoring the questions. The analyses from the semantics, often referred to as relational analysis, determined the relationship between identified concepts and measured incidences of

these concepts within the text. These incidences and relationships were also analysed using Leximancer software. Generally there are three categories for relational analysis including affect extraction, proximity analysis and cognitive mapping. Affect extraction is used to describe an evaluation of the proposed underlying emotions driving the response. This method is useful where the researcher also observes the participant as it is difficult to draw emotional inferences from text alone. Only clearly stated and obvious emotions within the survey data were treated as affect terms. Affect extraction, however, featured often within the interpretation of the interview data and field observations for this research. Proximity analysis refers to measuring the cooccurrence of concepts found within the text, whereas concept mapping refers to the relational analysis represented in a visual form. Denzin and Lincoln (2000) also suggested that the two main social science traditions used to analyse interview data are conversation analysis and discourse analysis. Conversation analysis has become recognised as the primary method for social interaction and where the researcher accepts that words are not a representation of reality but rather, according to Denzin and Lincoln (2000), the mechanics of the conversation and how words link together provides the meaning or reality. These links and meaning are derived from the treatment of text often used in either conversation analysis, discourse analysis or other ethnographic methods. Using Leximancer software analysis, many of the links and meanings underpinning the interview text were extracted and discussed.

The semantic scale used against the survey data assumed the interval descriptions would be either similar to that perceived by the participant or relatively closely aligned (see Table 2 below). Although interval descriptions were not provided on the survey forms to ensure the survey appeared uncluttered and easy to use, motivating participants to complete it, it is assumed participants have a general understanding and experience with ranked questionnaires. The use of the neutral option in the survey questionnaire is two-fold. To allow the participant the option of not being forced to make a decision between a more positive or more negatively ranked answer and, although there is no assurance that the midline answer is neutral (as it may be due to reluctance to decide, not being relevant or applicable to their situation for example) to remove the resistance not to answer at all where the midline is not an option. As this research did not intend to utilise any other quantitative analyses than descriptive statistics, a neutral answer would not impact upon any results, such as the deviation from the mean. Responses were merely reported, with any non-responses affecting the median responses evaluated against the mean obtained. Using a midline also allowed the participants to 'be' neutral as several of the questions were leading (unlike those expected for true quantitative research). The questions within the survey were designed to complement those recorded within interviews and questions were pre-empted to elicit key responses. An advantage of using a survey method is the real-world relevance of the

data gathered due to the inaccessibility of participants other than those close to the researcher. Surveys, according to Denscombe (2001) are structured and purposeful with a wide and inclusive coverage. Although access to surveys was only provided to participants attending training, the possibility of snowball sampling allowing a wider sample population access to the surveys was optional. A disadvantage of the survey method used within this research may be that checking the accuracy or honesty of the responses was not possible due to the anonymity of the respondents (Denscombe 2001). However, an advantage of using an anonymous sample is that the responses obtained add insights and depth to other data (Minichiello et al. 2000). Qualitative research data relies on non-probability sampling methods which often include theoretical and snowball sampling (Minichiello et al. 2000). The text analysis performed on both the interview data and survey responses examined the words, sentence structures, ideas, meanings and even what was not said (or answered). This approach permeates the social sciences and the results from analysing text are eventually combined into conceptual models and theories, explaining the phenomena under investigation (Denzin & Lincoln 2000). This research utilises the description of themes, ideas and suppositions evident in the data gathered and compares these across each individual's response, within sample participants in each group, and across all texts gathered. The analysis of the survey data features in chapter 4 of this Thesis; while an outline is provided in Table 2 below.

Table 2 - Semantic differential scale and survey questions

		Semantic Differential Scales		
Semantic Descriptions	Survey questions and descriptions of each interval in the range			Semantic Descriptions
	1 2 3 4 5 6 7			
		a need to learn new information, what is your l		
Disagree	worry?			Agree
Negative	Very	mewhat, neutral, some, little	Not worried	Positive
regative	Q2. What do you consider is your ability to learn?			TOSITIVE
De-motivating	Very low quite lo	w, low, neither low or high, high, quite high	Very high	Motivating
	Q3. How well do you remember information?			
Uncomfortable	Not very well a little,	not much, neither, somewhat, quite a lot	Very well	Comfortable
Worried	Q4. When learning something new – I find it easier if I have an opportunity to talk about it			Relaxed
Stressed	Not normally quite, so	ome, neither, some, quite	Always	Unworried
	Q5. I prefer to have visual information to assist my learning			
Major	Never not often, occasionally., neutral, occasionally., often, Always			Minor
	Q6. I need to consider each step in learning new information before moving on			
Unimportant	Never not often, sometimes, not sure, occasionally, often Always Q7. I enjoy the challenge with learning new information		Important	
Struggle	Never not often, sometimes, not sure, occasionally, often Always		Always	
	Q8. Rate your own perception of yourself as a learner			Calm
	Difficult quite, not really, neither, some, quite Easy			
Never	Q9. Do you visualise the learning environment and your interaction in it prior to attending?			Always
Impoverishing		n, sometimes, neutral, occasionally, often	Always	Enriching
	Q10. I can remember what I learned at school			Emicing
Unknown	Never none, some, not sure, a bit, a lot Always			Known
Ulikilowii	Q11. My learning at school was a bad experience Never not ever, sometimes, neutral, often, many times Always			Kilowii
C 6 i	Q12. Learning I have undertaken has an adult has been very enjoyable			C1
Confusing	Never not ever, sometimes, neutral, often, many times Always			Clear
	Q13. Learning I have undertaken as an adult has been very difficult			
Unpleasant	Never not ever, infrequently, neither, sometimes, frequently Always			Enjoyable
	Q14. I will deliberately seek out and attend learning opportunities			
Hard	Never not even frequen	; occasionally, not deliberately, often, tly	Always	Easy
Bad	Short answer questions			Good
Dau	Q15. Can you tell me, in your own words, about your past and current experience			
Low	of learning on-the-job			High
	experiential learning, mentoring, coaching, transfer of skills, competence, Q16. Can you describe how you feel (have felt) when required to learn a new			S
Incomplete	process for your job?			Complete
	perception of self as a learner, changing self-perception			
None	Q17. Please describe what you do prior to attending a training/learning program			All
	perception of self as a learner			
	Q18. Has your self-perception of yourself as a learner altered over time? If yes, please explain how you believe this occurred			
	changing self-perception			
	Q19. Do you have any comments you would like to add?			
	, , , , , , , , , , , , , , , , , , ,	•		

Minimising researcher bias

The adequacy and credibility of the data collected and analysed in qualitative research studies is difficult to establish because, unlike quantitative research, the qualitative paradigm does not have rigorous mechanisms for confirming levels of reliability and validity (Chenitz & Swanson 1986). The level of subjective observations and analyses in qualitative research makes it particularly vulnerable to researcher bias (Miles & Huberman 1994). It is, therefore, important to establish the steps taken by the researcher to minimize the impact of researcher bias on the study (Charmaz 2005). Denzin and Lincoln (2005:22) summarised this well when they commented: "All research is interpretive; it is guided by the researcher's set of beliefs and feelings about the world and how it should be understood and studied".

In order to minimise the effect of researcher bias, the methodology for this study employed the steps suggested by Creswell (1998) for maximising the reliability, validity, credibility, transferability, dependability and confirmability of qualitative inquiry. First, the researcher maintained a detailed reflective journal throughout the study in order "to re-examine her own interpretations, unstated assumptions and presuppositions as they became apparent over the course of data collection and analysis, and to question the consistency and authenticity of what was recorded" (Weatherley 2010:90). Second, comprehensive field notes were kept during interviews and training sessions involving the participants that clearly identified the impressions that the researcher formed at the time, thus minimising the need to rely on memory. Third, throughout the study, the researcher continuously challenged the consistency of her own interpretations by seeking alternate explanations. This process was designed to ensure that the researcher was not collecting and analysing data according to pre-conceived self-fulfilling prophecy (Strauss & Corbin 1998). Fourth, the researcher drew heavily on sources outside her study in order to validate impressions and interpretations. In particular, the researcher talked with peers and other researchers about her ideas and consulted with her supervisors regularly. Fifth, a "bricolage of methods" (Denzin & Lincoln 2005:4), including in-depth interviews, observations, and surveys was used to triangulate information and to confirm consistency of interpretation. Sixth, the researcher regularly shared her thinking with participants, asked to verify conclusions and to identify areas in which they believe she had "got it wrong". Finally, by incorporating story telling methodology into the research design, the researcher was able to consider the 'view from the other side' when reviewing and analysing observational data.

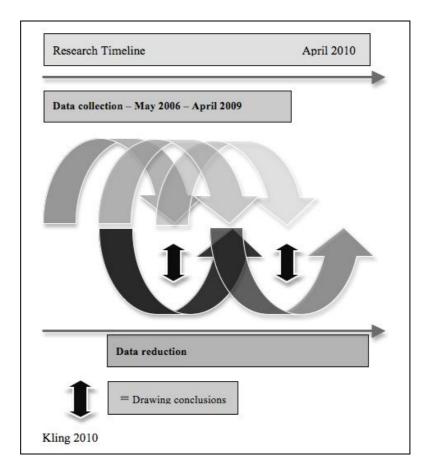
Analysis of data

Two primary methods were used for the analysis and interpretation of the data collected through the interviews, surveys and observations: subjective thematic analysis and computer-aided software analysis (Leximancer V3.07).

Thematic analysis as described by Leedy in (1997) involves "identifying the common 'themes' (sets of related issues, suggestions or perspectives) that emerge from an holistic analysis of the complete set of data available to the researcher" (Smith & Clayton 2009:9). The initial phase of thematic analysis involves coding the data from the interviews, observations, surveys and reflections on the basis of preliminary concepts. The reason for developing these codes is to bring themes from deep inside the data to the surface (Charmaz 2006, Neuman 2003; Strauss & Corbin 1998). The coding of data in subjective thematic analysis is largely derived from the researcher's experiences and background with the topic and, although highly subjective (as the title implies), is argued by many researchers to be a legitimate option for inductive theory (Denzin & Lincoln 2000, Minichiello et al. 2000, Bouma 2000, Bannister et al. 2001).

According to Denzin and Lincoln (2000) using ethnographic software programs to analyses qualitative data allows the researcher to identify and correlate predominant factors, search for subjective meanings, and relate the outcomes to "objective social structures" (p.824). An interactive model of the data analysis model used in this research is depicted in Figure 1 below.

Figure 1 - Research model



The model of the qualitative analysis above shows the timeline starting from the data collection stage of the research and, as such does not include the research proposal preparation time. It depicts the three methods of data collection with each of the downward curved arrows, indicating interview, observation and online surveys. The upward (darker) arrows depict the data reduction, analysis and coding performed systematically over the research period. The fading in the downward arrows depicts the data becoming saturated until no new concepts are evident. The fading in the upward (darker) arrows depicts the reduction of data and focus narrowing to several key theories. The double-sided arrows demonstrate this data reduction with progressively drawn conclusions. Where both arrow types overlap, this indicates the progressive review, comparisons and correlations performed during the research period for both data collection and data reduction. The ethnographic software program used to analyse qualitative data for this study was Leximancer V3.07.

The Leximancer software program is designed specifically to analyse text and extract thematic links. The tool was used to provide concept maps delineating primary and complex relationships derived from comparative analyses performed on the interview data. The significance of themes was represented both in two dimensional random fractals as well as concept maps and relative

counts (percentage incidences of coded themes). Diagrammatical and graphical representations of several of the relationships between words evident in the interview transcripts were also demonstrated using concept maps. All were concluded with an analysis and discussion of possible meanings derived from relationships evident.

The computer analysis was performed after the initial examination of data with the use of selective, focused coding and line-by-line coding, which illustrated several relationships between the 'learning history' of the participants and their current self-perception as learners. Recurrent and consistent themes were coded against phrases and words in context and comparisons elucidated several themes and links between participants' responses. Many key concepts became apparent within the analyses. The coding of terms related to or linked with self-perception was derived from my experiences and background with the topic and, according to many, is a legitimate option for inductive theory (Denzin & Lincoln 2000, Minichiello et al. 2000, Bouma 2000, Bannister et al. 2001). The decision rules (Trochim 2002) for coding were developed with the grouping of semantically similar terms and structurally similar sequences throughout the data. The process of selecting texts and extracts involves the judgement and discretion of the researcher. The use of verbatim quotes illustrating why the text was extracted and coded along with protecting the anonymity of each participant, yet providing descriptions to differentiate between participants, are also paramount to the analysis of interview data (Denscombe 2001). The qualitative data was explored to find the meaning and the way people understand events and circumstances within their lives and the interpretation of the patterns of behaviour focusing on the aims of this research.

The following chapter, Chapter 4, provides the findings from the interviews, observations and surveys employed for this study.

CHAPTER 4 - Data Analysis and Findings

Introduction

The purpose of this chapter is to present and discuss the research findings from the analyses of the data gathered for this study in order to provide insights into the research questions posed. Several key findings and aspects of interest are extracted from the data supporting the proposed themes and issues emerging from this research along with the complete data sets provided in the relevant appendices. The structure of this chapter follows an analysis of data obtained through interviews, surveys, informal observations and ends with a computer analysis of these data.

Data extraction

The analysis involved the process of delineating data obtained from interviews, observations and field notes into its relevant parts and, without losing a grasp on the whole, breaking the texts down to reveal elements, characteristics and terms that made up the structure of the language. This process determined how the constituent parts came together and analysed language combinations and 'language trees', all of which all form speech. The analyses of the data also included extracting references to, and influences upon the development of idiosyncratic speech, of environmental, cultural, historical or educational situations. Associations evident from the reduced data were further described as concepts, themes or patterns. Analyses similar to a conditional matrix (Strauss and Corbin 1990, cited in Denzin & Lincoln 2000:783) which is described as a set of concentric circles with each level corresponding to a different unit (or code) and the centre of each circle representing an action and interactions to outer rings of other circles which depict larger structures such as international or national concerns. Although not exclusively used in this research, an adaptation of the concentric circles analysis was utilised in describing the method for the theories developed and is outlined in the Figure 1 (Research Model). Visual displays flowcharts or maps which communicate the concepts visually for readers along with the analyses of data are provided to support the findings (Denzin & Lincoln 2000).

The analyses also utilised an examination of data with the use of selective, focused coding and line-by-line coding, to determine the relationships between learners history and current self-perception. Many key concepts became apparent within the analyses due to the recurrent and consistent themes within the data. The coding of terms of self-perception analysed were derived from the researcher's experiences and background with the topic which is a legitimate option for inductive theory (Denzin & Lincoln 2000, Minichiello et al. 2000, Bouma 2000 & Bannister et al.

2001). The decision rules (Trochim 2002) for coding were developed with the grouping of semantically similar terms and structurally similar sequences throughout the data. This process of selecting texts and extracts involves the judgement and discretion of the researcher (Denzin & Lincoln 2000). To illustrate and support the coding yet clearly differentiate participants, verbatim quotes are provided throughout the analysis (Denscombe 2001). The data was explored to find the meaning and the way people understand events and circumstances within their lives in the development and interpretation of the patterns of behaviour relevant to this research. An analysis of the data was also performed utilising the computer software program (Leximancer V3.07) with a comparison between the computer analyses and that of the researcher's coding.

Interviews

The interpretation of the interview transcripts was performed utilising both the recording of the interview and the researcher's observation within the interview. This section however discusses only the interview data. Interviews were recorded using a small device pictured below (Sava Media Voice Recorder, Model No. SR-38ON). This device was barely noticeable on the table.



Source: http://www.fpni.com.hk/bookpic2/NH1763.jpg

The use of a separate microphone was not required due to the inbuilt microphone. The concerns with recording interviews were not evident with any of the interviews, with no apparent nervousness, vulnerability or any other behaviour indicative of being uncomfortable evident from the participants (Minichiello et al. 2000). The recording instrument was very reliable with only a couple of words from all interviews being inaudible. These gaps were noted in the data but did not detract from the overall meaning or continuity of transcripts as many missing words were obvious within the context of the sentences. Recordings were transcribed using a half speed playback to enable every word to be documented with punctuations and annotations added to indicate the end of sentences, exclamation, pauses and other verbal nuances. The interpretation of

the interview environment is dependent upon this type of careful precision (Minichiello et al. 2000).

Coding interview data

Categorising and coding, according to Denzin and Lincoln (2000:780) is the 'heart and soul of whole-text analysis' (italics in original) and that the fundamental tasks associated with these processes are designed to identify themes from which to construct models for testing. Categories or code lists are useful in this process as they list, define and organise data into the hierarchies evident in language, which is also consistent with the description of selective, or focused coding as described by Denzin and Lincoln (2000). The categories and codes identified from interview data are discussed under each heading below.

Appendix F provides a full description of the interview techniques used with an explanation of how the interview questions align to the research premise. Appendix G provides a verbatim transcript of all interview recordings and Appendix H, a detailed list of the researcher's observations during each interview.

The categories defined by the research data are as follows:

- personal change
- perception of self as a learner (related to low or high self-perception), and
- motivation to learn (related to understanding of ability)

By analysing the definitions of the self provided by the interviewees it was possible to draw several comparisons from the data confirming that development of self as a learner impacts upon learning outcomes and the adult's motivation to attempt further learning. Participants are identified only by their age and gender with each subsequent response by a particular participant recognised accordingly.

Personal change

Several incidences drawn from interview statements were categorised as defining personal change. Personal change was seen as an important factor in the development of a perception of self as a learner, based on the process of learning being a type of change.

Personal change was categorised from language relating to the following:

- comments indicating a knowledge of change
- comments indicating recognition of the 'self' in the change process
- comments indicating recognition and either a positive or negative perception of how the 'self' would endure the change
- comments suggesting change resulting from external pressures (others)
- comments suggesting change resulting from internal pressures (self)
- any comments with historically referenced examples
- any comments with prospects of future change

The following excerpt from one interview demonstrates how a change of career impacted upon the person's perception of 'self' and of their understanding of the learning process. This participant had just described how he faced new learning environments without fear and provided the following responses to the ensuing questions from the researcher:

You enter the learning environment without an exact understanding of the expectations but are ready to face anything...

"...I have to look at what is detrimental and what may come back and bite me. You have to go throw a little bit of caution to the wind even if it means going a little bit off the track..."

And;

How has this worked for you in the past? Say for a new job or new role within a job?

"I went from a sales person into an owner and I came from probably a background to when I was in charge of other people anyway who I had a bit of - you know- knowledge of how to talk people... everyone has a different way to achieve..."

The statements above show knowledge of *change*, and an understanding of the 'self' in the process of change. There is also a positive reference to the 'self' in handling the inevitable change. This participant also went on to add:

"...everyone told me I have no idea and am never going to do it – and this got under my skin and it was a bit of a challenge for me to strive and that's what happened - it was a turning..."

(Male, approximate age 40 – 50)

The interesting finding here is that where a challenge is perceived to be detrimental to the person's image of the 'self' it may initiate personal change. There also seems to be a greater force if that judgment is from an external source. This participant's comments are well aligned to the internal motivators such as self-esteem, recognition and self-actualisation that are suggested by Maslow (cited in Kearsley 2010).

Similarly, the following excerpt confirms relationships to personal change in his statement in response to the opening interview statement from the researcher:

Tell me about you and your learning history – at work or otherwise...

"... I started out in hospitality in an industry which is very interesting and is - is one of those environments or workplaces a lot of people go into and not many survive..."

This response suggests this person has an understanding of 'surviving' through (future) change. The participant's response also supports a recognition of 'self' in that process of surviving change. Other statements by this participant show further language indicative of personal change and learning, with a consciousness of how that occurs, in the following comment:

"...even with external trainers – you can usually ask more questions to actually get the information in a way which is more suitable – which has held me in good stead for educating me...I am conscious of that..."

The statement above and the following comments by the participant supports the category of personal change as well as aligning to the findings of Boud and Solomon (2003) who suggested that people will name themselves as learners by interpreting and understanding their identity within the norms and values that exist in various environments and in other's impressions of them.

"A lot of time it turned out to be the expectations I placed on myself—unrealistic ones—because - people say that I am anal retentive—what they mean is that I try to be too much of a perfectionist ... so things take longer for me to do as I am not happy ... pressure environment and you have to actually just say 'look I just have to stop it will have to do'—and then you actually get the results and feedback back with comments it has actually been more than adequate and it's been beyond the expectations..."

and,

"I think that is the nature of life – for me the nature of change – for me I don't see myself in a single industry forever... yes I certainly see myself being able to merge into a more different role..."

(Male, approximate age 30-35)

Evident also in the comment above is the recognition of the 'self' as well as both the internal and external forces to perform through a process of personal change.

Responses received from another interviewees found several of the key aspects categorised as personal change as is demonstrated in the responses to the following question:

Tell me about yourself as a leaner – tell me whatever you like - about you and what you do when you are faced with new learning experiences?

"I am happy to be put into a situation of told to get on with it – but I kind of need that backup of knowing exactly what they expect – so getting the learning or training then I can do what they expect..."

This participant recognised their own ability to adapt to change and learning. She went on to make several statements which appear to show a strong understanding of the 'self' in the process of personal change, her knowledge of historical aspects of 'self', external pressures to change, and her own learning style, with:

"I used to think that I would never be able do it – that I am useless even now I think that...– I didn't really feel the need to do the study – I did it because I had to..."

"but I have kind of changed in the fact that me as a person wanting to do it rather than opposed to having to do it..."

"I now think not to give myself such a hard time — and actually just chill out — whatever is going to happen will happen — I am a very much a perfectionist and that sort of comes out in everything I do and in my work so if I can't do it to the best I can do it then I will not be able to sit back and say well I did the best that I could — not I should have done this or

should have done that..."

and,

"I can't see myself not studying..."

(Female, approximate age 25-35)

Interestingly, comments from this interviewee also indicated she placed importance on both her own understanding of the self as a learner but that she recognised this 'self' may behave differently within different learning environments.

Perception of self as a learner was categorised from the data relating to the following:

Perception of self as a learner

Perception of self as a learner was categorised from language relating to:

- comments ranking the 'self' as a learner
- comments recognising how the 'self' interacts in the learning environment
- comments describing the learner 'self' in either a positive or negative premise
- comments relating to how the person believes others' perceive them as a learner
- comments suggesting how the person recognises a change in the learner 'self'
- any comments relating to personal motivation related to past judgements of self or future success of self

Responses received from several interviewees below provided examples indicative of several of the key aspects categorised as demonstrating a perception of self as a learner. All responses below were in answer to the following opening question:

"Tell me about your workplace learning and how you embarked on new learning opportunities - how did you feel prior to the learning, during and after?"

"I can actually get into training courses myself and learn that way – like with my Masters..."

"I have never really stopped learning. Every single year I have done a new course or some learning, because I always have a yearning to learn something useful – I may never use it but is good to still have that knowledge..."

(Female, approximate age 25-35)

The comments above are related to the definition of the self as a learner, linking to elements of *perception of self as a learner*. They also provide alignment to the elements of *personal change*. Another participant provided the following response to the question above:

```
"There is a fear factor of course – 'what if I can't '-I think? Then I look at people who have gone before me and I think I can achieve", (Male, 42)
```

These comments seem to indicate reference to the perception of self as a learner in relation to what others' abilities are (i.e. ranking self). This learner also added:

```
"I was always in the top classes and never really did any homework or anything and just cruised through and got accepted to Uni..."

(Male 25-35)
```

The understanding of self as a learner and a positive perception of self are evident in this comment:

```
"I always think of outcomes - good and bad - and try to relate it to a scenario or give myself a couple of different scenarios of how it could go and also to look back at previous situations and at that outcome of what happened or where it could have gone..."

(Male, 40-50)
```

The perception of self as a learner is described as explicitly related to past experiences and of change of perception with reflection of previous outcomes:

```
"I actually have to change how I am actually trying to learn it..." (Female 25-30)
```

There seems to be a clear understanding of self as a learner and of how that perception can change:

"I find I work better under that environment under stress rather than an open-ended environment purely because you have to get on and you can actually drive toward it and you always know there is a light at the end of the tunnel..."

(Male, 35-40)

This demonstrates a positive perception of self as a learner and perhaps some change to get to this realisation:

```
"Having to diversify I am not afraid of learning and I have had a range of other jobs and learned different skills throughout life..."

(Male, 40-45)
```

This person describes themselves with a clear perception of how the self as a learner has changed, progressing from a lower self-perception to a high self-perception:

"I don't know - sort of really - not had that much of a struggle - its just my ability to apply myself...when I was younger I just couldn't be bothered I was lazy - but now I have the drive to go and do it is now the time"

(Male, 30-35)

Indicating a clear perception of self as a learner and changed self perception:

"I learn by clarifying; by recalling things; by getting feedback and by listening ... other people speak about it which consolidates it ..."

and

"I avoid training if I can't see the value in it... I prefer non-formal training I can access my training myself now – I don't wait for the organisation I will source if myself...I read extensively – soak up...I want to do it"

(Male, aged 42)

These comments describe the self in the learning environment and align to the concepts of both *personal change* with a very clear understanding of the *perception of self* as a learner:

"I suppose you as the teacher and you as the student we need to work out what works for me and or how to teach me and I have to learn how to learn from you and if you are successful in working that out and me – then I am probably going to learn and succeed more if it does happen and if it doesn't happen then I can see myself..."

"I was prepared that this course is a lot for me because I'm not a academic – you know – I don't act academic is not my forte – I am a visual and an hands on thrown in the deep end and come out the other side – you know – and that's my point..."

"...but I am looking around the room and I see peoples' responses and that and what we are doing and I can see there are people that are similar to me.."

"I haven't done the theory side of things as much as what other people in the class have..."

(Male, approximate age 40 - 50)

These comments indicate both an understanding of the learning environment in response to the participant's identification of self as a learner (and also as the learner in relation to others).

The description the participant provided below in response to a prompting question, resulted in a description that shows an understating of the perception of self as a learner in both a positive and negative light but also provides a good insight into how the person prepares for the learning environment in relation to either a good or bad outcome. These comments align with the definitions for both the *perception of self as a learner* and *personal change*.

Can you tell me about your experiences in your background and how you have faced learning for your jobs? I am interested in how people change and learn for their work. Can you tell me a history or story about how you learn and what you do when faced with new learning (when related to your job)?

"I always think of outcomes - good and bad - and try to relate it to a scenario or give myself a couple of different scenarios of how it could go and also look back at a previous situations and at that outcome of what happened or where it could have gone..."

And the participants closing statement:

"I think in the long term I – well I have come here to be successful – which will probably take me longer than others but that is not something that is going to be a surprise to me..."

(Male, approximate age 40 - 50)

This participant was describing both how he recognises (albeit retrospectively) how he performs in light of his own definition of a successful learner – a *perception of self as a learner*. He also seems to describe with a certain resolve that he is not expecting his perception of self as a learner to change – yet his thoughts fade off with an unfinished comment hinting that perhaps he has sensed the prospect of personal *change* - with his comment below...

"I know how to use it (points to computer) what would take some one 15 minutes may take me a day – or a couple of hours to sort through it and to find things – through different methods myself – I might....."

In response to the following question, the participant below provided several key definitions of perception of self as a learner. The question posed was:

There are different types of learning involved there - which one of those did you find suited you the best?

"Out of all the different styles – looking at university studies, hospitality on the job etc – for me ...hands on that was the most appropriate and reinforced the learning that had occurred..."

"I always try to look at things from a logical perspective – I try to break things down into bite size chunks or pieces – to make it feasible – if it is not you have to take it from – the entire task perspective – yes it does look daunting and yes it can be..."

(Male, approximate age 30-35)

These comments indicate an understanding of self as a learner, as does the following:

"As an age thing I see that I am probably never going to stop learning and I quite enjoy it..."

(Male, approximate age 50)

In answer to the following question the same participant commented:

If you had to face a learning environment where you had no previous knowledge in - what would you do? Have you done this?

"I will go about preparing myself and so have a preconceived idea about what I need to know and what I need to ask to ensure I can keep up..."

(Male, approximate age 50)

An indication of the preparation requires for learning and again a clear understanding of self as a learner is the response to the following question:

When you were faced with this learning what did you do – in preparation if any – how do you feel?

"I'm auditory really as a leaner – never take notes – just read through the PowerPoint later as a recap..."

(Male, approximate age 50)

This learner understands and has named their own learning style and went on to demonstrate a understanding of how their perception of self as a learner has changed over time with the response to the following question:

How do you perceive yourself if you are faced with a learning environment you expect will stretch you?

"I like a challenge – I think I have probably got the – if I was going to study medicine I might struggle a bit but – you know – I don't really have too much of a drama with it and maybe that's because of my experiences that I have learned that I could - I don't have too much of a drama with it – I wouldn't like to be doing it as a seventeen year old I don't think a lot of them get through it I - I think it is probably better with life's experiences..."

(Male, approximate age 50)

The following participant provided many descriptions of self and their own impression of their learning history, ability and probable future growth. In response to the question:

Why did you start learning and what drove you to it?

"I probably would have left in year 10 as I wanted to be a professional fisherman actually. I worked on the weekend and holidays in a trade I ended up picking up. I really didn't like school and then I went on to learn a trade. Adult learning after school – I learned through my trade and I really learned quickly. A year and a half into my trade I was running the show, driving the trucks etc. I learned out of necessity and I was quite good at..."

(Male, approximate age 30-35)

This learner provided both an historical perspective which demonstrates an understanding of the development of a perception of self as a learner as well as providing a rich description of what that perception of self represents. The same participant also mentions how his perception of self as a learner has altered in response to the following question:

If you had to face another formal learning how will you face it?

"I may have changed my view a little bit though because of the formal learning I am now involved with... [and].. I will probably ask someone and if I don't get the answer I want I will do a search on the internet..."

Comments from another participant also consolidate that perception of self as a learner was quite predominant from the interview data:

How do you go about ensuring you are learning?

"I learn by clarifying; by recalling things; by getting feedback and by listening..."

(Male, aged 42)

This participant is describing himself in terms of what he knows of the way he learns as well as the impact the environment (including the trainer) has upon his learning self, comments which align to the premise that comments recognising how the 'self' interacts in the learning environment and comments suggesting how the person recognises a change in the learner 'self' show the recognition of and self-perception of self as a learner:

What do you do if you have to learn something new?

```
"If I can read from the beginning to the end the whole course – then I can put it into perspective and understand what is coming up – If I can't do that I find it difficult to put it into perspective..."

(Female, approximate age 25-35)
```

The theme, motivation, was categorised from the data in accordance to the following categories:

Motivation

Motivation with regards to perception of self as a learner was categorised from comments relating to:

- comments stating personal reasons for learning
- comments which indicated forces driving the person to learn, and
- comments describing either a positive or negative motivation to learn.

Participants clearly stated both negative and positive reasons to learn along with underlying intrinsic motivations to learn. The perception of self as a learner was found to be an overriding factor regardless of negative motivation. The following responses were in relation to the question:

[&]quot;Voluntary participation you will really get a lot out of..."

[&]quot;A lot is to do with who delivered the training...

[&]quot;You develop a relationship with the trainer...

[&]quot;An external provider is a better environment for learning because you can take a risk in the external environment like – asking silly questions – and not feel like a goose in front of peers..."

"Tell me about your workplace learning and how you embarked on new learning opportunities - how did you feel prior to the learning, during and after?"

"There are ramifications for not complying – such as probation or IR ramifications..."

"I believe that there is very little retention or very limited energy with this type of learning – it is about satisfying the requirements – not about the content as much..."

"I can access my training myself now -I don't wait for the organisation."

(Male, aged 42)

These comments align to the elements suggested for *motivation* with the motivation to learn, being described as both negative and/or self initiated. From the same participant, the following statements seem to indicate a clear motivation to learn for personal reasons:

"I am learning this to improve my lifestyle and flexibility..."

"When I am studying I will make the distinction between work and home — so I will actually get up and get dressed & keep a record of how long I study and monitor it straight away to correct it (if I find I am not studying enough)..."

"I sense a whole new experience – and I am bored with the system to I will be very happy to do something else..."

Woven into the stream of verbalised thoughts from the participant below are many of the concepts of motivation identified for this categorisation. The question posed prior to this response, were:

What you think of yourself in the future – what is your vision for yourself and I can hear you thinking the next steps are going to be interesting?

"...some change is constant – this company we literally produce a new release every six to eight months and we have to change from a software perspective every day which keeps us on our toes – literally every day – which is draining – but at the same time challenging in a good way – so you never satisfy the – as to how that impacts careers or working life – you can't pre-empt I mean you can plan and try to shape things – you find a input or a different impact – I think that is more feasible than was potentially before – I look at my role with a company with 500 staff – we've got one trainer - I mean there is a lot of stress..."

(Male, approximate age 30-35)

Identified in this response are perhaps positive *motivations* based on the personal identity of self and that of the position held the company, and career aspirations along with perhaps negative motivation in related to stress. For example:

Tell me about your workplace learning and how you embarked on learning opportunities - how did you feel prior to the learning, during and after?

```
"Having to diversify I am not afraid of learning and I have had a range of other jobs and learned different skills throughout life and so..."

(Male, approximate age 50)
```

This response was identified as identifying self as a learner as well as indicating a positive *motivation* in relation to the understanding of self as a learner. The relationship between learning and motivation were also expressed by the following participant in relation to the question:

How do you perceive yourself if you are faced with a learning environment you expect will stretch you?

```
"That's a hard one - I don't know - sort of really - not had that much of a struggle - its just my ability to apply myself - when I was younger I just couldn't be bothered I was lazy - but now I am not lazy and have the drive to go and do it is now it is the time - time is the commodity now that I don't have..."
```

and,

"I am going to try to knock this over as soon as possible and then do an MBA and I was thinking of doing law or second degree in law..." (Male, approximate age 35-40)

In these responses the participant identifies both the *motivation* from a personal perspective as well as those from external forces. The participant below makes a statement about what he sees as the difference between external and intrinsic motivation from his response to the following questions:

Tell me about your learning history maybe going back to school or your recent adult learning. How did you embark on them and how did you feel?

"I probably only learned as much as I needed to learn – what I put into it I got out of it..."

"I didn't really want to do it -I realised I needed to do it but that style of learning to me is something I don't often enjoy..."

and.

"A lot of the government requirements just cement my opinion about it ..."

(Male, approximate age 30-35)

And lastly; a comment indicative of the type of motivation that may exist with a learner who has a high self-perception of self as a learner seems evident from the response below in answer to the following opening question:

"Tell me about your workplace learning and how you embarked on new learning opportunities - how did you feel prior to the learning, during and after?"

"If you have an interest in something then you will learn it..."
(Male, 50)

This description suggests that, for this participant, learning is related to interest (*motivation*).

As is visible in the excerpts above, the relationships between perceptions of self as a learner were found to exist in much of the data obtained from in-depth interviews. Many comments made by participants also correlate to the findings of Velez (2006:15) who suggested an extrinsic motivation to learn may be ineffectual where the learner's perception of self as a learner does not exist.

Several challenges described by some of the participants were termed as personal struggles, lack of confidence, difficulties with training method, memories of past learning, dealing with change, and balancing learning and work. These elements, however, were not included in further analyses due to the limitations with this study. However, many respondents attributed negative experiences as a result of the environment, teachers and peers or a combination of some or all; with participants' also indicating their own ability (or perceived ability) acts as a pre-determinant of their success.

According to Merriam and Brockett (1997:129) 'teaching-learning transaction is at the heart of all adult education practice'. Suggesting a thorough knowledge of issues related to adult's experiences would open the doors for better study options for (more) adults in the future.

Although several anomalies (which bear further investigation) were evident with the snapshot of this current research, it seems fair to state there is a consistency from participants' interview data demonstrating how they attributed previous exposure to, and experiences with, learning environments as impacting upon their existing attitudes to learning.

Comparisons with data from short answer survey responses

The following section illustrates the comparison between the comments received from in-depth interviews and those provided through the anonymous online survey questionnaire (Appendix D). Participants are not identified within this discussion to enable a comprehensive and overall impression of the whole data set, however the participants are as those identified above.

The data reported below are verbatim and have not been altered to correct spelling, syntax or any other errors. As these data were obtained through the online anonymous surveys, the apparent 'emerging themes' were noted by the researcher as part of the categorising and understanding of the type of data being collected. The key point to note with the survey data is that each of the entries below are from a different participant for whom there may not have been any contact with the researcher or other participants, and the only known characteristics are those that were provided along with the date the survey was generated. Not all short answer questions are provided within this discussion, as these are quite extensive, however the full transcripts of survey responses are provided in Appendices I and J.

The example responses from the survey data provided below highlight quite remarkable similarities to the responses from the interview data obtained and discussed above.

The extracted codes or categories for the survey results identified below are similar to those found within the interview data; and are as follow -

- comments ranking the 'self' as a learner
- comments recognising how the 'self' interacts in the learning environment
- comments describing the learner 'self' in either a positive or negative premise
- comments relating to how the person believes others' perceive them as a learner
- comments suggesting how the person recognises a change in the learner 'self'

 any comments relating to personal motivation related to past judgements of self or future success of self

The following question was closely linked to the sample requirements of this research; targeting people with a history of learning on the job (as would be expected by at least five years work history):

Question - "Can you describe how you (have felt) feel if required to learn a new process for your job?"

"Excited that I have the opportunity to learn a new skill but in the back of my mind I have a 'fear of failure' thought. Hence, I apply myself to the learning process and try to ask as many questions as possible to avoid this"

[these comments appear to indicate a *perception of self* as a learner described in terms of the person 'conversing' with the self]

"I do feel anxious as if failing to learn the new process without an opportunity to resit means losing my job - annoys me as I do not like to fail"

[indicating a lower *self-perception* prior to entering a course - expecting outcomes based on previous history]

"I am always worried about learning something new, as did not with to fail, Once I was participating I calmed down and enjoyed myself"

[indicating personal change of self-perception perhaps moving to a higher perception of self]

"A little bit nervous, but confident"

[again, indicating a *change of self-perception* with a tentative expectation of higher achievement]

"Depending on what job and what I am learning - sometimes boredom / frustration; sometimes nervousness / worry over my competence; sometimes interest" [indicating an understanding of the self and a perception of self as a learner as fluctuating perhaps depending upon the environment or motivation (with interest and boredom)]

"Excited that I'm learning something new but anxious about doing it correctly."

[indicating a *perception of self* with some negative self-perception]

"Generally I enjoy training for job requirements and used to grasp things quickly. I have found that it now takes more effort on my part (age I think) and at times can be a little apprehensive until I can see were it is heading"

[indicating a clear understanding of perception of self as a learner]

"I have no problem with learning new processes as long as training is comprehensive and there is a degree of mentoring or support available."

[indicating a clear understanding of perception of self as a learner and learning style]

"Excited.....knowledge is the path to compassion, and understanding. Knowledge gives the opportunity to challenge the mind to look at things from a different perspective."

"I feel very enthusiastic, and take time and effort to learn the process and how it fits into the larger picture. I ensure I learn a process well before making suggestions to improve it"

[Both comments are similar to elements of motivation, knowledge of and a high *self-perception as a leaner* as well as an understanding of learning style]

"Exhilaration, love the challenge of learning something new"

[indicating both *motivation* and high *perception of self as a learner*]

Similarly, several responses to another of the survey questions below provided links to the objectives and categories determined by the research, for the following question:

Question - "Please describe what you do prior to attending a training/learning program..."

"Basically worry about not seeming like a complete fool with no ideas. So lots of pre-reading to prepare"

[indicating a low *self-perception* but an understanding of learning styles]

"I will have a quick read over any material found but won't stress over it too much because that's what I'm there for - to learn."

[indicating a high *self-perception* and a motivation to learn]

"Try not to get nervous. Try to look after health and to ensure am able to operate optimally."

[this person has indicated a lower low self-perception, perhaps even affecting health but an understanding of their own *self as a learner*]

"This depends - if with peers I study as I don't want to be made to look stupid. Generally I do some work or reading before attending a training program"

[these comments seem to indicate a slightly low *self-perception* and a measure of self in relation to the expectations of others]

"Find out a little about what the training/learning might entail (topics, units of competency etc) Travel planning so that I know where being held Try to find out the number of people attending. Ascertain type of learning set-up, eg small groups, individual, hands-on, etc. Ascertain the method of assessment (if required) - oral, short answers, project, exam etc."

[indicating an understanding of *self in the learning environment* with *motivation* to succeed by planning to learn]

"Whenever possible, I would research the field or scan any pre-reading material provided. If pre-reading is provided for information only, I will not read in detail - I prefer to maintain an open mind on detailed content. I will only read thoroughly if the topic is of special or current interest, or there are tasks to complete"

[again, a reasonable level and understanding of the *self in the learning environment*]

"Do a little research unless there is a pre course package. I like to come in relatively open minded and not pollute the training"

[This comment suggests a high *self-perception* and understanding of the behaviour of self in the learning environment]

"I look forward to what the course is going to offer me so I often think about that, how I will be able to use it. I also think of any questions I may have, write them down and at the end of the course ask them if they haven't been addressed throughout the course"

[again, these comments are descriptive of a person with a high *self-perception* and knowledge of own *learning style*]

In response to the following survey question:

Can you tell me, in your own words, about your past and current experiences of learning on-the-job?

"Most of my experiences of on-the-job training have been positive encounters. However the majority of training I felt was pitched at a lower level than it should have been. The delivery of this training has been mostly 'death by PowerPoint'"

[these comments show someone with a lot of background with learning environments and perhaps positive learning experiences resulting in a high *self-perception*]

"Have had extensive opportunity to learn as my employer was extremely proactive offering a lot of course and learning experiences on a frequent basis. With new positions I took on in the company I was always offered mentoring and the tools too display my efficiency"

[this person's description of *self as a learner* is positive and they indicate they are an experienced learner (again with positive successes in learning environments)]

"I learn more quickly by doing - i.e. visually, feeling (tactile) and operating. I was forced to complete courses with set subject - not fun at all!"

"To grasp theoretical concepts, I like a clear explanation or the opportunity to calmly read and understand the information. If it is a practical activity e.g. learning new software program or doing things a different way - I like to know why I am doing things this new way (re the theory behind it) and then have an opportunity to practice before I go online / deliver the produce in the real world..."

"I have had to do training which I don't like. I find I can do it, but I don't remember things that well. Other things I have learnt that I do really like - I get much more nervous and emotionally worried - which affects my ability to learn - often have issues around self-worth and competency"

"A large amount of my experience is from on-the-job training (one-on-one). I think it best fits my learning style"

"I have found that I have learnt a lot quicker by actually doing as apposed to just being told. I find it a lot easier to retain the information".

"When presented in an interactive environment I have found learning stimulating and experienced a more complete learning experience"

"My experience is that if I did not seek to learn, others were not willing to show me..."

[the thread throughout these comments align well to the elements of having a very clear understanding of the *self as a learner* as well as history with different learning environments]

"My best 'on the job' learning experiences have been when information has been presented in a practical way, and opportunities to test this learning and discuss has been integral. As I have almost always worked in a business environment, most of the training has been conducted in-house"

[this comment shows both an historical understanding of the development of *self as a learner* as well as the types of learning environments best suited to the person's perceived concept of self]

"My school experiences were very limited and in the most uninspiring. My education did not start until I left school and started work. All my training was on the job until the early 80's when training really started to move into the workplace"

[this participant indicates the change of *perception of self as a learner* and how the environment may affect learning]

"I am quite a practical person and learn best seeing how the job is performed and then performing it myself. I have found it difficult to complete complex tasks on verbal instruction only" [an example of how the learner describes themselves and their *perception of self as a learner in* relation to learning styles and environment]

"Past: Good experiences when 'fed' stretching work - felt achieving & stimulated Bad when dysfunctional environment/boss and not appreciated or respected. Often lasted weeks to months before I left whether I had another job organized or not. Current: good experiences - I enjoy new experiences (often even difficult ones) and I am a fairly independent learner so cope well with finding my own way but prefer a supportive situation where I can ask questions if I need to and I can make my own decisions without bureaucratic inhibiting people/factors - Bad experience for me mostly when not shown respect or freedom to solve problems or interact with people (many bureaucratic-style orgs)"

[this respondent provided a very thorough and structured response to the question outlining clearly aspects of *perception of self as a learner* as categorised. The participant has also provided a description of how their perception of self as a learner altered in relation to new experiences and their understanding of those experiences aligning well to elements of *personal change* and *motivation*]

In response to the survey question below several participants' responses are categorised:

Can you describe how you (have felt) feel if required to learn a new process for your job...

"Excited that I have the opportunity to learn a new skill but in the back of my mind I have a 'fear of failure' thought. Hence, I apply myself to the learning process and try to ask as many questions as possible to avoid this..."

[this response shows aspects of low self-perception moving towards a change of perception of self as a learner]

"I do feel anxious as if failing to learn the new process without an opportunity to resit means losing my job - annoys me as I do not like to fail"

"I am always worried about learning something new, as did not with to fail, Once I was participating I calmed down and enjoyed myself"

"Anxious at first usually but once the new process has been revealed usually feel excited about learning something new"

"Excited, nervous, worried, keen, eager, frustrated"

"I find it to be a challenge and most of the time I feel excited. Sometimes a bit apprehensive if it's around numbers"

"slightly flustered, new processes seem to always be more complex and not as good as old processes- fear of the unknown I suppose. It is seldom that new processes are introduced with any "pre-training"/ preparation"

[these responses are indicative of the participant's perception of self as low prior to entering a training or learning environment but with some expectation of success]

One of the key questions in the survey questionnaire was Question 18 as indicated below. The responses again provided good indications of the perception of self as a learner being strongly related to both successes and failures as well as aspects related to the environment, motivation and the expectations of others.

Survey Question 18 was: Has your self-perception of yourself as a learner altered over time? If yes, please explain how you believe this occurred...

"Yes, I am a more competent and dedicated learner. I have learnt more being an 'adult learner' than when I was a young student attending unit at the age of 17..."

"I have become more analytical in my approach and are more aware of areas I need to concentrate on to make the experience more worthwhile. I have also found my attention span has actually decreased so I need to talk more care to cover material outside of the training course"

"I did worry about others' opinion about my abilities but as age and experience has shown me that others only worry about themselves. I don't care any more about others' opinions of me..."

"I personally had no self awareness as to how I learnt i.e. when doing a degree! Now I know that I naturally prefer certain ways of learning and seek out info using y preferred learner style."

[all of the above provide statements indicative of a change in *perception of self as a learner* and a cognitive understanding of that *change* and often an analysis of the reason behind the change]

"I have always enjoyed learning and was a good student. My family has a philosophy regarding the need to be lifelong learners. For the most part this self-perception has remained very stable. I like to learn something new each day, even if this is a small thing."

[this participant indicates the environment has a strong (and in this case positive) influence on the development of self as a learner]

"I now feel more confident as a learner. This has occurred because I can now add more of my life/work experiences into the learning situation, thus combining the practical with the theoretical elements. Learning no longer is viewed as something that is done in isolation, nor just for the behefit of university qualifications."

[this participant has defined his/her experience as the reason behind a change of perception of self as a learner]

"Yes. I have gone from a passive learner to an active learner, always looking for the lesson in most things I do; analysing and reflecting to see how I could do things differently."

[this participant has stated rather clearly that his/her understanding of the *self as a learner* has been a cognitive recognition of *personal change*]

Yes, I am more confident in my learning now. I wish I had of had this confidence in my 20's and early 30's as I think I would be on a different career path (not saying I am unhappy with my career) but I studied my degree late and chose (education) to suit my 40 lifestyle as a working mum. I think if I had the confidence earlier I may have chosen science, justice or law.

Yes. I used to stress out too much and cram when I was at university. I have since acquired more control over my cognitive processes and my attitudes towards study. I find that if I can visualise the benefits, I can reframe the study as a personal challenge rather than a threat. Since I enjoy challenges,

[both participants above also provide responses that align well with the premise that the *perception of self as a learner* can *change* and that a knowledge of self as a learner is a positive indicator for successful outcomes from learning opportunities]

Quantitative ranked questions - descriptive statistical analyses

Several of the ranked questions (Questions 1 to 14) from the online survey are compared, analysed and discussed in light of the short answer questions (Questions 15 to 19) from various participants below. Participants were anonymous and, as such are only identified by an identification number (ID) which related purely to the order survey responses were received, and

as are indicated on Appendix E. For the purposes of this discussion, however, identification only with gender, age, employment or qualifications are detailed.

Several interesting anomalies were found within the responses provided.

The first are analysed from the question:

When faced with a need to learn new information what is your level of worry?

A female participant of between 40-45 years of age responded:

"learning on-the-job is the easiest form of learning for me but I like to have a manual/ theory for it as well. Practical experience is the better way for me to learn. Generally my colleagues have been understanding in waiting for me to learn"

This is congruent with the aspects of *perception of self as a learner* and those of *personal change*. This participant ranked her level of worry at six (6) from the scale where 'Very Worried' was 1 and 'Not Worried at All' was ranked at 7.

Another female participant aged between 26 and 30 years of age, with a business history, a Certificate III in Business and over ten years work experience, answered the same question with:

"to grasp theoretical concepts, I like a clear explanation or the opportunity to calmly read and understand the information. If it is a practical activity e.g. learning new software program or doing things a different way - I like to know why I am doing things this new way (re: the theory behind it) and then have an opportunity to practice before I go online/deliver the produce in the real world"

This participant ranked her level of worry at the lowest level seven (7) from the scale above.

Both responses above demonstrate participants have an understanding of self as a learner and that learning occurs better where a variety of visual, kinaesthetic and auditory styles are incorporated into a program. Participants also suggested a preference to understand the practicability of new skills in order to apply them, as was illustrated by the following responses.

A female participant aged between 31-35, with over ten years in business and holding a Masters Degree, response to the same question above, with:

"most learning has been ad hoc. There has been no written procedures. Generally you follow someone around for the day and then it is your turn. As we work in a lab this is often recorded"

This participant ranked her level of worry at five (5) from the same scale - where 'Very Worried' was 1 and 'Not Worried at All' was ranked at 7.

From the comments above, perhaps with returns of 6, 7, and 5 respectively, and from their comments supporting the ranking, perhaps having a learning history is responsible for lower levels of worry (particularly where the learning is related to the person's work) – as all participants spoke of learning in relation to their roles whereas the question did not specify what type of learning environment. Two of the participants had undertaken study; one with a vocational based certificate and the other with a higher education degree. Although outside the limits of this research, perhaps investigating where the type of learning influences the perception of self as a learner may be useful.

Another participant who was male, between 41 and 45 years of age, with a Diploma qualification and had over ten years work experience in business, responded to the same question with a rank of 6 and the following comment:

"I have found that I have learnt a lot quicker by actually doing as apposed to just being told. I find it a lot easier to retain the information"

This indicates the person's understanding of self as a learner and learner style preferences.

A female participant, aged between 56 and 60 years of age, with a Diploma level qualification and also with over ten years work experience in business, provided the following response to the question below:

Can you tell me, in your own words, about your past and current experiences of learning onthe-job?

"learning on-the-job is par for the course in (removed for anonymity).

I undertake it regularly for regulatory and personal development reasons – I generally enjoy learning"

Although the participant did not provide any descriptive terms as to whether the prospect of learning was a worry or not a worry, she ranked 1 as her answer to Question 1 (*When faced with a*

need to learn new information what is your level of worry?), and where the rank of 1 indicates a response of 'Very Worried'.

Interestingly, this participant also responded to Question 11, (My learning at school was a bad experience) with a rank of 2 (from the scale of 1 to 7, where 1 is Never and 7 is Always). To Question 12 (Learning I have undertaken as an adult has been very enjoyable) with a similar scale, returned a rank of 6 and with the same ranking system ranked her answer as 3 to Question 13 (Learning I have undertaken as an adult has been very difficult). These answers indicate the participant did not recall having bad experiences at school; found learning as an adult enjoyable and did not find learning as an adult difficult. Perhaps it is reasonable to consider her answer for the Question 1 (When faced with a need to learn new information what is your level of worry?), and responding with rank of 'Very Worried', was due to the participant misreading the question and perhaps the response was intended to be 7? Conversely, this rank could be a deliberate and correct response indicating a low perception of self as a learner, where workplace learning environments are concerned, but a high perception of self as a learner within any other learning system.

The anomalies with the responses to certain questions, as with the last participant above, were also evident from another participant. This participant responded to Question 11 (*My learning at school was a bad experience*), to Question 12 (*Learning I have undertaken as an adult has been very enjoyable*) and Question 13 (*Learning I have undertaken as an adult has been very difficult*) with ranks of 2, 7, & 4 respectively (for the same scale above) demonstrating a similar outcome to that of the previous participant. A full set of the survey ranked questions are provided in Appendix I.

Four other participants reported the highest responses to Question 14, "I will deliberately seek out and attend learning opportunities..." with all four participants responding with a rank of seven (7) on the scale below.

Very worried						Not worried at all
1	2	3	4	5	6	7

Although these four participants ranked deliberately seeking out learning opportunities at the highest level, several further anomalies are noted with other responses, in particular, one

participant provided a high ranking to Questions 11 (*My learning at school was a bad experience*), 12, (*Learning I have undertaken as an adult has been very enjoyable*) & 13 (*Learning I have undertaken as an adult has been very difficult*) reporting ranks of 1, 6, & 2 respectively (aligned to *Never* to *Always* ranked 1 to 7 accordingly). However one of the participants above reported a rank of 4 (Sometimes) to Question 13 (*Learning I have undertaken as an adult has been very difficult*).

A female participant, aged between 36-40 with over 10 years work experience and who holds a Diploma qualification, also recorded incongruities with her responses to Question 2 (What do you consider is your ability to learn?) for which she ranked seven (7) indicating Very High Ability, yet a direct contrast recorded the following response in answer to Question 18 (Has your self-perception of yourself as a learner altered over time? If yes, please explain how you believe this occurred?);

"no, I still think I have to work harder than other to learn skills"

Consistent with the literature on adult learning is the response from one participant to Question 18 (Has your self-perception of yourself as a learner altered over time? If yes, please explain how you believe this occurred?), answered:

"Definitely. As an adult I have choice over what and how I choose to learn"

And from another participant who answered Question 18 with;

"Yes - with maturity has brought about more fear and more confidence. A contradiction in terms but usually with a good outcome"

Intriguingly, this same participant answered Questions 7 & 8 (*I enjoy the challenge of learning new information*) and (*Rate your own perception of yourself as a learner*) at the midline of the range returning 4 (*Sometimes*) and 4 respectively, where 1 is, '*Learns With Difficulty*' and 7 is, '*Learns Very Easily*' (for Question 8).

From these results and others it is evident that self-perception plays a key part in the impetus to attempt new learning, in the acquisition of new skills and in the self-directness of an adult learners seeking out and valuing learning opportunities. Exactly how self-perception can be measured and verified will be examined in the final analysis of this study, however it is hoped this study will

add to the existing models of adult self-perception, which will add to the existing literature on adult learning.

With this new information adult educators may better understand, and accommodate for, the depth of influence (it appears) self-perception plays in the adult learner they see before them.

Measure of self-perception of self as a learner

To quantify or generalise a perception of self as a learner along a continuum from LSP (Low Self Perception) to HSP (High Self Perception) or NSP (Negative Self Perception) to PSP (Positive Self Perception) would be difficult without subsequent empirical investigations. However, from the data and analyses above it is clear there are specific attributes seen that relate to both negative or positive (low or high) self-perception. In light of the comments by participants in this research, we may also rename Low or Negative Self-perception of self as a learner as 'non-confident' and 'confident' for High or Positive Self-perception. It can be assumed by those comments received that confident learners actively organise material to be learned according to their needs and of its relevance – the nature/difficulty is not considered as an impeding factor. Non-confident learners consciously *avoid* organising material – afraid to confuse and frighten themselves by realising it is as difficult as they suspected (this is transparent for work that is below the standard they expected also). This lack of pre-organisation may in fact amplify the issues/fears facing people with negative self-perceptions.

Survey results comparisons

Descriptive statistics and several comparisons for short answer survey results are expanded and discussed below. The full online survey questionnaire is provided in Appendix D. Not all survey questions are noted, however, several interesting incongruities evident across matched questions within the surveys are provided. These results indicate that further surveys may yield insights into the responses obtained thus far and self-perception.

Questions 1 and 7 are displayed individually below and several are paired together to illustrate the deliberate alignment of the ranking between the paired questions. What appears to be an interesting anomaly with adult learners is that some may exhibit levels of worry but are keen to enjoy a challenge of new learning opportunities.

Perhaps this can also be linked to the possibility of personal change and perception of self as a learner being closely linked to motivation and challenge?

Figure 2 - Question 1 survey results

• Q1 - When faced with a need to learn new information what is your level of worry?

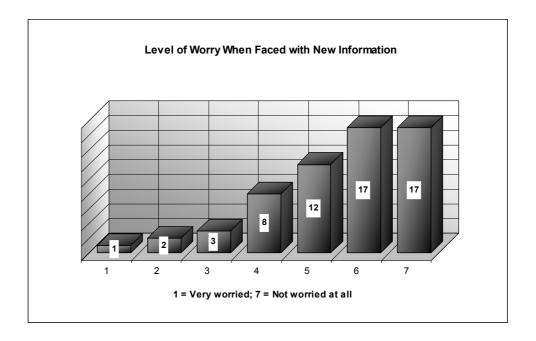
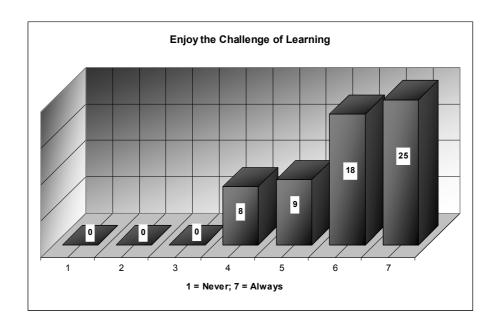


Figure 3 - Question 7 survey results

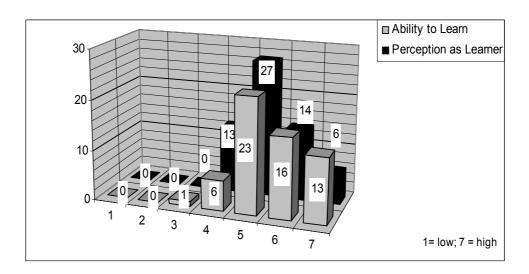
• Q 7 - I enjoy the challenge of learning new information.



Of interest also were the comparisons between Question 2 and Question 8 below. Participants matched their ranked ability to learn with a level of alignment to rating their own perception of self as a learner.

Figure 4 - Question 2 and 8 comparison survey results

- Q 2 What do you consider is your ability to learn?
- Q 8 Rate your own perception of yourself as a learner

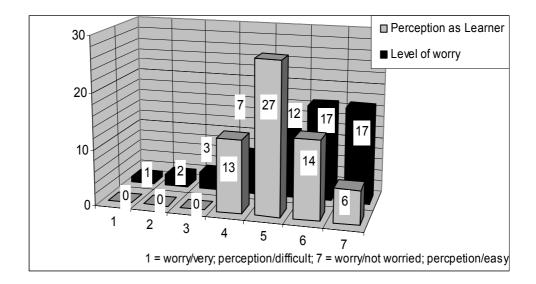


When comparing Question 1 with Question 8 (below) there is a slightly low 'perception of self as a learner' with more people at rank five (5), which is just above the mid-line on a rank from 1 - 7.

However most participants indicated 'level of worry' when faced with new learning environments as low.

Figure 5 - Question 1 and 8 comparison survey results

- Q 1 When faced with a need to learn new information what is your level of worry?
- Q 8 Rate your own perception of yourself as a learner



When comparing questions 10 and 11 it is evident that many participants (almost half of the 60 respondents) provided a 'neutral' response (4) from the ranking range of 1 - 7. Yet with the following question (Q 11) which asked whether respondents remembered bad experiences at school (a deliberately closed and leading question), over fifty percent (36) responded below the midline and fourteen (14) gave 'neutral' ranks and only six (6) indicating experiences at school were bad. There were two (2) non-responses to this question. For question 10, only 24 respondents indicated they remembered what they learned at school. The two questions were asked in succession to determine whether the ability to remember what was learned at school may be linked to bad (or good) memories. It is assumed that good memories were implied if participants provided a low rank for question 11. Twenty-four (24) respondents indicated they remember what they learned at school and only six (6) with memories of bad experiences. Perhaps this means that eighteen (18) remember learning from school better due to good experiences at school?

Figure 6 - Question 10 survey results

• Q 10 - I can remember what I learned at school?

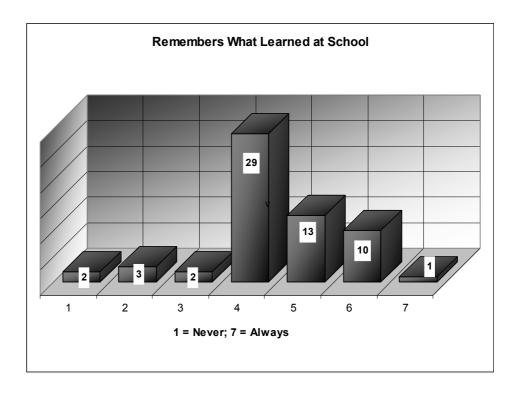
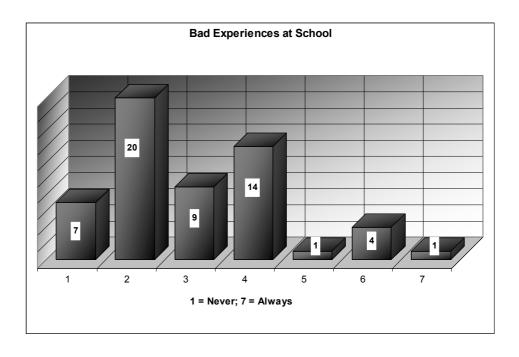


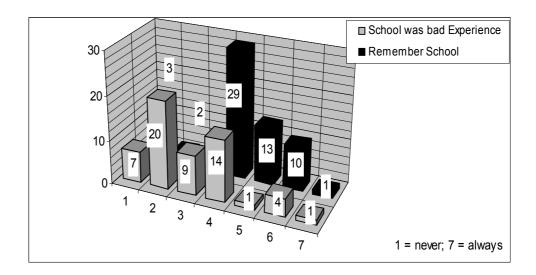
Figure 7 - Question 11 survey results

• Q 11 - My learning at school was a bad experience...



The comparison graph for questions 10 and 11 are provided below.

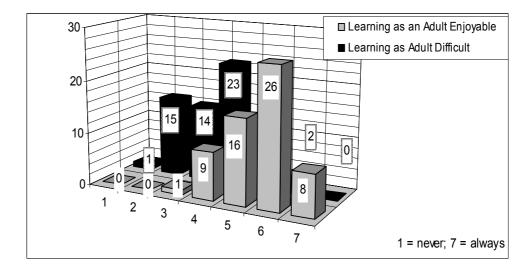
Figure 8 - Question 10 and 11 comparison survey results



Similarly, both question 12 and 13 were cross-checked and the results provide an insight to LSP or HSP with regard to learning as an adult being enjoyable (expected relationship to HSP) and learning as an adult being difficult (possible links to LSP).

Figure 9 - Question 12 and 13 comparison survey results

- Q 12 Learning I have undertaken as an adult has been very enjoyable
- Q 13 Learning I have undertaken as an adult has been very difficult



Question 14

• I will deliberately seek out and attend learning opportunities

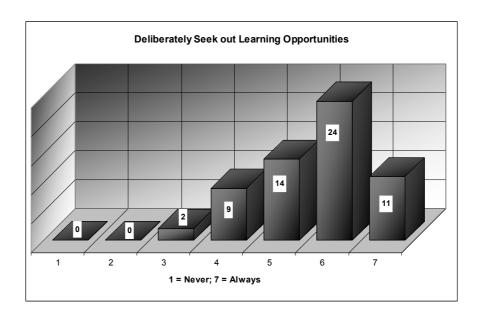
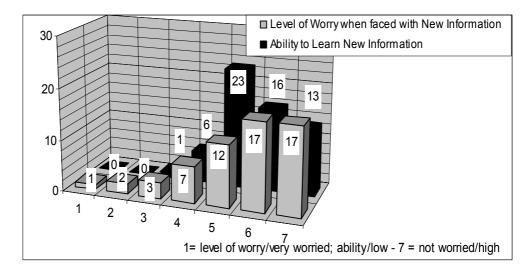


Figure 10 - Question 1 and 2 comparison survey results

- Q 1 When faced with a need to learn new information what is your level of worry?
- Q 2 What do you consider is your ability to learn?



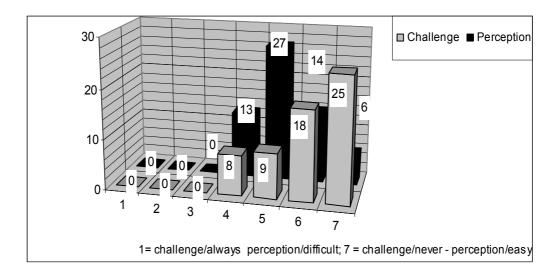
It is clear from the comparison of questions 1 and 2 that the level of worry and ability to learn are positively correlated. There is a slight drop in perception of ability to learn new information but the level of worry remains the same not increasing (which would be indicated by a lower number).

One other interesting comparison from the survey data is that of question 7 of learning and question 8. Figure 41 below displays the comparisons depicting that perception of self as a

learner is higher than enjoying the challenge of learning. The perception of self as a learner drops in comparison (as dramatically) as the challenge rises. These figures are indicative of learner self-perception ranked to the difficulty (or other perceived issues) with the information that will be presented in the new learning environment.

Figure 11 - Question 1 and 8 comparison survey results

- Q 1 I enjoy the challenge of learning new information
- Q 2 Rate your own perception of yourself as a learner



With regards to the comparisons from the survey results, there are certainly issues that would warrant further investigation and which, the results indicate have relevance to all aspects of adult learning.

Informal observations

Along with the analysis of both the interview data, survey ranked questions and short answer questions informal observations within the interviews. From these field notes it is possible to view how interpretations of the interview data were supported. A full transcript of the field notes is provided in Appendix H – Interview Observation Notes.

The categories attributed to these notes, and later transcribed into the analyses herein, were those of the benefits of learning (seen as motivation), self-directed learning (seen as a positive self perception as a learner, motivation and personal change) and flexibility (related to personal change).

Some of the transcripts and the researcher's comments are provided below to illustrate these evaluations. The comments by the researcher were made from streaming thoughts and therefore may not necessarily demonstrate grammatically correct syntax.

The research objectives are provided below, in reference to the comparisons made in the field notes:

- 1. What experiences most influence the perception of self as a learner?
- 2. What aspects of self-perception promote the development of self-directed learners?
- 3. Can self-perception change, and if so, how?
- 4. Can an understanding of self-perception by a learner improve their learning processes and outcomes?
- 5. Is self-perception linked with conscious interaction?

One of the participants talked about the lack of challenge in relation to the opportunities, within his workplace, for learning, growth and self-development. He spoke of his own understanding of his need to progress, described his learning style in detail and seemed to have a clear understanding of himself as a learner. His perception of self as a learner was termed positively.

When asked to talk about his learning on the job, this participant responded thus:

"The X are different to the Y sector with regard to the skills sector and there seems to be a big distinction and responsibility between what the organisation has deemed as compulsory... You are expected to jump through the hoops...the outcomes are pre-set. There are ramifications for not complying – such as probation or IR ramifications..."

Researcher's notes and observations made with regard to the participant's body language were:

• this participant's body language displayed a noticeable downward stare with mid-range gaze, body forward with a slightly heavy lean on table; facial expressions not specific but a little 'loose' and appearing a little tired. The participant looked up and around the room and then back at me...pausing after the word 'complying'...then with a steady knowing gaze...completed the sentence and then paused again at the end...slightly leant back in chair at end of sentence, no hand movements, sitting loosely on the table or on lap...this statement seemed to be related to a personal experience but this was not elucidated...

Observations made with regard to the participant's voice were:

• the participant's voice seemed raised and was quite energetic, yet along with his body language, seemed to portray some emotional undertones sounding like; despondency – although perhaps not as strong as the emotion despondency, but more the emotion attached to the stress of being unable to affect change for personal gain or growth (as related to the participant's current role)

- the participant's voice altered to a more monotone range after a short time, the emotion was still evident yet slightly subdued however it was difficult to define whether this change of tone was more as muted anger or the beginnings of frustration with his current position there was also a slight tone of resignation quite a tonal combination for the opening question which appears to demonstrate this is an emotive subject for the participant ...
- the participant's voice deepened and slowed when using words such as 'ramification' and 'complying' with an almost staccato effect and a slightly louder volume then followed by a pause allowing the words to 'hang' for emphasis it seemed these terms were a cause of angst in relation to the lack of opportunities offered for him to learn on the job then using a softer tone, as well as a slightly quicker pace, the participant discussed how he intended to ensure he continued to educate himself indicating a clear understanding of his own motivation to learn...and an understanding of the self as a learner...

These field notes and subsequent analysis highlighted several key elements against the research objectives. There seemed to be a strong indication that past experiences influence the perception of self as a learner and, motivation to learn for career development, (research objective 1), may be a driving factor in the development of self-directed learners. There were also indications within the field note analyses that this participant was exhibiting knowledge of a change of self-perception (research objective 3) and that he was clearly aware of this and was seeking conscious interaction (research objective 5).

Another participant's responses and related field notes supported several of the research objectives; for example, in response to the researcher's question:

Can you tell me about your experiences in your background and how you have faced learning for your jobs? I am interested in how people change and learn for their work. Can you tell me a history or story about how you learn and what you do when faced with new learning (when related to your job)?

"I always think of outcomes - good and bad - and try to relate it to a scenario or give myself a couple of different scenarios of how it could go and also look back at a previous situations and at that outcome of what happened or where it could have gone..."

Observations made with regard to the participant's body language and voice were:

• this participant was seated in a casual position and his facial expression was relaxed, with raised eyebrows and a wide gaze – his expression changed and mirrored an expression indicating an 'air of importance'. His body was reasonably still with his arms folded loosely upon his chest. The participant's tone of voice was as a story-telling and lyrical tone. His tone of voice seemed in contrast to the answer he provided, however the participant's tone altered when he went on to state the final statement to his answer (below). His tone took on a slight edge and he straightened in his seating position a little – his eyes gazed into the distance as though remembering past events...

"You have to go throw a little bit of caution to the wind even if it means going a little bit off the track..."

This participant's body language and voice, although seemingly contrasted to his responses at first, were interpreted to indicate a person with some negative experiences within learning environments and someone who perceived is learning self or self as a learner to be related to some risks of (further?) failures. Yet, he also seemed to portray a strong motivation to succeed. These interpretations are mirrored in research objectives 1, 2, 3 and 4 (as reiterated above).

Although not all interview field notes were recorded as documents most interview recordings were transcribed shortly after the interview allowing a consolidation of the environmental factors and informal observations of the researcher throughout the interviews. Due to limitation of time not all interviews were recorded with field notes.

Computer aided analysis

As a comparison to the evaluations above all short-answer survey questions along with all other data are evaluated from the relationships found using Leximancer software analysis.

Interpreting Leximancer concept maps

The Leximancer text analysis software system was used to explore all recorded data, as this data mining system can highlight consistencies and anomalies within large data sets, a process which would be virtually impossible to manage using a completely manual system. The Leximancer system will identify relationships between concepts and compare these between several documents, such as individual interview texts or between responses on survey questionnaires. Leximancer software was used to generate visual images of relationships between words, iterations and phrases. The visual concept maps and tables require interpretation therefore, an explanation is provided.

Concept maps have the following attributes:

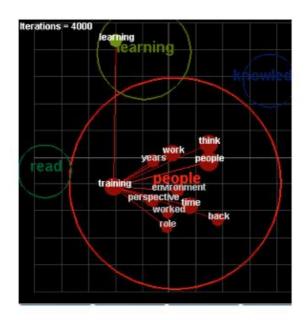
- the brightness of a concept is related to its frequency (i.e. the brighter the concept, the more often it appears in the text).
- the brightness of links between concepts relates to how often the two connected concepts co-occur closely within the text.

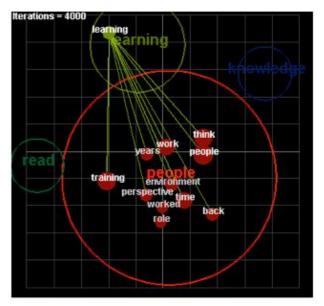
• nearness in the map indicates that two concepts appear in similar conceptual contexts (i.e. they co-occur with similar other concepts).

Leximancer concept maps below (Figure 12 & 13) show the many relationships between learning and training (derived from all interview data) and which also depict *read* and *knowledge* on the outer edges of the map. Figure 12 and 13 also clearly display the links evident in the language between three key terms; *training*, *people* and *learning*. These simple concept maps highlight closely linked entities but can be extended to show broader links, as determined by the preferences set by the operator. By isolating *training*, as in Figure 12, the brightest links between that term and other entities become visible. These show that *training* and people co-occur frequently along with many other related words. However, when *learning* is isolated, as in Figure 13, the related links between it and other entities become evident, with *training being* one of the brightest links. Together, these maps depict clearly the correlations between *training* and *learning*.

Figure 12 - Relationship links - Training

Figure 13 - Relationship links - Learning

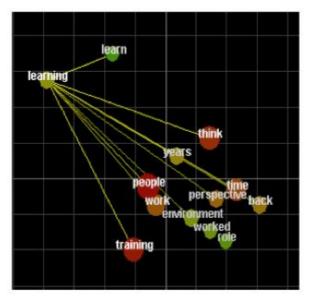


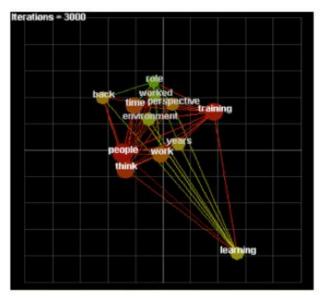


Using the data mining software the simple concept diagrams above can readily demonstrate the themes evident from the data obtained from the seven interviews. Several close links between *training* and *work*, *time*, *years*, *think*, *perspective* and *environment* (to name a few) are depicted in Figure 13. Similarly, in Figure 13, the links between *learning* and, *years*, *work*, *think*, *training*, *people*, *perspective* and *environment* (among others) are also clearly evident.

Figures 14 and 15 below show further examples of how the entities (for *learning*) can be illustrated. Both Figures 12 and 13 are more simple maps depicting the (selected) entities without the related concepts (demonstrated by circles encasing several words) and Figure 14 is a simple representation of entities only, whereas Figure 15 extends these entities, highlighting the more complex relationships between each of the entities, rather than just one. Figure 15 is useful to see the relatedness between many concepts with the thickness of the line and its brightness as indicators of strength of relationships. Both Figures 14 and 15 show visual images of the number, the strengths, and the relationships of other concepts to the entity *learning*.







The concept maps above were derived from the analysis of interview text (where *learning* was selected as the central term) and, from Figures 12, 13, 14 & 15 a further analysis showing the *ranking* of the same entities visible in all four maps was performed with the results depicted in Table 3 (Ranked concept list) below. For Figures 12, 13, 14 & 15 above, the Leximancer program was set to start and finish the data mining, with only a manipulation of the number of concepts altered by the operator, from *automatic* and to 60. This means the software will look for 60 concepts rather than automatically finding all concepts. The duplicate text setting (bigram sensitivity) was also set at *high* sensitivity to reduce the number of replicated results due to incidences of the same concepts occurring in the text. This ensures the data is not represented as a higher relationship due to duplicated terms. For all four maps from Figures 12, 13, 14 & 15, the concepts *think* and *back* could be removed and the map regenerated, as these words appear superfluous to the relevance of the map. The maps would be then regenerated with those extraneous concepts removed. The 'seeding' of concepts for the data analysis can also be set to

be automatically extracted from text or determined by the user and, using the seeds extracted, Leximancer software will *learn* and add more terms through a 'thesaurus learning' mechanism (Leximancer Manual 2009).

Leximancer will also provide a further data analysis. Table 3, depicts the same entities and concepts displayed in Figures 14 and 15 (i.e. by highlighting the relationships down to and including 'role'). Table 3 demonstrates the *relative count* and *absolute count* for each of the concepts depicted in Figures 14 and 15 above. Where *absolute count* depicts the count of text segments, which have been classified as containing the concept through the corpus, and where *relative count*, gives the number of occurrences of the concept as a proportion of the most frequent concept (Leximancer Manual 2009).

Such tables generated by Leximancer are useful as they provide an immediate view of all the relationships between the data and concepts in a literal display. By expanding Figures 14 or 15 concept maps further it would have been possible to view all concepts (as listed in Table 3 – ranked concept list), however the resulting map would have been cluttered and too complex to view easily. From the list in Table 3, it is also possible to select any of the entities and access the relevant data beneath (for example the section from the recorded texts from interviews or survey responses). It is also possible to view the expanded relationships between selected entities. Examples of the extended analysis as such, with verbatim transcripts of the data beneath are provided in several of the analyses following.

Table 3 - demonstrates the *absolute* and *relative* counts for *training* and the entities generated from concept maps displayed in Figures 14 and 15.

Table 3 - Ranked concept list (training)

	Absolute	Polotivo	
Concept	Count	Count	Bar Graph
training	39	100%	
learning	38	97.4%	
people	34	87.1%	
think	33	84.6%	
time	24	61.5%	
work	24	61.5%	
learn	19	48.7%	
back	18	46.1%	
perspective	14	35.8%	
years	14	35.8%	
environment	11	28.2%	
find	11	28.2%	
learned	11	28.2%	
role	10	25.6%	
worked	10	25.6%	
day	9	23%	
service	9	23%	
job	9	23%	
style	9	23%	
fact	8	20.5%	
expectations	8	20.5%	
should	8	20.5%	
person	8	20.5%	
read	7	17.9%	
working	7	17.9%	
information	7	17.9%	
life	7	17.9%	
knowledge	7	17.9%	
started	7	17.9%	
change	7	17.9%	
coming	7	17.9%	
happy	6	15.3%	
train	6	15.3%	
workplace	6	15.3%	
talk	6	15.3%	
pretty	5	12.8%	
university	5	12.8%	
position	4	10.2%	
trainer	3	7.6%	
u amī	J	7.0/0	

An analysis of Figures 12, 13, 14 & 15 show the relevant placement of several key words spoken in interview texts. These maps indicate that *training* and *learning* are inexorably linked but that the relationship between each and *self-perception* are also different.

The explanation for these links are that several terms in text were 'seen' together by the software and analysed as related in context and therefore becoming seeds. These seeds are then compared to further combined concepts to bring forward the relationship percentages shown. The terms noted by the software (depicted in Table 3 above) were also evident in the observation memos made by the researcher after each of the interviews (Appendix H). Using Table 3 above, it is possible therefore, to view all concepts 'seeded' by Leximancer software and the relative counts between each as percentages (to complement the visual maps).

Analysing the words beneath absolute and relative counts

From Table 3 (above) we have a display of both the *absolute* and *relative* counts for each of the terms linked to *training* from the interview transcripts. These links are also depicted in *conceptual maps*. These conceptual maps (Figures 12, 13, 14 & 15) are relatively simple to understand as was described above, however, by analysing Table 3, we are provided with an insight into both number of times the word (term or concept) is iterated in text segments (absolute count) and the number of times the concept appears in proportion to the most frequent concept. Both are very useful content analysis tools. However, Table 3 can be delineated further with access to the actual transcript beneath the words for manual analysis to support the computer-aided interpretation. This allows both the researcher and reader the benefit of 'viewing' the concepts extracted by the computer (this analysis is described further in sections below).

Maps depicted in Figures 13, 14, & 15 below represent an automatic *seeding* by the software (by setting the function for concept seeding to automatic) and including no sensitivity for duplicate text (as also explained further below). From the initial software driven data mining samples and all relationships found by the Leximancer software, a manual delineation of words (and categories) related to each concept is better facilitated. An example of the Leximancer program with 'automatic' is depicted below in Figure 16 - *Leximancer automatic concepts setting*.

Figure 16 - Leximancer automatic concepts setting

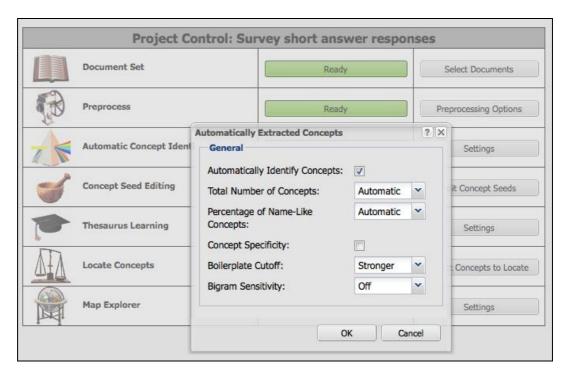


Figure 16 above demonstrates the setting used for the initial data mining using Leximancer software (for Figures, 12 to 15). The *Total Number of Concepts* is set to *Automatic* thereby utilising the power of the software to determine the concepts mined and also to determine which of the concepts found are 'Name-like' and therefore not shown (such as those words beginning with a capital and not necessarily at the beginning of a sentence). The setting for *Bigram*Sensitivity is also set to off. This setting calculates how often words appear to with each other (to the left or right) and are then included if the frequency of these words appearing together is above that setting. Words such as 'training course' or 'workplace training' are examples of a Bigram collection. The *Boilerplate Cutoff* is also set at *Stronger* stops common words that may occur frequently in the same concept from appearing as an automatic concept seed. This is recommended (Leximancer Manual 2009) for text which has many terms commonly occurring together. For subsequent maps this setting was manually altered to medium to allow more seeding of words, as the concepts may become too general if this setting is high.

Using the concepts in the map in Figure 17 below (*related concepts for perspective from survey questions 15-19*), it is clear there are a number of frequently occurring concepts related to *perception* and the proximity of *perspective* with other concepts such as *person* and *role* show they are closely related. It appears the software has also noticed similar relationship to those identified by myself. The relationships between each of the concepts in the map (Figure 17) are determined by the brightness of the links and thickness of the line between each. Both indicate

the relative strength of the link between terms. Figure 17 below also demonstrates the links between *perspective* and other often occurring terms or concepts (as seeded by the software automatically) and their relationships. It is noticeable, that in Figure 17, both *people* and *training* are brighter than the other concepts around them, as are the concepts *training*, *learning* and *course*. This denotes that the software found several incidences of these terms within phrases or sentences from the survey data linked to the term *perspective*. By rotating the maps different aspects of the relationships can be visualised where they are slightly obscured.

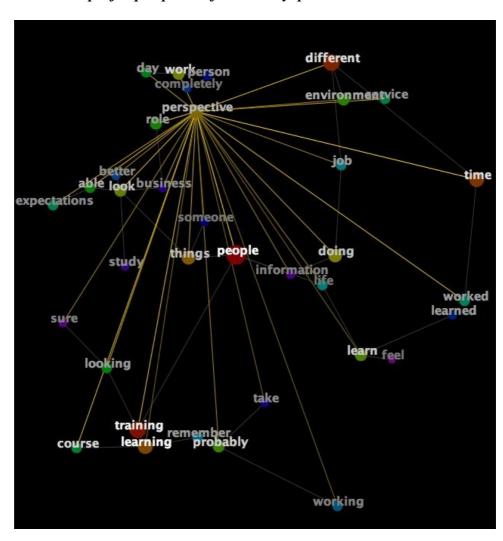


Figure 17 - Related concepts for perspective from survey questions 15-19

By examining the automatically seeded map of all related concepts and *perspective*, it is clear there are possibly some extraneous concepts generated by the software (such as *sure*, *someone* and *take* from Figure 17, for example). Once identified, these extraneous terms can be ignored using the '*kill*' function, (eliminating the unwanted words from the automatic seeding) and therefore removing them from subsequent maps. The same original data (no concepts set to 'kill') are depicted in Figure 18 below and was generated to depict concepts related to *training*. Again,

we see the same extraneous concepts not relevant to the final analysis may be excluded. It is evident from Figure 18 that the relationship between *training* and *perception* is close and from Figure 17 above the link is bright.

The detail from Figure 17 may be further displayed using both the Thematic Circles and Thematic Summary forms within Leximancer software. Figure 18 below depicts the thematic circles related to *perspective* and Figure 19 highlights the relationships between each theme and *perspective as a* percentage relevance. Thematic circles group several linked concepts together into a theme, thereby allowing a better overview of how each entity relates to others.

Figure 18 - Thematic circles all interview data

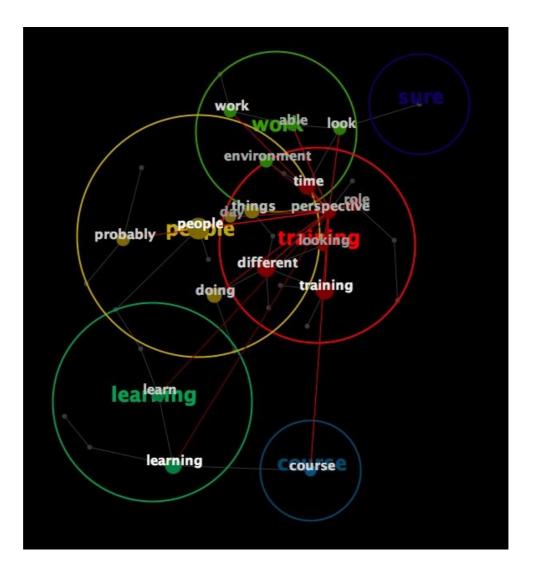
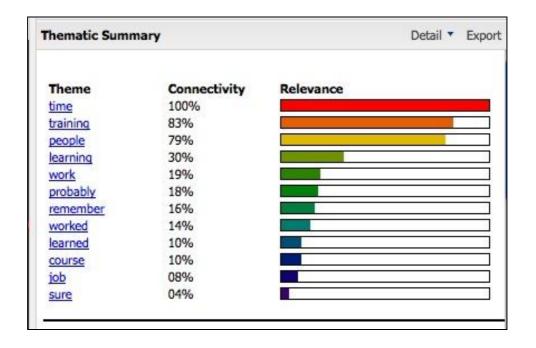


Figure 19 - Thematic summaries all interview data



By processing both concept maps shown in Figure 17 and 18, into a thematic summary, it is clear that relationship between *perspective* and *time, training, people learning work* (etc.) were suggested by the participants as important related concepts. By using both the Thematic Circles, representing a visual relationship between these important concepts and the percentage connectivity (relevance) depicted in a Thematic Summary (Figure 19) all incidences of these concepts become more clear. The colour of the relevance bar is used only to distinguish the circles in the map. At this stage the Leximancer software has not been customised but merely running the data through with automatic settings. Again, some extraneous concepts are evident (such as sure at 4%) however the links between concepts related to training are still evident.

Figure 20 - Related concepts for training from survey questions 15 to 19

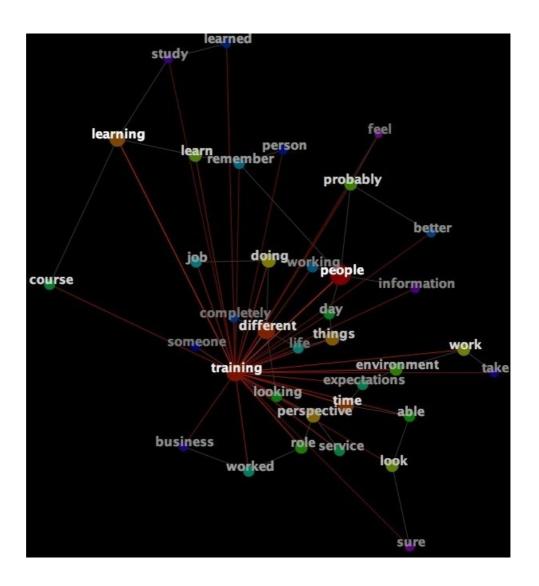


Figure 20 above shows the visual map targeting the concept *training* as the key concept and by removing the thematic circles the links between concepts are visible. The *concepts*, *perspective*, *expectations*, *time*, *environment* and *able* (to name a few) all show closely related relationships to *training*.

Relationships between *perception* (using the term perspective) and other key concepts as highlighted in Figure 17 and the similarities between the concepts related to *training* in Figure 20 show a comparison and relationship between both of those terms.

Figure 21 - Concept map showing all noted relationships to perspective

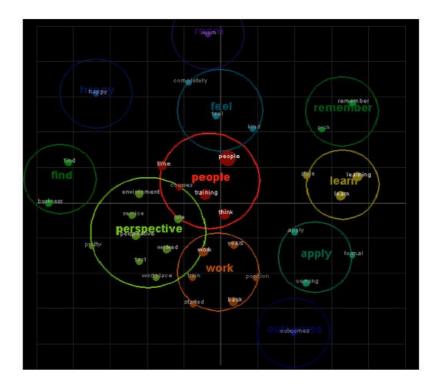


Figure 21 displays what the software has found as all noted links to the concept perspective. The thematic circles demonstrate the concepts within. This view provides a good visual for the size of the thematic circle in relation to others providing again a further analysis.

Figure 22 - Concept map showing narrow concepts in a simple relationship to perspective

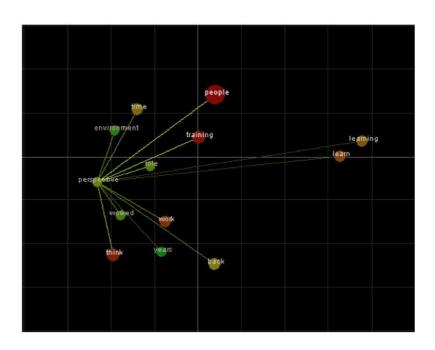


Figure 22 however, shows the links between *perspective* and the related concepts, which were manually seeded. The distance of the links and the thickness of the line is an indication of relationships as is the size of the dot - also showing the weight of the concept in relation to the selected concept (in this case *perspective*). In Figure 22, the concept *people* appears as the largest dot and has also a thicker and brighter line connecting it to perspective than to any other concept which suggest strong links between perspective and people were evident in the data. Perspective is also clearly showing an equally highlighted link to training. The strength of the line is as a result of the concepts in accordance with the participants' descriptions, which also support the assumptions made in this research.

The new map below (Figure 23) depicts the broader concepts related to *perspective* (from all interview data). By broadening the concept seeds an extensive view of all seeds mined by the software are visible.

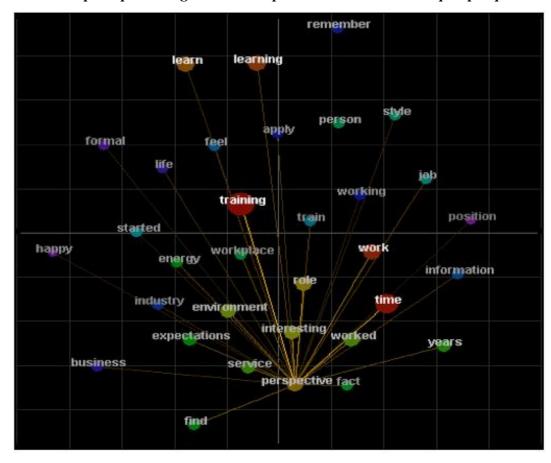


Figure 23 - Concept map showing broad concepts in detailed relationship to perspective

Again, Figure 23 above shows many links common to previous maps when highlighted in respect of *perspective*.

For Figure 23, the strongest links related to *perspective* are, *training*, *work*, *time* and *role*. Several other key concepts are *expectations*, *interesting* and *environment*. Many of the terms spoken about by participants were recognised in the manual evaluation of data.

An alternative view, showing mid-range concepts and relationships for *learning* and *training* is depicted in Figure 24 below. This mid-range map is useful to find major themes and related concepts and by highlighting only nearby thematic circles, this provides a clear representation between the chosen concepts.

Figure 24 - Concept map with mid range concepts and relationships for learning and training

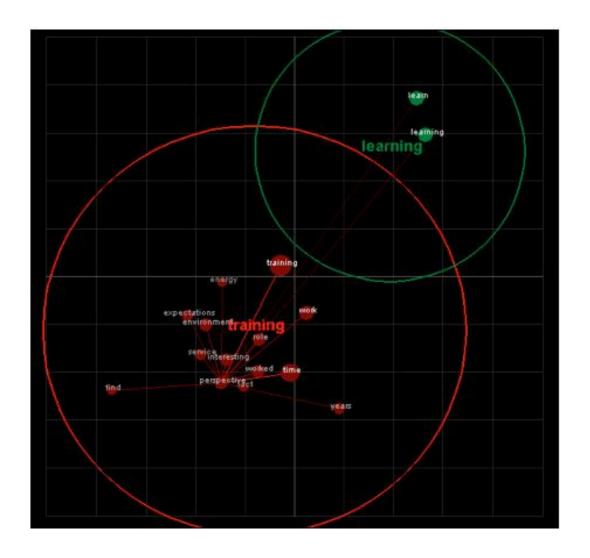
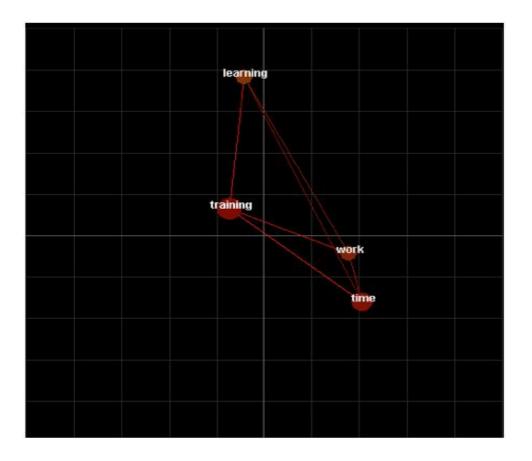


Figure 25 below is the last of the maps in sequence, which depicts the narrow relationships between four main entities, *training*, *work*, *time* and *learning*. These narrow maps are useful to show 'direction' between each of the concepts chosen.

Figure 25 - Concept map showing narrow concept relationships



The absolute and relative counts for the narrow concepts (depicted in Figures 23, 24 & 25 above) are displayed in Table 4 below. All concepts visible from an automatic seeding are depicted for all interview data. Absolute Count depicts the text segments, which have been classified as containing the concept, and the Relative Count provides the number of occurrences of each concept in proportion to the most frequently occurring concept. This shows that *training* and *time* were both evident in 100% of the concepts frequently occurring and that more text segments included those two terms than the next related concept *role*. By using absolute and relative counts the visual representation can be quantified. Beneath the Bar Graph are the text references with the concepts included and these may be accessed to read the thread and determine how the software analysed the text – a further checklist for the automatic seeding performed by the software.

Table 4 - Concept absolute and relative counts

Concept	Absolute	Relative	D C 1
	Count	Count	Bar Graph
training	13	100%	
<u>time</u>	13	100%	
<u>role</u>	9	69.2%	
interesting	8	61.5%	
<u>work</u>	7	53.8%	
worked	7	53.8%	
<u>environment</u>	6	46.1%	
service	6	46.1%	
<u>find</u>	5	38.4%	
energy	4	30.7%	
expectations	4	30.7%	
<u>years</u>	4	30.7%	
workplace	4	30.7%	
<u>fact</u>	3	23%	
learning	3	23%	
<u>job</u>	3	23%	
<u>train</u>	3	23%	
<u>information</u>	3	23%	
<u>business</u>	2	15.3%	
<u>apply</u>	2	15.3%	
<u>industry</u>	2	15.3%	
<u>life</u>	2	15.3%	
<u>learn</u>	2	15.3%	
<u>formal</u>	1	7.6%	
started	1	7.6%	
<u>happy</u>	1	7.6%	
<u>position</u>	1	7.6%	
<u>feel</u>	1	7.6%	
working	1	7.6%	
<u>style</u>	1	7.6%	

Manual seeding of concept maps (all data)

To complete an analysis using the data mining software Leximancer, several of the concept maps already depicted above were generated using manually seeded concepts. Firstly I removed weak and 'non-lexical' information from the text (Leximancer Manual 2009). This means that all words such as 'and' and 'or' or 'of' are removed and will not accidentally appear as a concept (given that they occur frequently in normal speech). Although this was a deliberate function for the final maps below, Leximancer software generally removes these automatically (hence they do not appear as concepts within the previous maps). Any proper names, including multiple words were removed, such as company names, people and places for example. Also altered within the concept seeding option was the merging of duplicate words, or concepts with similar meanings that should not be seen as individual concepts (such as training, trained etc).

Lastly for Figures 26 to 27 below, user defined concepts and manual seeding options were utilised to generate concept maps for; all current interview data, all current and previous interview data (Kling 2004) and user defined concepts for all short-answer survey questionnaire responses. Ranked and pathway maps are also depicted and explained below. These maps can then be compared to the automatically generated concept maps from Figures 19, 21, 22, 23 and 24 above. Leximancer software also has the option of learning (Thesaurus), which was also selected during the generation of maps for Figures 13, 16 and 24, for example. The Thesaurus option allows Leximancer to find words and concepts and *learn* from them. It will find words, such as the word *course*, and then, from the *thesaurus* option it will look for and learn new concepts (often generating new words or renaming concepts), which appear to be relevant terms. An example of this is for the word 'rose', terms such as 'flower', 'petal' and so on would be learned and related to 'rose'.

Figure 26 - User defined concepts all interviews

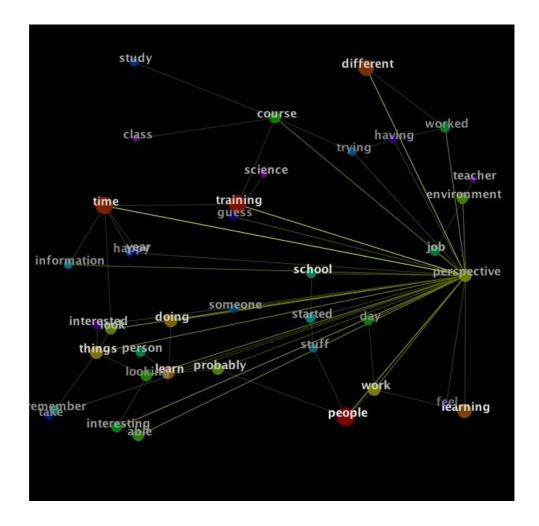


Figure 26 above, depicts the words (or concepts) closely related to *perspective* from all current interviews. This map was also set to 'randomise' due to the closeness of some of the concepts (which would make viewing virtually impossible). Due to the randomisation of concepts it is difficult to see the relationship; therefore the *ranked view* table is essential to complete the analysis of relationship in Figure 26. Figure 27 below demonstrates the ranked view of all concepts. Although several concepts were removed in the user defined option, they re-appear after running the Thesaurus Learning option, however their likelihood (rank to perspective) are low. The count and likelihood are indicators of those concepts forming part of *perception*.

Figure 27 - User defined concepts all interviews - ranked view

Concept: perspective Ranked Vie					
Related Name-Like	Count		Likelihood		
Related Word-Like	Count	Likelihoo	d		
looking	5	45%			
worked	5	45%			
interesting	6	40%			
able able	5	36%			
time	11	31%			
training training	10	29%	- 3		
look	6	29%			
day	3	27%			
different	8	26%			
information	3	23%			
environment	3	20%	- 5		
course	4	19%			
guess	2	18%			
job	3	18%			
things	5	14%			
work	4	14%			
people	7	13%			
o feel	1	13%			
trying trying	1	10%			
happy	1	10%			
doing	3	10%			
take	1	09%		3	
having	1	09%			
probably	2	07%			
started	1	07%			
someone	1	07%	4 · · · · · · · · · · · · · · · · · · ·		
interested	1	05%			
learn .	1	03%			
learning	1	03%			
school	1	02%			

Figure 28 - Pathway demonstration all interview data

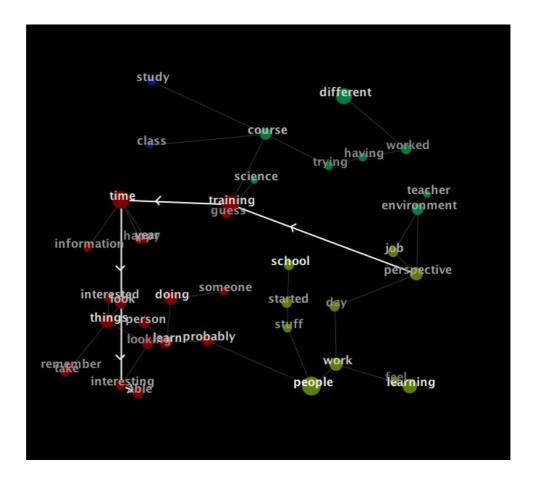
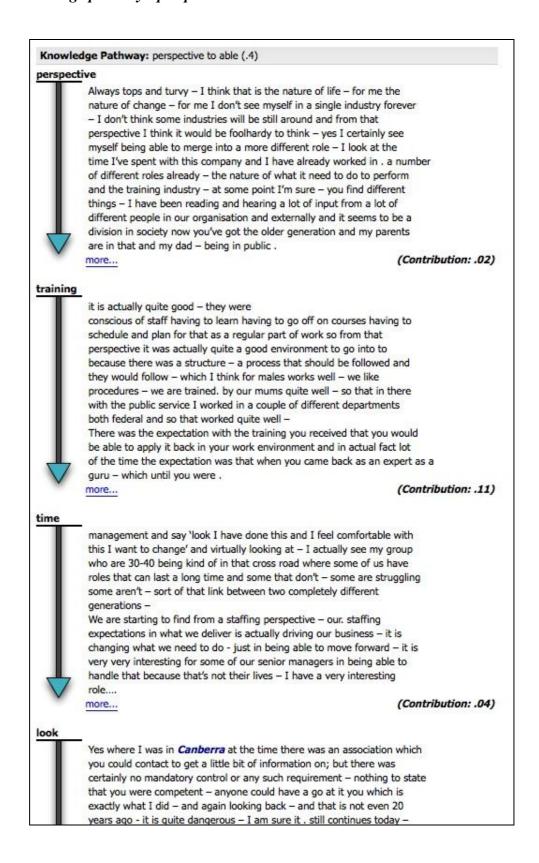


Figure 28 demonstrates the optional view which generates the pathway from one concept, in this case *perspective* to another concept – such as *able*. This view is useful to show relationships in a linear view, rather than relative relationships. We can see that participants may have spoken about being *able* and this related to *perspective* in terms of their *training*, *time*, *look* and *interesting* (or .4 steps). The following figure (Figure 29) demonstrates how the knowledge pathway was determined from actual interview texts.

Figure 29 - Knowledge pathway - perspective to 'able'



By examining the pathway texts as above (Figure 29), a manual interpretation may be elicited and compared to the computer driven pathway. The concept *perspective* will also relate to other concepts forming different pathways, and Figure 30 below illustrates that participants also

recognised that *perspective* and *learn* are related by the pathways *training* and *doing*. Figure 30 and Figure 31 provide both the visual map (pathway) and the related knowledge pathway from interview texts as a comparison.

Figure 30 - Pathway - perspective to 'learn'

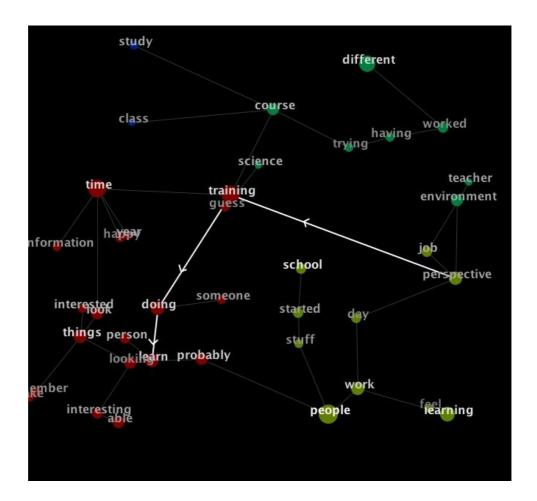


Figure 31 - Knowledge pathway - perspective to 'learn'

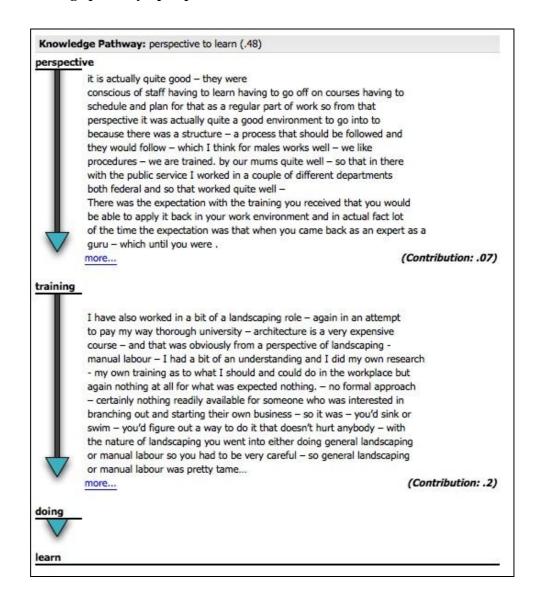
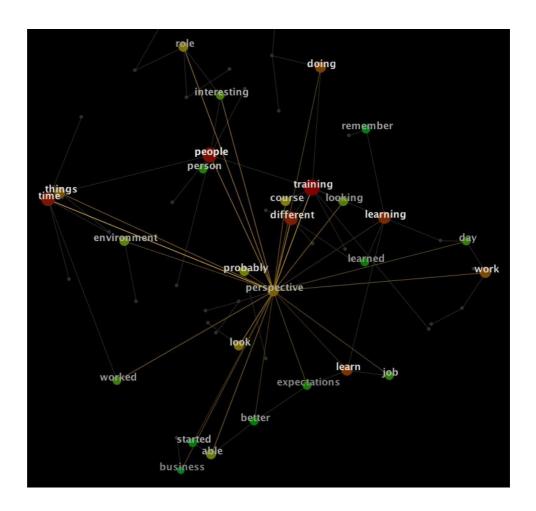


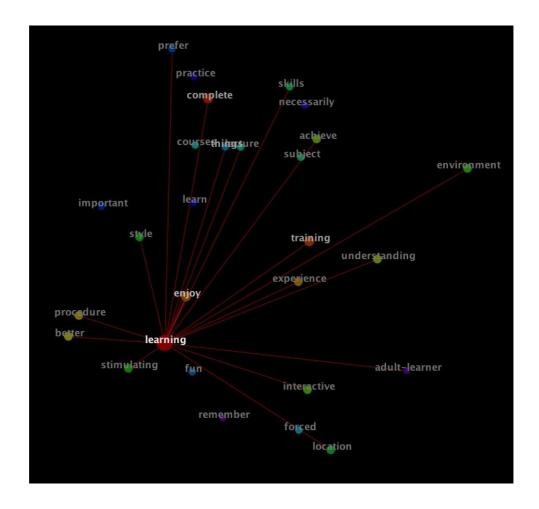
Figure 32 - User defined concepts all interview data



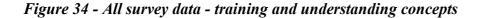
From the map above (Figure 32) it is clear that there are consistent themes and concepts related to *perspective*. The data used for Figure 32 was all interview data. This map was generated using 45 visible concepts (out of a manually seeded 60 concepts) and with a 0% theme size (therefore no thematic circles are shown). The map was also put through the *thesaurus* and then randomised for easier viewing (due to concepts often overlapping in the original map). It is evident that terms such as *learn*, *look*, *expectations*, *probably*, and *look* are related to *perspective*. Again, with further analysis of the interview text beneath this map the comparisons will be broadened. As this is exploratory, further explanations are limited to future research.

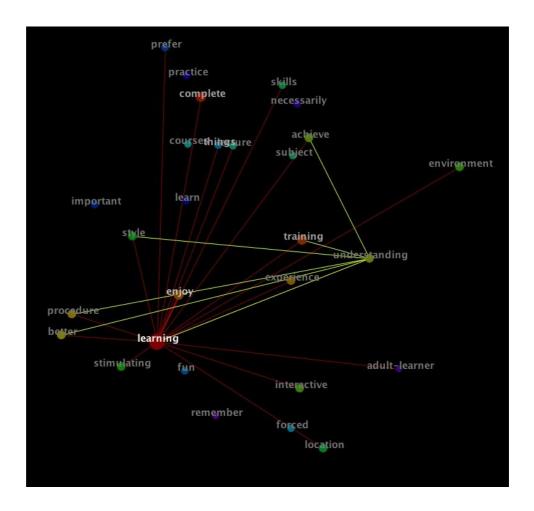
To demonstrate the use of concept maps in providing views of the data, the map below, Figure 33, depicts the concepts, manually seeded, for all short answer survey data. This map forms an excellent comparison to Figure 32. Similar concepts between Figure 32 and Figure 33 are evident, however several new concepts are also visible, such as; *location, experience, skills, enjoyment* and *enjoy*. The limitation of this research prevents further investigation of these new concepts however the relationships found may support subsequent investigations.

Figure 33 - User defined concepts survey short answer data



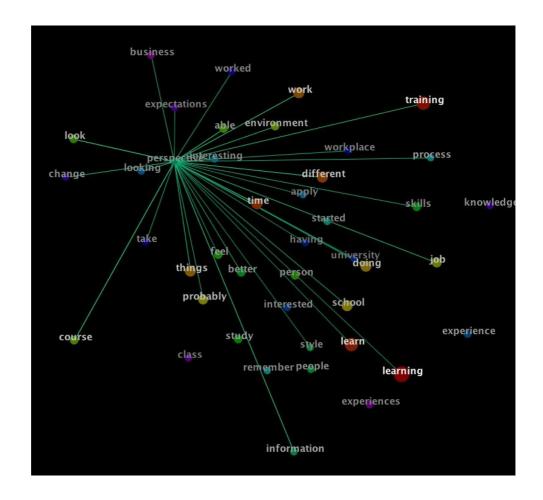
To demonstrate further relationships between concepts the related links of more than one concept are highlighted in Figure 34 below. Using the survey data (as in Figure 33) the relationships between *training* and *understanding* are both highlighted, adding depth to the analysis of each concept. Each concept within the map may be highlighted to determine the relationships thereby providing further optional analyses. Figure 34 demonstrates that *understanding* is related to the concepts *style*, *procedure*, *better*, *training* and *learning*.

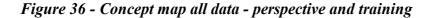




Lastly, two final maps relevant to all data are displayed in Figures 35 and 36 below. These maps were produced using all interview data and all survey (short-answer) results. Figure 35 shows the relationships between *perspective* with the concepts visible set to the maximum setting of 100. Figure 36 includes both links between *perspective* and *training* and again with concepts visible set to 100. Figure 36 includes both links between *perspective* and *training* and again with concepts visible set to 100.

Figure 35 - Concept map all data - perspective





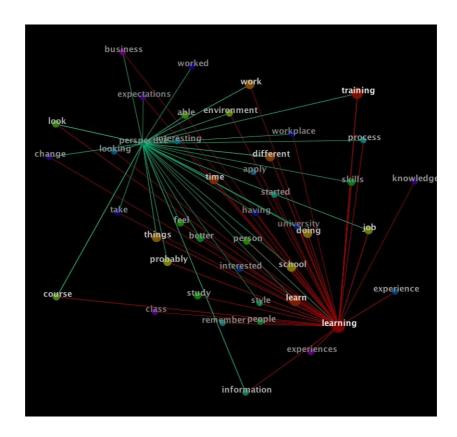


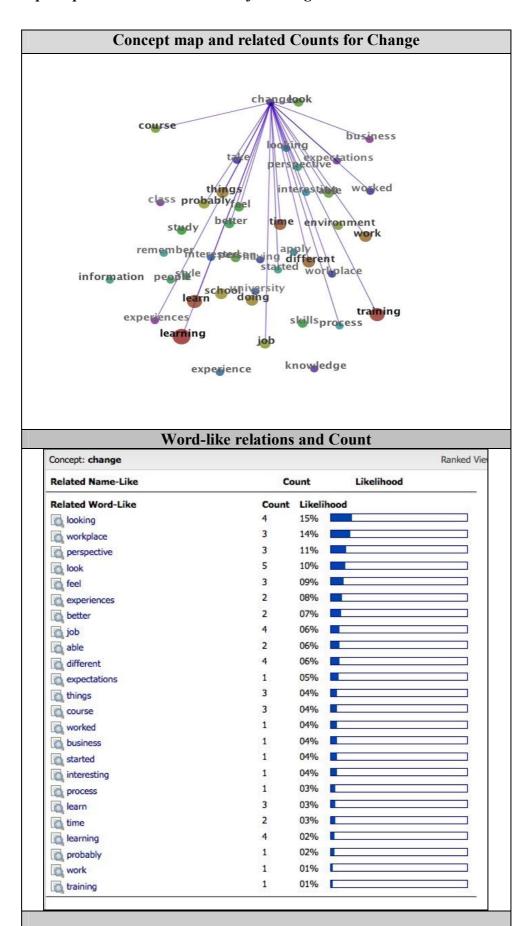
Figure 36 shows the links between *perspective* and *training* with concepts visible set to 100. Specifically the relationships expected; were (1) perspective would be correlated with learning; (2) environment would be correlated with training; (3) experience would be correlated with learning; (4) expectations would be correlated with perspective; (5) change would be correlated with perspective; (6) training would be correlated with learning and perspective and (7) environment would also be correlated with training and perspective. The relationships above were all found to exist across all concept maps generated, with numerous other links also evident (but limited from this investigation).

In determining the actual relationships found, each relevant concept map for the data sets used in this research were manipulated in 'Concept Mode' (a view which is demonstrated clearly in Figures 35 and 36 above) and each concept of interest was analysed. The analyses confirmed that (7) expected relationships above were found and these findings represent the research objectives as briefly described in Table 5 below. A representation of the concept mapping used to determine the relationships found (for Table 5) and using the correlation (5) *Change correlated to perspective*, is provided in Table 6 below.

Table 5 - Relationships found linked to research objectives

Relationships Found	Link to Research Questions and Objectives				
Perspective correlated with learning	Question 1 - Which (experiences) precipitate a perception of the self as a learner? Objective - To find out whether environmental (historical and situational) factors may contribute to the development of self-perception as a learner - to investigate the relationships between past learning experiences and current self-perception.				
	Concepts linked - Concepts visualised closely related to perspective included; feel, doing, started, apply, better, person, interested, style, study and skills.				
Environment correlated to training	Question 4 - Could insights of self-perception improve learning? Objective - To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs. Concepts linked - Concepts linked to environment included; training, process, job, experience, information, course, learn, time, course and perspective. These links show that a model encompassing these aspects would be useful if				
	implemented in learning environments (including all environments and in particular workplace learning environments) Question 2 - What aspects of self-perception manifest as self-directed learners?				
Experience correlated to learning Expectations correlated to perspective Change correlated to perspective	Objective - To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning – in particular - applying the learned skill in the learner's work.				
	Concepts linked - As noted in link (3) above, similar concepts linked to environment also include those related to the workplace - including; training, process, job, experience, information, course, learn, time, course and perspective.				
	Question 3 - Can (does) self-perception change, and if so, how? Objective - To investigate whether there are contributing factors which may initiate or alter a perception of self as a learner. Concepts linked - Concepts linked to perspective (and learn, learning and learner) included: people, experiences, knowledge, interested, style, time, able,				
	perspective, time, skills and remember. Question 3 - Can (does) self-perception change, and if so, how?				
	Objective To investigate whether there are contributing factors which may initiate or alter a perception of self as a learner.				
(See example analyses in Table 7)	Concepts linked - Concepts linked to change included: looking (meaning searching for growth), workplace, perspective, look, feel, experiences, better, job, able and many more. These are demonstrated in Table 16 below (as an example of the analyses included in this table).				
Training correlated to learning and perspective	Question 5 - Is self-perception linked with conscious interaction? Objective - To find out to what extent a positive or negative self-perception is linked to the engagement of learners in learning				
	Concepts linked - Links for training brought forward concepts including; workplace, skills, started, job, process, environment, experience, interesting, able, perspective and knowledge.				
Environment correlated to training and perspective	All research questions apply All research objectives apply Concepts linked - Several key concepts found to be linked to environment included; work, training, different, interesting, expectations, perspective, time, skills, knowledge and able.				

Table 6 - Concept map and count - correlations for change



The analyses have some interesting consequences for understanding perception of self as a learner and the accompanying concepts. Firstly, many HSP (high self-perception) concepts were found from the data along with some links to learning and LSP (low self-perception). It is evident that behaviours by participants may fluctuate depending upon their perception of self at the time and it is also evident that a perception of self as a learner may change. The factors contributing to a change in perception of self as a learner indicated links to business (jobs), interest and expectations as well as perspective. Based on the relevance of these links the prediction that a perception of self as a learner may impact upon a person seeking out and valuing learning is certainly supported.

The following Figure (37) illustrates a concept map for the literature reviewed supporting this research. A thematic summary is also provided in Figure 38. Both show similar relevance to learning, workplace learning, personal development, skills, as well as many other concepts. The Leximancer map was generated with one hundred (100) concepts seeded automatically from most references reviewed in Chapter 2 of this thesis (excluding only those references related to qualitative research methods). This map is provided to demonstrate that several other key concepts arose from the literature but the absence of perspective (and several key related terms) is evident.

Figure 37 - Concept map reviewing the literature

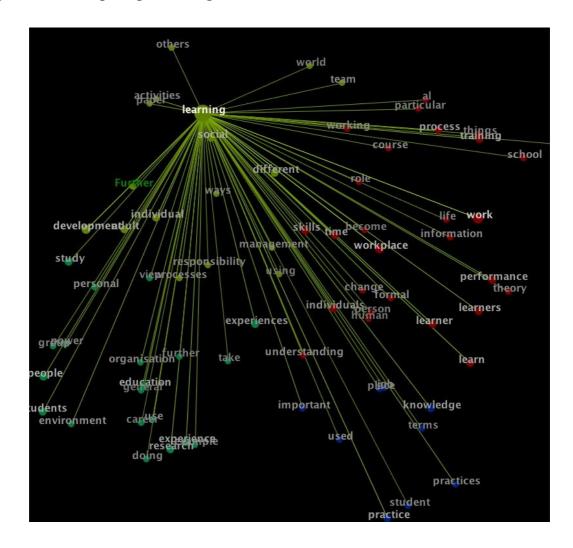


Figure 38 - Thematic summary of literature review

hematic Summary		Detail ▼ Expo
Theme	Connectivity	Relevance
learning	100%	
different	41%	
social	40%	
personal	40%	
work	39%	
learner	33%	
students	24%	
life	14%	
performance	13%	
people	12%	
school	05%	
job	03%	l e
power	03%	

General discussion

It is clear from the data provided by the participants in this research that several key factors impact upon adult self-perception as a learner. Not the least of which is the environment, which seemed often linked to the reason for study and delivery methods. Of the participants interviewed, a consistent concept of learning being imperative to remaining employed was noticeably enunciated. Some participants commented that, whilst they had completely changed career, they had adapted by learning only the relevant material for what was required in the new position. These comments would certainly represent a person who is clearly aware of his or her own requirements and understanding of their perception of self as a learner. For some respondents, many unhappy memories of their past learning history emerged and these memories appeared in some way to hold them back from considering further study. Some respondents also reiterated positive learning experiences, which were often linked to non-formal study. Formal study, conversely, was often mentioned as a negative experience. Some participants stated being surprised that they achieved the outcomes of training contrary to their own expectations of ability (again demonstrating a perception of self as a learner prior to entering the learning environment has an impact upon the outcomes). Participants where asked to talk about their learning history and experiences or background in learning environments and many spoke of their personal perception and understanding of self in those learning environments in negative terms. Several responses to the initial open-ended question indicated an apparent perception of self as a learner.

From the above analysis, there are several important findings that can be drawn from the data and these are noted in point form below:

- many perceptions of self as a learner showed positive and negative correlations to learning experiences,
- both positive and negative learning experiences showed correlations to the learning or training environment,
- many expectations of success or failure from a learning situations are correlated to previous experiences and the development of a negative or positive perception of self as a learner,
- self-perspective as a learner can change and is correlated to experiences
- teachers, trainers and the environment all play a part in influencing the development of a perception of self as a learner,
- self-perception of self as a learner is correlated to the development of self-directed learning,

- a conscious understanding of perception of self as a learner improves motivation to change and develop higher self-perception and self-confidence, and
- all education is potentially related to the development of a perception of self as a learner.

The following chapter, Chapter 5, provides the conclusions drawn from the research data analyses in this study.

CHAPTER 5: Conclusions

Introduction

Perception is about how we see and value ourselves. It is also about how we see and value the people and events around us, and in turn, how we believe the outside world sees and values us. As a consequence, perception is a major determinant of our goals and ambitions, and our beliefs regarding our capacity to achieve them.

Self-perception is a component of the broader concept of 'personal and social identity'. Psychologists define 'identity' in terms of a

... "bounded cognitive schema – a structure of complex, rich, affectively charged, interrelated concepts about the self ... [that] ... contains core concepts and peripheral concepts of the self. Core concepts allow an individual to maintain an enduring personality, and peripheral concepts allow an individual to adapt to various situations" (Forte 2007:168).

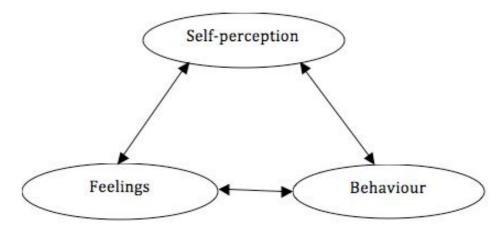
As a psychological trait, identity is derived in part from our interactions with and among other people and our social environment (the domain of perception), but it is also derived in large part from neurological processes that occur in our brains (Pratt 2003). At least within the vocational education and training sector, identity theory currently is too complex and too poorly understood to be of significant practical assistance for training interventions (Brubaker & Cooper 2000). Self-perception, however, is a much less complex and much better understood notion, and one that can realistically be addressed by all vocational educators to improve the quality of vocational learning. For this reason, the focus of this study has been on issues and concepts relating to self-perception, rather than on the more encompassing psychological theory of personal and social identity.

The self-perception – vocational learning relationship

The findings from the study reported in this thesis, along with insights gained from the albeit limited repository of contemporary literature and previous research, suggest that there are five key dynamics impacting on the relationship between self-perception and vocational learning for adult learners.

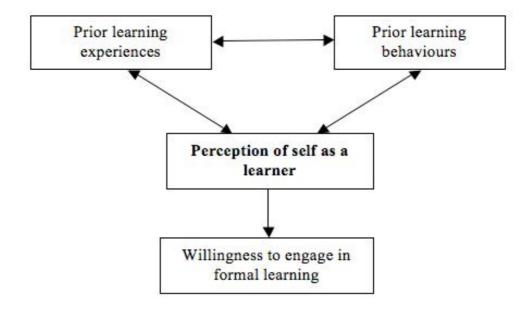
First, there is a mutually-interactive cycle involving self-perception (how we view ourselves and believe the world views us), our feelings (emotions, including motivation) and behaviour (including our engagement in learning). This cycle can be demonstrated as follows:

Figure 39 - Relationship between self-perception and behaviour



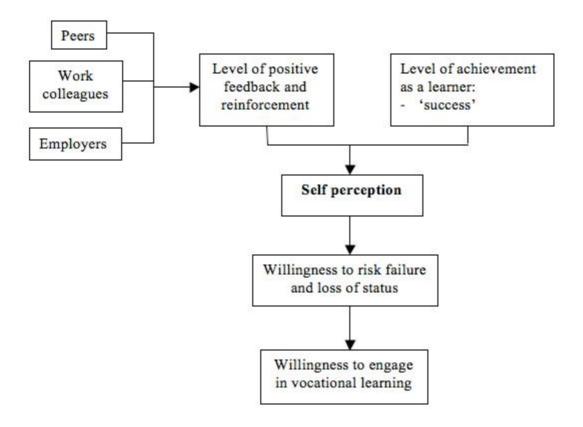
Second, there is a strong, overt and mutual relationship between self-perception as a learner and learning success. The greater our level of self-perception as a learner, the greater the likelihood of our success as a learner. In turn, our self-perception as a learner is primarily impacted by our knowledge and understanding of our previous learning experiences and behaviours. This relationship is demonstrated in Figure 40:

Figure 40 - Engaging in formal learning



Third, for adults, self-perception as a learner is improved by previous acknowledged success. Our self-perception as a learner is increased by positive reinforcement and support from peers, work colleagues and employers. This is demonstrated in Figure 41:

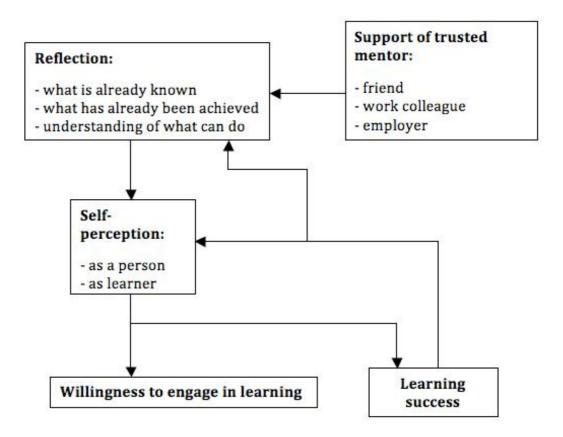
Figure 41 - Factors impacting on self-perception



Fourth, the greater our self-perception as a learner, the more 'risk' we are prepared to take with respect to our learning, and as a consequence, the greater our willingness to engage in a variety of learning events and environments. In turn, the greater the variety of learning events and environments with which we engage, the more our likelihood of experiencing learning success and achievement which, in turn, increases our self-perception as a learner.

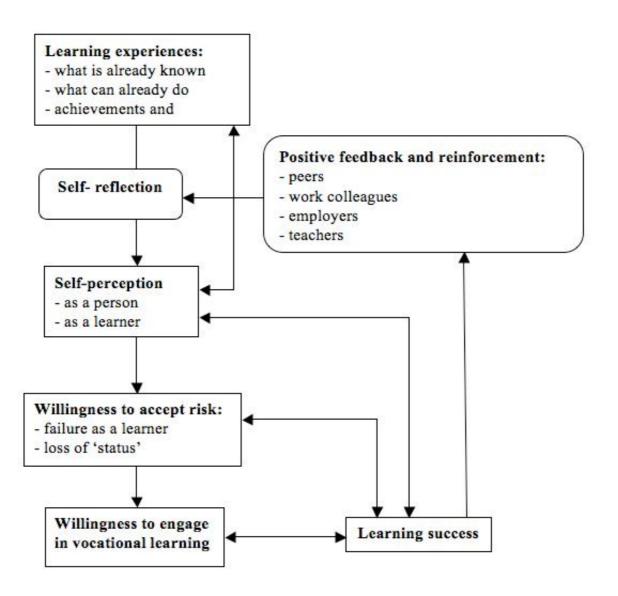
Finally, reflection appears to be the most powerful way of influencing our self-perception as a learner. These last two conclusions are summarised in Figure 42:

Figure 42 - The relationship between reflective practice, self-perception and learning



Overlaying the three models previously presented in this chapter allows the relationship between self-perception and vocational learning to be presented in Figure 43 in the form of a dynamic model (Hoyle 1995). A dynamic model is one that not only presents the components of the system or issue under consideration, but also the nature and direction of the interactions among those components. It is important to note that Figure 43 is a dynamic, self-reinforcing model; that is, the components of the model interact in ways that continually reinforce each other once the model is activated. Increasing the level of self-perception, for example, will increase the level of learning success, but that increase in learning success will – of itself – act to further increase the level of self-perception, and so the cycle continues and grows in strength. This is very important when looking to effect improvement, because it suggests that improvements in one part of the model may well result in a snowball effect across the entire model.

Figure 43 - A model of the relationship between self-perception and vocational learning



The model developed through this study for conveying the relationship between self-perception and vocational learning has two extrinsic leverage points; that is, there are two components which, with external intervention, can positively influence the system. These are: self-reflection, and positive feedback and reinforcement – represented by the two soft-cornered boxes in Figure 43.

Several studies reported earlier in this thesis have found that while self-reflection is an extremely powerful process that can significantly improve self-perception, the low perception of self initially held by many individuals will act to prevent them from engaging in any meaningful way in an exploration and evaluation of their existing knowledge and skills acquired through past experience. For this reason, it is reasonable to argue that the intervention of trusted 'mentors' can be critical to assisting the individuals to overcome their initial fears and to engage in reflection on

their learning achievements. Mentoring, however, is more than being a 'trusted and caring friend' – it is a highly developed skill, particularly when it is trying to influence something as fragile as an individual's self-perception. For this reason, vocational learning systems will need to place an emphasis on formal mentor training, at least for vocational teachers and, one would suggest, interested employers as well. It would also seem important for RPL (recognition of prior learning) assessors to be trained in mentoring skills, because RPL assessment is arguably the most overt process in the training system for encouraging individuals to reflect positively on their past learning achievements.

Most people require positive feedback and reinforcement from trusted others to validate the worth of their learning experiences and achievements. If teachers, employers, customers and valued colleagues praise us for what we know or can do or have achieved, we feel much more positive about ourselves as learners and as people, and we think and behave much more positively and effectively in the future as a result. Alternatively, if we receive negative external feedback, we quickly retreat into our cognitive shells to protect us from experiencing what we perceive to be public humiliation and loss of personal status. Further, we actively avoid future engagement in learning events because of the fear of repeat failures. It is of particular importance to note that the literature consistently tells us that neutral feedback, or no feedback at all, generally is perceived to reflect a negative assessment of our learning achievements and capability. As a result, it is critical for vocational educators to take a strong formative approach to their interactions with vocational learners, giving them overt praise for what they have achieved, and responding in the most constructive ways possible when learners fail to meet standards or expectations. This is particularly important in the areas of assessment, feedback on task performance, and in the way learner questions are answered.

Areas for further research

As stated many times throughout this thesis, there is a paucity of methodologically sound and conceptually rigorous research into the development and impact of self-perception as a learner among adult learners.

Much more research needs to be conducted into how adult learners can be assisted to enhance their levels of self-perception as learners, and how that increased self-perception can be harnessed to motivate adults to engage in levels and forms of learning beyond their current frame. The presentation and application of recognition of prior learning (RPL) processes would seem a

particularly fertile area for further research in this regard. Above all, however, the link between self-reflection and self-perception provides a rich field for further research, particularly with respect to how adults can be motivated and supported to undertake appropriate self-reflection.

Conclusion

How we see and value ourselves, and how we believe the outside world sees and values us, is called self-perception, and it has a strong impact on the nature and quality of our vocational learning.

If our self-perception is low, we generally will not risk failure by attempting to engage in formal learning events, particularly as our performance will be observed and evaluated by others. Alternatively, as our perception of ourselves as learners increases, we feel more confident about our capacity to succeed, and so our concerns about possible failure diminish. This relationship is mutually reinforcing: as our self-perception increases, our willingness to engage in learning increases and as a consequence our level of learning achievement increases, which in turn improves our self-perception as a learner, and so the cycle continues. A strong implication of this situation for vocational educators is that every effort must be taken to assist learners to improve their self-perception, and that means ensuring that they get regular and appropriate positive feedback on performance – that their successes are recognised and celebrated in ways that improve their self-image and self-belief.

The critical process for long-term improvement in self-perception, however, is guided self-reflection – working with a mentor to understand and give meaning to what is already known, what has already been achieved, and as a consequence, what the learner can already do. Reflection is both a starting point and a tipping point for improving self-perception. Unless individuals are genuinely prepared to explore and evaluate their past experiences, no amount of intervention by vocational educators will lever an increase in self-perception, but once the exploration begins, each identified success unleashes feelings of pride and worth that impact positively on self-perception. Reflection is the point at which learners start to acknowledge who they are and what they can do, and to take responsibility for it. It is a passport to effective vocational learning.

References

- Amar, A.D. 2004, 'Motivating knowledge workers to innovate'. *European Journal of Innovation Management*, vol. 7, no. 2, pp. 89-101. Retrieved 27 August 2004 from ProQuest database.
- Apte, J. 2009, 'Facilitating transformative learning: a framework for practice'. *Australian Journal of Adult* Learning, vol. 49, no. 1, pp. 169-189. Retrieved 2 January 2010 from ProQuest database.
- Athanasou, J.A. 2005, 'Self-evaluations in adult education and training'. *Australian Journal of Adult Learning*, vol. 45 no. 3. pp. 290-303. Retrieved 28 January 2007 from ProQuest database.
- Anderson, J.R. & Budiu, R. 2004, 'Interpretation-Based Processing: A Unified Theory of Semantic Sentence Processing'. *Cognitive Science* vol. 28, pp. 1-82 Retrieved 18 November 2004 from: http://act-r.psy.cmu.edu/publications/pubinfo.php?id=399
- Bannister, P., Burman, E., Parker, I., Taylor, M., & Tindall, C. 2001, *Qualitative Methods in Psychology: a research guide*. Open University Press, Buckingham.
- Baker, A.C., Jensen, P.J., & Kolb, D.A. 2005, 'Conversations as experiential learning'. *Management Learning*, vol. 36, no. 4, pp. 411-427. Retrieved 5 January 2010 from ProQuest database.
- Ballantyne, R. 2000, 'Students' conceptions of learning, the classroom environment, and approaches to learning'. *The Journal of Educational Research*, vol. 93, no. 4, p. 9. Retrieved 24 November 2004 from ProQuest database.
- Bauer, J., Festner, D., Gruber, H., Harteis, C., & Heid, H. 2004, 'Do epistemic beliefs affect workplace learning?' *Journal for Workplace Learning*, No.16, pp. 284-292.
- Beckett, D. & Hager, P. 2000, 'Making judgements as the basis for workplace learning: Towards an epistemology of practice'. *International Journal of Lifelong Education*, vol. 19, no. 4, in AET 451:*Learning in the Workplace, Resource Book*, 2002, University of New England, Armidale, NSW, pp. 117-124.
- Bennett, R. 2004, 'Student's motives for enrolling on business degrees in a post-1992 university'. *The International Journal of Educational Management,* vol. 18, no. 1, pp. 25-36. Retrieved 27 August 2004 from Emerald Database
- Biggs, J.B. 2003. *Teaching for quality learning at university*. Buckingham: Open University Press/Society for Research into Higher Education.
- Billett, S. 2001, Learning in the Workplace: Strategies for effective practice. Allen & Unwin, Crows Nest, NSW.
- Billett, S. 2002, 'Toward a Workplace Pedagogy: Guidance, Participation and Engagement'. *Adult Education Quarterly*,. vol. 53, no. 1. pp. 27-44. Retrieved 29 September 2004 from ProQuest database.

- Boud, D. & Solomon, N. 2003, "I don't think I am a learner": acts of naming learners at work'. *Journal of Workplace Learning*, vol 15, pp. 326-331. Retrieved 15 December 2003 from Emerald database.
- Brooks, A.K. 2004, 'Transformational Learning Theory and Implications for Human Resource Development'. *Advances in Developing Human Resources*, vol. 6, no. 2, pp. 211-226. Retrieved 2 May 2005 from ProQuest database.
- Brubaker, R., & Cooper, F. (2000), 'Beyond 'identity', Theory and Society, Vol. 29, pp. 1-47.
- Bruner, J. 2004, 'A short history of psychological theories of learning'. *Daedalus Boston*, vol. 133, no. 1, pp. 13-21. Retrieved 2 May 2005 from ProQuest database.
- Burns, R. 1995a, 'The psychology of learning'. The adult learner at work, Business and Professional Publishing, Sydney, Chapter 4 in PDLD 471: *Teaching and Training Adults, Resource Book*, 2003, University of New England, Armidale, NSW, pp. 99-136.
- Burns, R. 1995b, 'Methods in adult education'. The adult learner at work, Business and Professional Publishing, Sydney, Chapter 3 in PDLD 471: *Teaching and Training Adults, Resource Book*, 2003, University of New England, Armidale, NSW, pp. 254-295.
- Bouma, G.D. 2000, The Research Process, Oxford University Press, Melbourne.
- Bowerman, J., & Collins, G. 1999, 'The Coaching Network: a Program for Individual and Organizational Development'. *Journal of Workplace Learning: Employee Counselling Today*, vol. 11, no. 8, pp. 291-297.
- Caffarella, R. 1994, 'Self-directed learning', in S. Merriam (ed.), *An update on adult learning theory*, Jossey-Bass, San Francisco, Chapter 3, pp. 25-35.
- Chan, C.C. Pearson A.C. & Entrekin, L. 2003, 'Examining the effects of internal and external team learning on team performance.' *Team Performance Management*, vol. 9, no. 7/8, pp. 174-181. Retrieved 13 November 2004 from Emerald database.
- Charmaz, K. 2005, Grounded theory in the 21st Century, Norman K. Denzin, & Yvonne S. Lincoln, (Eds.) *The Sage Handbook of Qualitative Research*, 3rd edn., (pp. 507-536), Thousand Oaks, California: SAGE Publications.
- Charmaz, K. 2006, Constructing Grounded Theory. London: SAGE Publications.
- Chenitz, C.W., & Swanson, J. M., 1986, *From Practice to Grounded Theory*, Addison-Wesley Publ. Co. Inc.: California.
- Cooper, D.R., & Schindler, P.S. 2006 Business Research Methods Boston: McGraw-Hill
- Coutinho, S.A. 2006, A model of metacognition, achievement goal orientation, learning style and self-efficacy. PhD Dissertation, Dekalb, Illinois. Retrieved January 2 2010 from ProQuest database.
- Coutinho S.A., & Neuman G, 2008, 'A model of metacognition, achievement goal orientation, learning style and self-efficacy', Learning Environments Research, *Dordrecht*, vol. 11, iss. 2; p. 131. Retrieved January 2, 2010 from ProQuest database.

- Creswell, J.W. 1998, *Qualitative Inquiry and Research Design, Choosing among Five Traditions*, Thousand Oaks, California: SAGE Publications
- Cutcliffe J.R., & McKenna H.P. 2004, 'Methodological Issues in Nursing Research' *Expert Qualitative Researchers and the use of Audit Trails*. Blackwell Publishing Ltd. Retrieved 2 July 2004 from http://www.ruralhealth.utas.edu.au.
- Dack, C., McHugh, L., & Reed, P. 2009, 'Generalization of causal efficacy judgements after evaluative learning'. *Learning & Behavior*. vol. 37, iss. 4. pp. 336-349. Retrieved from ProQuest database.
- Daniels, J. 2008, 'Negotiating learning through stories: mature women, VET and narrative inquiry'. *Australian Journal of Adult Learning*. Canberra, vol. 48. iss. 1, pp. 93-108. Retrieved 2 January 2010 from ProQuest database
- Dealtry, R. 2004, 'The savvy learner'. *Journal of Workplace Learning*, vol. 16, no. 1/2, pp. 101-109. Retrieved 4 June 2004 from Emerald database.
- Denscombe, M. 2001, *The good research guide: for small-scale social research projects*. Open University Press, Buckingham. United Kingdom.
- Denzin, N.K. 2005, 'Qualitative research in journalism: taking it to the streets/the audience in everyday life'. *Journalism & Mass Communication Educator*. Columbia vol. 60 iss. 2 pp. 221-224. Retrieved 5 January 2010 from ProQuest database.
- Denzin, N.K., & Lincoln, Y.S. 2000, *Handbook of qualitative research*. 2nd edn. Thousand Oaks, Calif, Sage Publications.
- Department of Education, Employment and Workplace Relations, nd. *NRS*, Retrieved from http://www.nrs.dest.gov.au/default.htm
- Department of Employment & Industrial Relations, 2007, *Experience Pays*, Retrieved from http://www.dier.gld.gov.au
- Department of Foreign Affairs and Trade, 2009. *Annual Report 08/09*, Retrieved from http://www.dfat.gov.au/dept/annual reports/index.html
- Department of Health and Ageing, (DoHA) 2002, *National Strategy for an Ageing Australia*, DoHA, Canberra. Retrieved 3 August 2004 from: http://www.abs.gov.au/Ausstats/
- Department of Immigration and Citizenship, 2009a., *Skilled Occupation List (SOL) and Employer Nomination Scheme Occupation List (ENSOL)*, Retrieved from www.immi.gov.au/allforms/pdf/1121i.pdf
- Department of Immigration and Citizenship, 2009b, *State/Territory Summary Report*, Retrieved from www.immi.gov.au/skilled/skilled-workers/sbs
- Donnon, T.L. 2001, *Adult Learning: A Function of One's Differentiation of Meaning and Approach to Learning*. Graduate Division of Educational Research, Calgary, Alberta. Retrieved 6 August 2004 from ProQuest Information and Learning.
- Dwyer, B. 2001, 'Successful training strategies for the twenty-first century; using recent research on learning to provide effective training strategies'. *The International Journal of*

- *Educational Management*, vol. 15/6 pp. 312-318. Accessed from ProQuest 22 November 2009.
- Elias, J.L., & Merriam, S. 1980, *Humanistic Adult Education, Philosophical on Foundations of Adult Education*, Robert E. Krieger Publishing, Malabar, Florida, Chapter IV, pp. 109-138.
- Farney, S. 1999, 'Career Strategies: Doing More of What You Do Best', *ISM's 88th Annual International Supply Management Conference*, Arizona.
- Forte, R.F. (2007). A review of social identity theory with implications for training and development. *Journal of European Industrial Training*. Vol.31, No.3, pp.166-180
- Freire, P. 1972, *Pedagogy of the Oppressed*, London: Penguin.
- Glaser, B.G. & Strauss, A.L. 1965, 'Discovery of substantive theory: a basic strategy underlying qualitative research'. *The American Behavioral Scientist* (pre-1986). vol. 8, iss. 6. pp. 5-13. Retrieved from ProQuest database.
- Galbraith, M.W. (ed) 2004, *Adult Learning Methods: A Guide for Effective Instruction*, 3rd edn, Krieger Publishing Company, Malabar, Florida.
- Gardner, H. 2003, 'Multiple Intelligences After 20 Years', *American Educational Research Association conference*, 2003, Chicago, Illinois. Retrieved 15 October 2005 from http://www.pz.harvard.edu/PIs/HG_MI_after_20_years.pdf. pp. 1-14.
- Gardner, H. 1997, 'Multiple Intelligences as a Partner in School Improvement'. *Educational Leadership*, vol. 55, no. 1, pp. 20-22. Retrieved 15 October 2005 from ProQuest database.
- Geertz, C. (2003) The Interpretation of Cultures, New York: Basic Books
- Gilovich, T., Keltner, D., & Nisbett, R. 2006, Social Psychology. New York, Norton.
- Graham, G.C. 2002, *Transfer of learning: Perspectives of Select Adult Learners*, Thesis Dissertation, Faculty of Continuing Education, Calgary, Alberta. Retrieved 6 August 2004 from ProQuest database.
- Gray, D.E. 2004, Doing research in the real world. Sage Publications. London.
- Gubrium, J.F. & Holstein, J.A. 1994, 'Analyzing Talk and Interaction' in J.F. Gubrium, & A. Sanker, (Eds.) *Qualitative Methods in Aging Research* (287-305). Thousand Oaks, California: Sage Publications Inc.
- Hager, P. 1998, 'Lifelong Education: From Conflict to Consensus?'. *Studies in Philosophy and Education*, Vol. 17, No. 4, pp. 323-332
- Hamm, R. 2009, 'Negative will, self-image, and personality dysfunction'. *Psychoanalytic Review*. New York, vol 96, iss. 1, pp. 55-84. Retrieved from ProQuest 5 January 2010 from ProQuest database.
- Hanold, L. 2003, 'Developing effective employee learning experiences'. *Development and Learning in Organisations*, vol. 17, no. 6, pp. 6-8.

- Harrison, R. 2003, 'Languaging learners: constructions of identity through discourses of lifelong learning'. Paper presented at SCUTREA, 33rd annual conference, University of Wales, Bangor 1-3 July 2003, retrieved 21 September 2004 from: http://www.scutrea.ac.uk/library
- Helterbran, V.R. 2007 'Informal Learning: Mid-Life Learners Forging a Learning Philosophy'. *The Journal of Educational Thought*. Calgary, vol. 41, iss. 1, pp. 7-27. Retrieved 5 January 2010 from ProQuest database.
- Heikkila, K. & Makinen, K. 2001, 'Different Ways of Learning at Work'. 22nd International Conference on Researching Work and Learning, University of Calgary, July, pp. 380-390.
- Hogg, S. 2006, 'Adult education in the workplace: an engineer's journey to foster self-direction in others'. *Adult Learning*. Arlington, vol. 17, no. 1-4, pp. 24-27. Retrieved January 3 2010 from ProQuest database.
- Hoyle, R.H. (1995). *Structural Equation Modelling: Concepts, issues and applications*. Thousand Oaks, SAGE.
- Illeris, K. 2003, 'Workplace learning and learning theory', *Journal of Workplace Learning*, vol. 15, no. 4, pp. 167-179. Retrieved 8 April 2004 from ProQuest database.
- Illeris, K. 2004, 'A model for learning in working life', *Journal of Workplace Learning*, vol. 16, no. 8, pp. 431-441. Retrieved 12 September 2004 from ProQuest database.
- Industry Skills Councils, 2009, *A Directory of Education and Training Statistics*, 1136.0, Retrieved from http://www.abs.gov.au/ausstats/abs@.nsf/mf/1136.0?OpenDocument
- Kaufman, S. R.,1994, 'In-depth interviewing'. In J.F. Gubrium, & A. Sanker, (Eds.) *Qualitative Methods in Aging Research* pp.123-136. Thousand Oaks, California: Sage Publications Inc.
- Klein, B. Cosmides E., Murray R., & Tooby, J. 2004, 'On the acquisition of knowledge about personality traits: does learning about self engage different mechanisms than learning about others?'. *Social Cognition*; vol. 22, no. 4; pp. 367 390.
- Kearsley, G. 2010. The Theory Into Practice Database. Retrieved from: http://tip.psychology.org
- Kling, M. 2004, *Recurrent Issues in Learning: The Affect on Future Development of Adults*. Conference Paper presented for The 3rd Asia-Pacific Conference Diversity and Equity in Continuing Education and Lifelong Learning; Curtin University of Technology, Perth, Western Australia.
- Kling, M. 2007, *Insights into self-perception and adult learning; interviews with thirty-one adults.* Conference paper presented for Adult Learning Australia 47th Annual National Conference, Understanding Today's Literacies.
- Kolb, D. 1984, *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ. Prentice Hall.
- Kuhn, D. 2004, 'Metacognition: a bridge between cognitive psychology and educational practice', Gale Group. Retrieved 15 October 2005 from http://www.findarticles.com/p/articles/mi_m0NQM/is_4_43/ai_n8686064/print

- Knowles, M. 1990, *A theory of learning: Andragogy The adult learner: A neglected species*, Gulf Publishing, Houston. Chapter 3, pp. 27-65.
- Knowles, M.S., & Holton, E. F. H. III, & Swanson, R. A. 1998 *The Adult Learner: The definitive classes in adult education and human resource development.* 5th edn, Gulf Publishing Company: Texas.
- Kolb, D. 1997, 'The Theory of Experiential Learning and ESL' *The Internet TESL Journal*, vol. 3, no. 9, Retrieved 10 June 2003 from http://iteslj.org/Articles/Kelly-Experiential
- Laird, J.D. 2007, Feeling: The Perception of Self, Oxford, Oxford University Press.
- Leader, G. 2003, 'Lifelong learning: policy and practice in further education'. *Education* + *Training*. vol. 45, pp 361-370. Retrieved 12 December 2003 from: http://www.emeraldinsight.com/0040-0912.htm
- LeGreco, M. 2009, 'Discourse tracing as qualitative practice'. *Qualitative Inquiry*, Sage Publications, vol. 15, no. 9, pp.1516-1543. Retrieved 6 September 2007 from: http://qix.sagepub.com/cgi/content/abstract/15/9/1516
- Leximancer Manual, 2009, (Version 3.07).
- Littlejohn, S.W., & Foss, K.A. 2005, *Theories of Human Communication*, Toronto: Nelson.
- Livingstone, D. 2000, Exploring the icebergs of adult learning: Findings of the first Canadian survey of informal learning practices. NALL Working Paper #10, The Research Network for New Approaches to Lifelong Learning, viewed 6 November 2007, http://www.oise.utoronto.ca/depts/sese/csew/nall/res/10exploring.htm
- MacLennan, J. 2005, "Do the thing you think you cannot do". The imperative to be an adult learner...' *Australian Journal of Adult Learning*, vol. 48, no. 2, pp. 385-398. Retrieved 8 November 2009 from ProQuest database.
- Matthews, P. 1999, 'Workplace Learning: developing an holistic model', *The Learning Organization*, vol. 6, no. 1, pp. 18-29. Retrieved 2 May 2005 from Emerald database.
- Marton, F., & Saljo, R. 1976, 'On qualitative differences in learning-I: Outcome and Process'. *British Journal of Educational Psychology*, vol. 46, pp. 4-11.
- Maybury, R.C. 2001, A transformational adult learning model that leads to self-perceived life-changing self-awareness in a Jungian and Myers-Briggs Personality type context, PhD Dissertation, The Fielding Institute. pp. 1-197.
- Merriam, S., & Brockett, R. 1997a, 'The adult learner and concepts of learning', *The Profession and Practice of Adult Education*, Jossey-Bass, San Francisco. Chapter 6 in AET 451: *Learning in the Workplace, Resource Book*, 2002, University of New England, Armidale, NSW, pp. 15-45 and pp. 129-159.
- Merriam, S.B., & Brockett, R.G. 1997b, *Philosophical Perspectives from The Profession and Practice of Adult Education*. Jossey-Bass, San Francisco, pp. 27-50.

- Merriam, S. & Caffarella, R. 1999, 'Transformational learning', *Learning in Adulthood*, Jossey-Bass, San Francisco. in AET 451:*Learning in the Workplace, Resource Book*, 2002, University of New England, Armidale, NSW, pp. 65-177 and pp. 318-339.
- Mezirow, J. 1996, 'Contemporary paradigms of learning'. *Adult Education Quarterly*, vol. 46, pp. 158-172.
- Miles, M.B. & Huberman, A. M., 1994, *Qualitative Data Analysis*. 2nd Ed. Thousand Oaks, California: SAGE Publication.
- Millon, T., Lerner, M.J., & Weiner (eds), I.B. 2003, *Handbook of Psychology: personal and social psychology*. Volume 5. John Wiley & Sons, Inc., Hoboken.
- Minichiello, V., Aroni, R., Timewell, E., & Alexander, L. 1995, In In-Depth Interviewing, 2nd ed., Pearson Education Australia Pty Ltd, Frenches Forest, NSW.
- Minichiello, V., Fulton, G. & Sullivan, G.,1999, 'Posing Qualitative Research questions' in V. Minichiello, G. Sullivan, K. Greenwood, & R. Axford, *Handbook for Research Methods* pp. 35-56, Sydney: Addison-Wesley Pty. Ltd.
- Misko, J., Beddie, F. & Smith, L. 2007, *The recognition of non-formal and informal learning in Australia: Country background report prepared for the OECD activity on recognition of non-formal and informal learning.* Department of Education, Science and Training, Canberra.
- Nabi, G.R. 2004, 'Careers take a change of direction. The concept of 'jobs for life' is becoming a rarity'. *Development and Learning in Organisations*. Vol. 18, no. 2. pp. 25-28. Emerald Group Publishing Limited.
- Neuman, L. W. 2006, Social Research Methods Boston: Pearson Education
- Nielsen, T. 2008, 'Implementation of learning styles at the teacher level'. *Education and Training*, vol. 50, iss. 2, pp. 155-166. Retrieved January 3 2010 from Emerald database.
- O'Connor, D. 2007, 'Maslow revisited: constructing a road map of human nature'. *Journal of Management Education*. Thousand Oaks, vol. 31, iss. 6, pp. 738-757. Retrieved from ProQuest database.
- Okukawa, O. 2008, 'If your learning experience is meaningful for you, how have you been constructing that meaning? A study of adult learners in Bangkok'. *International Forum of Teaching and Studies;* vol.4, iss. 1, pp. 46-61 retrieved 23 October from ProQuest.
- Orpen, C. 1999. 'The impact of self-efficacy on the effectiveness of employee training' *Journal of Workplace Learning: Employee Counselling Today* vol. 11, no. 4. pp. 119-122 MCB University Press. ISSN 1366-5626 Retrieved 3 August 2004 from ProQuest database.
- Onwuegbuzie, A.J., & Daniel L.G. 2003, 'Typology of analytical and interpretational errors in quantitative and qualitative educational research', *On-line Journal of Current Issues in Education*, vol. 6, no. 2. Retrieved 4 June 2004 from http://cie.ed.asu.edu/volume6/number2

- Owen, G. 2004, 'Mind the gap! 'The critical role of continuing professional development'. *Development and Learning in Organisations*, vol. 18, no. 3, pp. 7-9. Retrieved 4 June 2004 from Emerald database.
- Parker, J. 2005, 'Developing perceptions of competence during practice learning'. *British Journal of Social Work*, vol. 36, pp. 1017-1036. Retrieved Advance Access publication 8 November 2009 from ProQuest database.
- Pfahl, N.L., Wiessner, & C.A. 2007, 'Creating new directions with story: narrating life experience as story in community adult education contexts'. *Adult Learning*, vol. 18, iss. 3/4, pp. 9-14. Retrieved 2 January 2010 from ProQuest database.
- Pratt, M.G. (2003), 'Disentangling collective identities', in Polzer, J.T. (Ed.). *Identity Issues in Groups*. Elsevier Science, Amsterdam, pp.161-88.
- Rogers, A. 1996. 'Adult students: Who are they...?' *Teaching adults*, Open University Press, Buckingham, U.K. Chapter 3, pp.51-73.
- Ryckmann, R.M. 1993, *Theories of personality* 5th edn. California: Brooks/Cole Publishing Co.
- Shields, N. 1995, 'The link between student identity, attributions, and self-esteem among adult, returning students'. *Sociological Perspectives*, vol. 38, no. 2, pp. 261-272. University of California Press. Retrieved 7 November 2009 from: http://www.jstor.org/stable/1389293
- Schein, E.H. 1978, 'Career Strategies Doing More of What You Do Best. Skills-Based Analysis of the World-Class Purchaser', *CAPS 1999*, Addison-Wesley Publishing. Retrieved 15 September 2004 from http://www.assessment.com
- Schein, E.H. 1996, 'Career anchors revised: Implications for career development in the 21st century. *The Academy of Management Executive*, vol. 10, iss. 4, pp. 80-89. Briarcliff Manor. Retrieved 5 November 2004 from ProQuest database.
- Schuller, T., Brassett-Grundy, A., Green, A., Hammond, C., & Preston, J. 2002, *Learning, Continuity and Change in Adult Life*. The Centre for Research on the Wider Benefits of Learning Institute of Education, Bedford, London. Retrieved 27 August 2004, from ProQuest.
- Sjovall, A.M. & Talk, A.C. 2004, 'From Actions to Impressions: Cognitive Attribution Theory and the Formation of Corporate Reputation', *Corporate Reputation Review*, vol. 17, no. 3, pp. 269-282. Retrieved 28 April 2004 from ProQuest database.
- Smith, L. 2004, Valuing recognition of prior learning, Adelaide: NCVER Press
- Smith, L., & Clayton, B. 2009, Recognising non-formal and informal learning: Participant insights and perspectives Adelaide: NCVER Press
- Smith, M.K. 1999, (updated January 30, 2005), 'Learning theory', the encyclopaedia of informal education'. Retrieved from ProQuest database.
- Smith, M.K. 2002, (updated October 20, 2005), 'Malcolm Knowles, information adult education, self-direction and andragogy.' Retrieved 10 August 2004 from www.infed.org/thinkers/et-knowl.htm

- Stake, R. 1995 The art of case Study Research Thousand Oaks CA: SAGE Publications
- Stewart, D. 2001, 'Re-interpreting the learning organization'. *The Learning Organization: An International Journal*, vol. 8, no. 4, pp. 141-152. Retrieved 4 August 2004 (updated 2001) from Emerald database.
- Stone, C. 2008, 'Listening to individual voices and stories the mature-age student experience'. *Journal of Adult Learning*. Canberra, vol. 48, iss. 2, pp. 263-291. Retrieved 2 January 2010 from ProQuest database.
- Strauss, A., & Corbin, J. 1998, Basics of Qualitative Research, California: SAGE Publications
- Tanggaard, L. 2009, 'The research interview as a dialogical context for the production of social life and personal narratives', *Qualitative Inquiry*, Sage Publications, vol. 15, no. 9, pp. 1498-1517. Retrieved 5 September 2007 from: http://qix.sagepub.com/cgi/content/abstract/15/9/1498
- Timma, H. 2005, 'Assessor judgments and everyday worker performance'. *Australian Journal of Adult Learning*, vol 45 no 2 pp 155-171. Accessed ProQuest 28 November 2009.
- Trochim, W.M.K. 2002, (updated 16 January, 2005), 'Social Research Methods'. Accessed 20 October 2005 from: http://www.socialresearchmethods.net
- Velez J. 2006, 'Motivating students by cultivating self-worth'. *The agricultural education magazine*, vol. 78, no. 4. p. 15.
- Waller, R. 2005, 'I call myself a mature student. That one word makes all the difference': *Reflections on adult learners' experiences*. Edward Arnold (Publishers) Ltd, University of the West of England, Bristol, UK. Retrieved 9 November 2009 from ProQuest.
- Walton, J. 1992 'Making the theoretical case'. In Ragin, C. & Becker, H. (eds). *Exploring the Foundations of Social Enquiry* Cambridge: Cambridge University Press
- Weatherley, A. 2010 An investigation into the factors that influence the quality and effectiveness of communication for the resident in a low care Hostel setting of an Aged Care Residential facility. Unpublished PhD thesis, University of New England, Armidale, Australia.
- Wlodkowski, T.J. 2004, 'Creating motivating learning environments', in *Adult Learning Methods: A Guide for Effective Instruction*, M.W. Galbraith (ed.),, Kreiger Publishing Company, Malabar, Florida, pp. 141-162.
- Wojciszke, B. 2005, 'Morality and competence in person-and self-perception'. *European Review of Social Psychology*, vol. 16, no. 1, pp. 155-188, Accessed 23 October 2008 from http://dx.doi.org/10.1080/10463280500229619
- Zuber-Skerritt, O. 2005, 'A model of values and actions for personal knowledge management'. *Journal of Workplace Learning*, vol. 17, no. 1/2, pp. 49-65. Retrieved 2 May 2005 from http://80-proquest.umi.com.ezproxy.cqu.edu.au

Appendix A - Participant Consent Form

'Adult Learners and Self-perception'

PARTICIPANT CONSENT FORM

This research is being conducted by -	Margaret Kling PhD Student University of New Engl (07) 3210 2755 0414 404 685 margaret@carson.com.s	
I(print name) has coversheet and consent to participation in this resear		
this information for my records.		
Signed:	Date:	
I understand that my participation is purely voluntar	ry and that at any time, and with	out the need
for explanation, I may withdraw my consent to part	icipate in this research. Upon w	rithdrawing I
expect immediately thereafter my participation will	cease and no further contact fro	m the research
will occur without my instigation and consent.		
Signed:	Date:	
I have been made aware that if I have any questions	or concerns relating to my part	icipant in this
research I may contact the University of New Engla	and Ethics Committee as detailed	d in the
participant coversheet.		
Signed:	Date:	

Appendix B - Participant Interview Coversheet & Interview Questions

'Adult Learners and Self-perception'

PARTICIPANT INTERVIEW COVERSHEET

This research is being conducted by -

Margaret Kling PhD Student University of New England (07) 3210 2755 0414 404 685 margaret@carson.com.au

Why the research is being conducted:

The purpose of this research is to understand more fully how adults learn. This research will focus on learning in any environment but predominantly workplace learning. From the existing research, we know that adults learn by utilising their past knowledge, experiences and skills, but what we know less about is what motivates adults to learn. With fast changing global economies, the need for adults to adapt more quickly to their (work) environment means they will need to continue to learn more effectively and efficiently to keep up with constant change. Research which will help adults, and educators, understand how to facilitate better learning is therefore warranted and important.

What will you need to do?

All participants will be given the opportunity to speak openly about their learning history in face-to-face interviews with the researcher. Each interview should take approximately 25-30 minutes. The interview will be semi-structured using open-ended discussions about past and present learning experiences. Participants will be able to speak openly about their experiences. The types of questions you will be asked are outlined at the bottom of this form. Each interview will be recorded, using an audio recorder, to allow for verbatim reporting of your responses.

Many participants from the target group will also be invited to respond to an online survey which entails several ranked questions and short answer questions. As this survey is online, the participants for this will be anonymous.

The selection process:

All participants must meet the criteria for inclusion. These are; a history of at least five years work experience and have undertaken, or are currently undertaking, an adult learning program (either formal or non-formal). Participants will have the opportunity to refer people they believe may also suit the selection criteria above. The number of participants required for this study will be determined when saturation of the data is obtained. It is expected, however, that up to 5-10 participants will be required for in-depth interviews.

The benefits of the research:

It is expected that from participating in the research each participant may gain a greater understanding of him or herself as a learner as every effort will be made to provide each participant with access to the outcomes of the research for their own information. The new learning models, learning tools and other outcomes of this research, may therefore enhance participant's own learning.

Risks to you:

There are no risks to participants involved in this research project.

Your confidentiality:

Your privacy will be assured, as any participation in this research project will be undertaken at your convenience and within the environment you specify. The report and analysis of the data will not contain any identifiers that could (even inadvertently) identify you. Any reference to the participants will be only as a pseudonym, which will not be linked to your real name in any way. All data collected (i.e. taped interviews, notes by researcher, participants' notes etc.) will be stored in a locked filing cabinet, which will only be accessed by the researcher. The information will not be held indefinitely and will be destroyed after 5 years.

Your participation:

As a participant, your assistance with this research is completely voluntary and you are at liberty to withdraw at anytime. Every effort will be made to ensure your participation in this research will not impact upon your relationship with your employer, organisation or work colleagues (where interviews may occur within the workplace). Each person has the option to participate within the timeframes to suit and will be accommodated by the researcher wherever possible.

The interviews, questionnaires etc.:

Only the researcher herself and her two supervisors will have access to the transcripts from interviews. The researcher alone will be conducting the interviews and administering the survey questionnaires and at no time will anyone other than herself and her supervisors have access to the information from either of the above sources.

Ethical conduct - questions:

At all times throughout this research the conduct of the researcher will comply with the guidelines set down by The University of New England NHMRC Statement on Ethical Conduct in Research Involving Humans (1999). If you have any concerns whatsoever with your participation in this research contact the Ethics Committee by email: ethics@une.edu.au or telephone 02 6773 3449.

Feedback and consultation with you:

All your data provided for this research report will be available for you to comment on, alter or give feedback about, prior to the completion of the report. A summary of the overall research findings will be provided to all participants.

Consent:

At the first contact (either by email or by other means as agreed by the participant and researcher), each participant will complete two copies of the consent form, one for the participant's record and the other for the researcher's files. Participants will also retain a copy of this coversheet.

Thank you for your help.

Appendix C - Participant In-depth Interview Questions

'Adult Learners and Self-perception'

PARTICIPANT INTERVIEW QUESTIONS

All participants will be asked a similar open-ended question at the beginning of the interview, as indicated below. The depth of response from each participant will be completely up to him or herself. The researcher will audio record answers whilst also making notes as a supplement the recording to aid in the verbatim transcription.

The following details the type of question, which will open the semi-structured interview.

Interview opening question examples:

- Can you tell me, in your own words, about your past and current experiences of learning on-the-job?
- Tell me about your learning at work and how you embarked on learning opportunities; how did you feel?
- Tell me about you and your learning history at work or otherwise...
- Tell me about your workplace learning and how you embarked on learning opportunities how did you feel prior to the learning, during and after?
- Tell me about your history with learning?
- Tell me about your learning history maybe going back to school or your recent adult learning.
- How did you embark on them and how did you feel?
- Tell me about yourself as a learner tell me what you do when you are faced with new learning experiences?

Appendix D - Online Survey Questionnaire

'Adult Learners and Self-perception'

ONLINE SURVEY QUESTIONNAIRE

Over a twelve-month period, participants will complete the following online survey questionnaire.

• Please answer the following questions using the scale as indicated below:

For questions 1-7 please indicate the number appropriate to your answer, for example -

1=very low and 7=very high

Ranked questions

- 1. When faced with a need to learn new information, what is your level of worry?
 - **1...2...3...4...5...6...7**
 - *1=very worried, 7=not worried at all*
- 2. What do you consider is your ability to learn?
 - **1...2...3...4...5...6...7**
 - 1=very low, 7=very high
- 3. How well do you remember new information?
 - **1...2...3...4...5...6...7**
 - *1=not very well, 7=very well*
- 4. When learning something new I find it easier if I have an opportunity to talk about it...
 - **1**...2...3...4...5...6...7
 - $l=not\ normally,\ 7=always$
- 5. I prefer to have visual information to assist my learning...
 - **1**...2...3...4...5...6...7
 - 1=never, 7=always
- 6. I need to consider each step in learning new information before moving on...
 - **1...2...3...4...5...6...7**
 - \blacksquare 1=never, 7=always

- 7. I enjoy the challenge of learning new information...
 - **1...2...3...4...5...6...7**
 - 1=never, 7=always
- 8. Rate your own perception of yourself as a learner...
 - **1...2...3...4...5...6...7**
 - l=learns with difficulty, 7=learns very easily
- 9. Do you visualise the learning environment and your interaction in it prior to attending?
 - **1...2...3...4...5...6...7**
 - l=never, 7=always
- 10. I can remember what I learned at school...
 - **1...2...3...4...5...6...7**
 - \blacksquare 1=never, 7=always
- 11. My learning at school was a bad experience...
 - **1...2...3...4...5...6...7**
 - 1=never, 7=always
- 12. Learning I have undertaken as an adult, has been very enjoyable...
 - **1...2...3...4...5...6...7**
 - \blacksquare 1=never, 7=always
- 13. Learning I have undertaken as an adult has been very difficult...
 - **1...2...3...4...5...6...7**
 - l=never, 7=always
- 14. I will deliberately seek out and attend learning opportunities...
 - **1**...2...3...4...5...6...7
 - l=never, 7=always

For questions 15 to 19 please provide a written response (attach separate sheets where required)

Short answer questions:

- 15. Can you tell me, in your own words, about your past and current experiences of learning on-the-job?
- 16. Can you describe how you (have felt) feel if required to learn a new process for your job?
- 17. Please describe what you do prior to attending a training/learning program...
- 18. Has your self-perception of yourself as a learner altered over time? If yes, please explain how you believe this occurred...
- 19. Do you have any comments you would like to add?

Thank you for your help.

Margaret Kling PhD Student University of New England

Appendix E - Survey participant demographics

No	M/F	O/Group	O/Type	Y/Employed	Qualification	Age Range
1	F	В	F	10+	Postgraduate	31-35
2	F	В	F	5-10	Undergraduate	26-30
3	F	В	F	10+	Postgraduate	31-35
4	F	В	F	10+	Postgraduate	46-50
5	M	В	F	10+	Diploma	41-45
6	M	О	F	10+	Postgraduate	51-55
7	F	В	F	At least 5	Undergraduate	Up to 25
8	M	Т	F	10+	Higher School Certificate Licensed Aircraft Engineer	46-50
9	F	О	F	5-10	Postgraduate	31-35
10	M	О	F	At least 5	Undergraduate	Up to 25
11	F	В	F	10+	Certificate III	26-30
12	M	В	F	5-10	Diploma	31-35
13	M	О	F	At least 5	Undergraduate	Up to 25
14	M	0	F	5-10	Postgraduate	31-35
15	M	О	F	10+	Certificate IV	41-45
16	M	В	F	5-10	Certificate III	26-30
17	F	О	F	10+	Diploma	36-40
18	M	О	F	10+	Overseas non-accredited	51-55
19	M	В	F	At least 5	Higher School Certificate	41-45
20	F	В	F	10+	Diploma	56-60
21	M	В	F	5-10	Certificate III	26-30
22	F	В	F	10+	Undergraduate	31-35
23	F	В	F	At least 5	Higher School Certificate	41-45
24	F	В	F	10+	Undergraduate	31-35
25	F	В	F	At least 5	Certificate (unspecified)	41-45
26	F	0	F	10+	Year 10	41-45
27	F	В	F	10+	Undergraduate	31-35
28	F	0	P	10+	Undergraduate	36-40
29	M	О	F	10+	Not Supplied	61-65
30	M	В	F	5-10	Certificate IV	31-35
31	M	В	F	10+	Certificate IV	36-40
32	M	В	F	10+	Postgraduate	51-55
33	M	В	F	10+	Higher School Certificate	36-40
34	M	О	F	10+	Higher School Certificate	41-45
35	F	О	F	10+	Undergraduate	51-55
36	F	В	F	10+	Higher School Certificate	26-30
37	F	О	F	10+	Undergraduate	26-30
38	M	В	F	5-10	Higher School Certificate	26-30
39	M	T	F	10+	Certificate III	26-30
40	F	В	F	10+	Postgraduate	41-45
41	F	О	F	At least 5	Postgraduate	31-35
42	F	О	F	5-10	Certificate III	31-35
43	M	В	F	10+	Doctorate	51-55
44	M	В	F	5-10	Certificate III	31-35

No	M/F	O/Group	O/Type	Y/Employed	Qualification	Age Range
45	F	В	F	10+	Undergraduate	41-45
46	M	T	F	10+	Diploma	51-55
47	F	В	F	10+	Certificate IV	31-35
48	F	В	F	10+	Undergraduate	36-40
49	F	В	С	10+	Diploma	51-55
50	M	В	F	10+	Postgraduate	51-55
51	M	В	F	10+	Undergraduate	41-45
52	F	В	F	10+	Higher School Certificate	31-35
53	F	В	F	10+	Postgraduate	51-55
54	M	В	F	At least 5	Postgraduate	46-50
55	F	В	P	10+	Certificate IV	61-65
56	M	В	F	At least 5	Postgraduate	51-55
57	M	В	F	10+	Certificate IV	51-55
58	M	В	P	10+	Diploma	61-65
59	F	В	F	10+	Certificate IV	31-35
60	M	О	F	10+	Certificate IV	41-45
M-30 F-30		Business -21 Trade-3 Other-17	Full -56 Par-3 Casual-1	Most 10+ years employed	HSC-8 Cert III-6 Cert IV-8 Dip-7 U/Grad-13 P/Grad-13 Dr–1 Other-4	Average 40.6

Appendix F - Interview techniques and alignment to premise

Interview Questions	ALIGNMENT		
Q 1	PREMISE		
Can you tell me, in your	 Originating and primary question designed to focus the intent of the interview Probing question (initially asking for background information, probing into the person's memory of their own learning – seeking terms related to environments, happenings, change in self-perception and workplace learning) Historical question Descriptive question (asking for overall feelings and experiences – relates to impression of self within a learning environment) Research Questions		
own words, about your	research Questions		
past and current experiences of learning	Q1. Which (experiences) precipitate a perception of the self as a learner? Q3. Can (does) self-perception change, and if so, how?		
generally and learning	Research Objectives		
generally and learning on-the-job?	To find out whether environmental (historical and situational) factors may contribute to the development of self-perception as a learner - to investigate the relationships between past learning experiences and current self-perception. To investigate to what output self-directed learning may be linked to a		
	 To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning – in particular - applying the learned skill in the learner's work. To investigate whether there are contributing factors which may initiate 		
	or alter a perception of self as a learner?		
Q 2	PREMISE		
	 Secondary probing question (to reiterate learning in the workplace) Laddering question (seeking responses depicting own hierarchy of what a self-directed learner is and the actions and feelings of being a SDL) Funneling question (intending to hone in on learning and initiating learning) Descriptive question (seeking own terms related to self-perception as a learner) Sensory Question (asking for feelings, emotions and descriptions of the environment related to stories of learning) 		
Tell me about your	Research Questions		
learning at work and how you embarked on learning opportunities; how did you feel?	Q1. Which (experiences) precipitate a perception of the self as a learner? Q2. What aspects of self-perception manifest as self-directed learners? Q4. Could insights of self-perception improve learning? Q5. Is self-perception linked with conscious interaction?		
	Research Objectives		
	 To find out whether environmental (historical and situational) factors contribute to the development of self-perception as a learner - to investigate the relationships between past learning experiences and current self-perception. To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning – in particular - applying the learned skill in the learner's work. 		

	 To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs. To find out to what extent a positive or negative self-perception is linked to the engagement of learners in learning.
Q 3	PREMISE
	 Open question (allows the participant freedom and choice of learning type and environment in the answer to broaden – and pyramid the question) Contrast question (asking for a contrast of learning experiences away from work) Descriptive question (initiating a story telling and historical elements to the person's experiences) Historical question (specifically asks for historical events) Drilling question (mentioning work again may evoke further description related to the previous question) Funnelling (honing in on learning and history in any environment)
	Research Questions
Tell me about you and your learning history – at work or otherwise	Q1. Which (experiences) precipitate a perception of the self as a learner? Q2. What aspects of self-perception manifest as self-directed learners? Q3. Can (does) self-perception change, and if so, how?
	Research Objectives
	 To find which factors may contribute to the development of self-perception as a learner - to investigate the relationships between past learning experiences. To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs and current self-perception. To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning – in particular - applying the learned skill in the learner's work. To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs.
Q 4	PREMISE
	 Repetitive question (inter-interview cross-checking question matched with previous answers to Q 2) Sensory question (reiterating previous feelings and checking for subordinate terms or hierarchy) Historical question (again repetitive questioning technique checking for
Tell me about your	subordinate terms)
workplace learning and how you embarked on	Descriptive question (clarifying descriptions of self as a learner) Contract question (feelings before, during and often)
learning opportunities -	Contrast question (feelings before, during and after) Page 2018 Overetions
how did you feel prior to the learning, during and after?	Research Questions Q5. Is self-perception linked with conscious interaction? Q4. Could insights of self-perception improve learning?
	Research Objectives
	 To investigate whether there are contributing factors which may initiate or alter a perception of self as a learner? To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs.

Q 5	PREMISE
	 Repetitive question (inter-interview cross-checking with previous answers to Q 3) Drilling question (asking the same question a different way to drill down and hear terms participant defines their past experiences) Historical (reiterating background perhaps different stories to evoke more memories) Open-ended question (with a closed topic) Descriptive question (non-leading descriptive question 'about' used rather than 'feel' to ensure the story provided is not told due to the perception that the question was either positively or negatively asked) Research Questions
T. 11	All research questions Research Objectives
Tell me about your history with learning?	 To find out whether environmental (historical and situational) factors may contribute to the development of self-perception as a learner - to investigate the relationships between past learning experiences and current self-perception. To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning – in particular - applying the learned skill in the learner's work. To investigate whether there are contributing factors which may initiate or alter a perception of self as a learner? To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs. To find out to what extent a positive or negative self-perception is linked to the engagement of learners in learning.
Q 6	PREMISE
Tell me about your learning history maybe going back to school or	 Closed question (honing in on self-perception) Knowledge question (specifically mentioning adult learning, yet allowing for a historical progression to provide insights into how learner may have changed) Sensory (again reiterating 'feel' to evoke terms related to self-perception of self in learning environments) Laddering (depending on answers to the previous questions - or supplementary laddering if answers brief for previous questions)
your recent adult	Research Questions
learning. How did you embark on them and how did you feel?	Q1. Factors that contribute to the development of self-perception and history Q3. Self-perception change, and if so, how? Q4. Could insights of self-perception improve learning?
	Research Objectives
	 To investigate whether there are contributing factors which may initiate or alter a perception of self as a learner? To develop a model showing the possible effects of self-perception – particularly implementing workplace-learning or team-based programs.
Q 7	PREMISE
Tell me about yourself as a learner – tell me what you do when you are faced with new	 Closed question (honing in on self-perception) Descriptive question (what you 'do' expected to evoke descriptions of
	 both physical and epotional preparation) Sensory question (asking what you 'do' may evoke response about inner

- thinking and perception of self in a new learning environment)
- Pyramid question (finding the hierarchical aspects of self-perception)
- Advanced probing question (relevant links to self-perception carried through all questions)
- Drilling question (again emphasising and honing in on learning experiences and self as a learner)
- 'Posing the ideal' (Minichiello et al. 2000:90) (honing in on what makes the person 'comfortable' in a learning environment)

Research Questions

- Q3. Can (does) self-perception change, and if so, how?
- Q4. Could insights of self-perception improve learning?

Research Objectives

learning experiences

- To find out whether environmental (historical and situational) factors may contribute to the development of self-perception as a learner to investigate the relationships between past learning experiences and current self-perception.
- To investigate to what extent self-directed learning may be linked to a perception of self as a learner. To find out whether self-perception impacts upon the successful transfer of learning in particular applying the learned skill in the learner's work.
- To investigate whether there are contributing factors which may initiate or alter a perception of self as a learner?
- To develop a model showing the possible effects of self-perception particularly implementing workplace-learning or team-based programs.
- To find out to what extent a positive or negative self-perception is linked to the engagement of learners in learning.

Appendix G - Interview recordings

- minimal encouragers such as "mmm", "ah ah" not included in transcripts
- text marked 'X', 'Y' or 'Z' replaces possible identifiers to preserve participant anonymity

INTERVIEW 1 - November 2006

Male, aged 42 – Police Officer for 16 years.

Opening Question

Tell me about your learning at work and - how you embarked on learning opportunities - how did you feel?

- The police/military are different to the private sector with regard to the skills sector and there seems to be a big distinction and responsibility between what the organisation has deemed as compulsory
- You are expected to jump through the hoops
- The outcomes are pre-set
- There are ramifications for not complying such as probation or IR ramifications
- I adhere to learning to satisfy the organisations (that is the funding)
- I believe that there is very little retention or very limited energy with this type of learning it is about satisfying the requirements not about the content as much.
- I tend to watch for non-verbal clues and believe the learning is just merit based is just an assessment
- The economic hardship from not learning is not worth it
- There is a loss potential and this detracts from the learning experiences
- I look at what the assessor needs and once the skills have been demonstrated just dump the knowledge
- The skills and knowledge analogy I don't need and the training and workplace link is getting further away I believe
- e.g. training in firearms will not be offered to help me but to help the employer from liability you can tell it is how it is designed a pantomime really
- Employers perspective we have to train the people ourselves competencies don't reflect the reality training on the job might.
- I believe particularly younger people are disinterested or disappointed as they can't apply the skills the proof is in the pudding and the course doesn't provide skills for the job

How do you go about ensuring you are learning?

- Voluntary participation you will really get a lot out of but is not fulfilling employer expectations if you don't have those industrial aspects
- I learn by clarifying; by recalling things; by getting feedback and by listening
- Other people speak about it which consolidates it
- You can remember because you must it is not second guessing what /why you are learning
- A lot is to do with who delivered the training
- You develop a relationship with the trainer
- You buddy up and then you get the gap bridged which works better with a much smaller group

- If it is complicated then 1 on 1
- If 20 people are packed in a room it is difficult
- I know that the facilitator is looking for a pre-programmed response once you've been to a few of these you can provide correct answers
- An external provider is a better environment for learning because you can take a risk in the external environment like asking silly questions and not feel like a goose in front of peers

How has your learning changed?

- What motivates the organisation to send people for training (this has changed)
- What are they really trying to do -i.e. cultural training etc
- Maybe to identify people with fixed ideas
- I would be led earlier I would lead a training course with no idea
- I avoid training if I can't see the value in it
- Also, there is training that is formal I don't like the formality of the formal thing it is too slow it drags
- The trick is to get a smaller group
- If I can find the link it is better

Can you elaborate on the finding the link?

- I feel that you can lead an experienced facilitator they only refer to the notes if they missed something you can say 'in my workplace I need this' whereas in the police formal training it is regimented and I can't be bothered particularly if I am 'not invited to participate then I can't be bothered'.
- I prefer non-formal training
- I can access my training myself now I don't wait for the organisation
- I will source if myself
- The internet & phone is a great way to get access to training
- Even a 360 degree peer review colleagues will network and tell you about something that is learning
- Learning on your own terms most of it is self-taught
- The technique of training needs more individual aspects
- Some training is awareness or attitudinal training that you can just display it then leave
- I was thinking that I have to do this other than that I would not have done the course

What learning will you find for the future?

- I am interested in micro-business forming as well
- I read extensively soak up
- Small business people are happy to talk to you
- This is a reciprocal learning
- I am going to think about downshifting (work at least) to allow me to complete a degree (law)
- I am learning this to improve my lifestyle and flexibility
- To be admitted to the bar (ultimately)
- With the degree I will gear it to the end result I will choose subjects to suit career prospects (rather than the structure of the course if I can) in other words I will look at what my personality, experience, background and knowledge could provide a better career with in law (for example maybe a particular expertise)

• I will learn using all external study

Why will you do the course fully externally?

- Universities are administration wise completely dreadful.
- In fact universities need to look at how RTOs work and offer a similar service
- I am dreading trying to work around the system

How will you monitor your learning?

- When I am studying I will make the distinction between work and home so I will actually get up and get dressed & keep a record of how long I study and monitor it straight away to correct it (if I find I am not studying enough)
- There is no-one looking over my shoulder I will have to monitor it
- There is a fear factor of course 'what if I can't ' I think? Then I look at people who have gone before me and I think I can achieve I have a record of undergraduate study so I think I can do it!
- I want to do it.
- I sense a whole new experience and I am bored with the system to I will be very happy to do something else!

Thank you for your help	•	
_		

INTERVIEW 2 - February 2007

Male, approximate age 40 - 50Formerly a tradesperson, currently running own business.

Opening Question

Tell me about your learning at work and - how you embarked on learning opportunities - how did you feel?

- It is amazing the different worlds we all live in I am surprised and the one thing I have learnt from this I used to live in X and work for the biggest dealers in Australia and you meet so many people coming in and buying stuff you think you know stuff and I met the person from Y and I bought the business off a guy who lived in Z for ten years and who was so... (participant indicated narrow with his hands) but being in this room for 3 days I think I am coming in there (indicates narrow again) see the army guys and you know?
- And it is a funny thing you know I worked in pubs for ten years and people who were there were a lot of people who had a part time job because they went to uni for years and they were astronauts here (indicates head) but here (indicates hands) they were cripples no idea no common sense you know?

Can you tell me about your experiences in your background and how you have faced learning for your jobs? I am interested in how people change and learn for their work. Can you tell me a history or story about how you learn and what you do when faced with new learning (when related to your job)?

• I always think of outcomes - good and bad - and try to relate it to a scenario or give myself a couple of different scenarios of how it could go and also look back at a previous situations and at that outcome of what happened or where it could have gone

Do you equate what you could have done or what happened to you in the past – do you look at difficulty or what the content is?

- Probably what my point of view is in owning a business I have to look at what is detrimental and what may come back and bite me
- You have to go throw a little bit of caution to the wind even if it means going a little bit off the track

You enter the learning environment without an exact understanding of the expectation but are ready to face anything:

- Yeah to a point you have to be you cant predict the future but you have to be ready for the left ball or something coming in from there
- Cant' think

How has this worked for you in the past? Say for a new job or new role within a job?

• I suppose when I bought my business I went from a sales person into an owner and I came from probably a background to when I was in charge of other people anyway who I had a bit of – you know- knowledge of how to talk people through it and so training is finding a way that works for that person - everyone has a different way to achieve however it takes and work out what works for them and go with it

How did you learn your new system?

• Working in previous businesses – lets say - let's go back one strep I worked in the Whitsunday's and never been a game fisherman and I went there and I tried to look back at the principles that I have been taught and shown and you know and think outside the square and suppose – everyone told me I have know idea and never going to do it – and this got under my skin and it was so a bit of a challenge for me to strive and that's what happened it was turning over 18 K a month and in my first month is was turning over 75 – went from loser to winner in a short time and so it was lucky it was all there but – someone just had to put it into place – it was all there – so yeah - straight away people had confidence – people who had been in that game fishing for 30 years had to re-evaluate their thoughts...

When you stated this course how did you feel - did you do some searching or just rock up?

• I asked around people how had done this course and I was prepared that this course is a lot for me because I'm not a academic – you know – I don't act academic is not my forte – I am a visual and an hands on thrown in the deep end and come out the other side – you know – and that's my point – when I said you are meeting other people they are probably the opposite and the business of teaching people about boat licenses I know the field and I have the qualification and some insight in to why the backing – why my RTO went about the way it did – it is a good thing this course for me – and it is probably something that I don't think I will be the pinnacle in the class

What do you base that on?

• Probably because I haven't done the theory side of things as much as what other people in the class have

Do you see this as an issue?

• Um – in some ways yes but others no – because sometimes you learn depending upon what it is – I believe you can learn anything in life it comes back to the different person – different people will learn at different rates and I suppose you as the teacher and you as the student we need to work out what works for me and or how to teach me and I have to learn how to learn from you and if you are successful in working that out and me – then I am probably going to learn and succeed more if it does happen and if it doesn't happen then I can see myself – where I think I will be at the end of only 3 days in to this course.

I may like to interview you after the course to see if your perception changes then...

• I suppose if you said to me to stand up in from of the class – I don't have a problem with doing that and I could probably do it off the cuff – but I am looking around the room and I see peoples responses and that and what we are doing and I can see there are people that are similar to me where some of the - it is a concern that – for me – that I am not - even though I know how to use it (points to computer) what would take some one 15 minutes may take me a day – or a couple of hours to sort through it and to find things – through different methods myself – I might.....

I will be interested to find out what happens with you in the course and whether your perception of what you believe may happen actually happens.

• I think in the long term I – well I have come here to be successful – which will probably take me longer than others but that is not something that is going to be a surprise to me –

Thank you for your help) .		

INTERVIEW 3 - February 2007

Male, approximate age 30-35, Business Manager in IT Software Company

Opening Question

Tell me about you and your learning history – at work or otherwise...

• For me, working - I started working – I started out in hospitality in an industry which is very interesting and is – in Australia – is one of those environments or workplaces a lot of people go into and not many survive – they had actually quite a good structured program and being the Hyatt they had a very good program – they were actually very thorough with training and induction training – pretty thorough from an initial starting point – as in we were working in the bar area and had different courses for different areas like for silver service versus cocktail area or serving at tables – the nature of that industry is very hands on and repetition and discussion and obviously asking why you do things in that environment was the induction

- style which was very good it then petered out very quickly and you were thrown into work!
- My very first taste of the working environment and training was very good and in fact I've still got fond memories of watching a John Cleese movie on relations on how to talk and not a perfect person to present the parody of it so that was great but very much let down after that you just get whacked into the environment and it doesn't continue then so high expectations were set and were not matched.
- In actual fact since then in probably all the industries I have worked in it has been pretty consistently the case I think from a business perspective I think everyone is very conscious of trying to make a very good first impression but forgetting to continue that it's a resourcing issue time, energy, effort, all of that so looking back I find that it is normal but certainly I had expectations there and I felt disappointed it had moments we would have a special course with Remy Martin and we would come in and would get to ask, discuss and sample their entire range of products and you would try to educate yourself on the products and where they came from those sorts of scenarios were fabulous how you out that back into the workplace after that could have problems.
- The same time I then started doing child care totally different trying to pay my way through university and that was an environment with up to grade six in after school care and no training in that environment I literally followed someone round for 1/2 day, the afternoon, and see what you were meant to do and there was this expectation for you to think on your feet and I figured out that kids like to play games and so I just tried to think of games and create games to keep them occupied so that was very interesting looking back I think that with some of these things really safe playing racing games across bitumen and 9 times out of 10 they would fall and graze their knees and should we have done it that way there was very little guidance in that way and looking at that industry now and my own children in that environment there is no way I would like that to occur so its interesting how so with my involvement in that now with my kids in childcare now I am quite interested in keeping tabs on what training they have it is quite remark able with the difference now I wish I had had the type of training as it is an amazing area to work in it is a fun environment. It is so much fun and energy there!
- I have also worked in a bit of a landscaping role again in an attempt to pay my way thorough university architecture is a very expensive course and that was obviously from a perspective of landscaping manual labour I had a bit of an understanding and I did my own research my own training as to what I should and could do in the workplace but again nothing at all for what was expected nothing no formal approach certainly nothing readily available for someone who was interested in branching out and starting their own business so it was you'd sink or swim you'd figure out a way to do it that doesn't hurt anybody with the nature of landscaping you went into either doing general landscaping or manual labour so you had to be very careful so general landscaping or manual labour was pretty tame...

So you had to learn all that yourself?

• Yes where I was in X at the time there was an association which you could contact to get a little bit of information on; but there was certainly no mandatory control or any such requirement – nothing to state that you were competent – anyone could have a go at it you which is exactly what I did – and again looking back – and that is not even 20 years ago - it is quite dangerous – I am sure it still continues today – it is such a broad part of the environment – so it was very interesting – quite a broad range from that perspective after I left school until I found my way to the public service and that's a very very strange beast –

they have a very good structure and procedures and policies – all of those are in place – a lot of them very much driven by red tape - but if you look at it holistically it is actually quite good – they were conscious of staff having to learn having to go off on courses having to schedule and plan for that as a regular part of work so from that perspective it was actually quite a good environment to go into to because there was a structure – a process that should be followed and they would follow – which I think for males works well – we like procedures – we are trained by our mums quite well – so that in there with the public service I worked in a couple of different departments both federal and so that worked quite well –

- There was the expectation with the training you received that you would be able to apply it back in your work environment and in actual fact lot of the time the expectation was that when you came back as an expert as a guru which until you were able to actually apply that in the work environment could be very difficult to do but that was the expectation that doing the training you should be good at it in all aspects the matter was that the training wasn't going to cover all of it it was a facet of your work role in the work environment so those expectations were there the expectation was that training was a regular process and you had to keep doing it and it was needed and they had a lot of different training program for different roles you had a two year rotation training program it was work at the end of the day it was work but you would rotate between different departments and learn the method of each and after a period of time you would be moved to the next one to be learning the method the process etc after a period of time when you understood those you would move onto another on
- So a lot of on-the-job style training very much the nature of the public service quite a lot of external training programs tying to re-emphasise the skills on the product and
- Which is interesting not always appropriate and you could actually see a lot of people who would go on those courses weren't getting any benefit or value out of it from that perspective was sort of a disappointing parts of training when you see people spending money on it and knowing you are not getting any return but at the end of the day you have to there was a period of time when the workplace had to spend a mandatory amount of money
- Within the public service once I had to actually work in the training department that was very interesting not only receiving it but having to deliver it and the structure of the training was very good I have to say very detailed we had to be qualified in the product areas we were training in before we could then on train also that mandatory requirement was there so that expectation was there again was on your shoulders that you would have to get to that level then you could then on train for the next wave of work ...

There are different types of learning involved there - which one of those did you find suited you the best?

- Out of all the different styles looking at university studies, hospitality on the job etc for me and again I think it is almost a guy thing we like getting physical and actually doing it so from that perspective where it was hands on that was the most appropriate and reinforced the learning that had occurred
- I love reading but I guess I am like a lot of people I don't like reading manuals the information can be applied so short sharp bits of information and then an exercise then short sharp information and then an exercise I think that works for me
- In actual fact my role in my current employment I have found it worked well a training if instructed that way feedback is fantastic if not terrible!

You don't seem to be daunted by any learning environment ...

Maybe that is just personality type not sure

What do you think about when you are faced with a particular learning environment?

- Normally in that sort of environment if there is a face-to-face training environment most of the time I have found that I've been persuadedtraining even with external trainers you can usually ask more questions to actually get the information in a way which is more suitable which has held me in good stead for educating me.....I am conscious of that and obviously working around the environment and talking to other people and going in and actually and trialling if it is something (indecipherable) driven I have had to try it as the only way to know and feel comfortable in what you can do probably in the last 10 plus years the environing I have been working in are all software related and the only way to know is to dive you can read stuff but there are as many as ten ways to do things you need to actually understand as to why can you do them as well as how and to relate to people you've got to twist and turn
- Working in a timely fashion I find I work better under that environment under stress rather than an open-ended environment purely because you have to get on and you can actually drive towards it and you always know there is the light at the end of the tunnel and initially yes its a freight train into the open ended tunnel but when there inst that pressure to be honest with you in this industry it would be pretty unusual to be open-ended if it is nothing occurs otherwise you tend to move pretty quickly and it is not an environment you are comfortable in

Has there ever been a time where you thought you would not get through the work?

• Always – you always have moments like that...

How do you face those?

You are not really daunted by any overwhelming aspects....you attack it...

• I always try to look at things from a logical perspective – I try to break things down into bite size chunks or pieces – to make it feasible – if it is not you have to take it from – the entire task perspective – yes it does look daunting and yes it can be – but from that perspective you have to perhaps have enough – so a much easy way to work you are much better off – you are able to offload where you think there will be a piece as well – well you can prioritise and who you can get involved as well with the processes – one of the challenges we are facing at the moment we have a huge amount of work – not enough resources – despite the size of the company we are growing faster than we are able to train at the moment – so causing a bit of

grief for us - our expectations are there – we cant get the resources so we are going to having to reset our expectations – not a task I like – you are not normally driven by that....

You are fairly driven by the fact that whatever the constraints are – you are going to try to complete that task ...don't consider yourself but the outcomes....?

• In a strange way – I've always worked from a principle of trying to make my job obsolete in the job – I know that sounds strange - but if I am looking at my role currently in training I am looking at how I can actually get the outcomes with the same number of resources and the only way I can use those resources in a very very different way to which they are being used currently – if I am successful in that part of the process of my job will disappear – the requirements will change and the ownerships of the creation will actuallynot with our consultants – most people in my position wouldn't do that – I could be doing myself out of a job – I have done that successfully for probably the past 10 years – from my perspective its shown that I am able to do that – and it does actually work and it is better for the organisation and at the end of the day it should benefit me – it doesn't always work – sometimes you do leave yourself in quite but – but I always work from the principle of the big picture....

What you think of yourself in the future – what is your vision for yourself?

- Always topsy and turvy I think that is the nature of life for me the nature of change for me I don't see myself in a single industry forever – I don't think some industries will be still around and from that perspective I think it would be foolhardy to think – yes I certainly see myself being able to merge into a more different role – I look at the time I've spent with this company and I have already worked in a number of different roles already – the nature of what it need to do to perform and the training industry – at some point I'm sure – you find different things – I have been reading and hearing a lot of input from a lot of different people in our organisation and externally and it seems to be a division in society now you've got the older generation and my parents are in that and my dad – being in public service for almost 40 years – to some extent the interesting thing is that you could be in the public service for life but in a 30 of different departments and roles and some people are happy to do that – some people struggle to do that – there is that gap between – I guess personality types – can you change readily to survive to do different things – I think that that generation the expectation is different it is a survival thing and I look at people younger than myself and I am in my mid thirties now – in another week I will be 35 – I say to my wife I am closer to 70 than when I was born – even people who join our company who are early to mid 20 they understand that is actually completely normal – so it is a very different mindset that they are actively looking for that change and pushing their management and say 'look I have done this and I feel comfortable with this I want to change' and virtually looking at – I actually see my group who are 30-40 being kind of in that cross road where some of us have roles that can last a long time and some that don't – some are struggling some aren't – sort of that link between two completely different generations –
- We are starting to find from a staffing perspective our staffing expectations in what we deliver is actually driving our business it is changing what we need to do just in being able to move forward it is very very interesting for some of our senior managers in being able to handle that because that's not their lives I have a very interesting role.....

I can hear you thinking the next steps are going to be interesting?

- To some extent knowing it is going to happen some change is constant this company we literally produce a new release every six to eight months and we have to change from a software perspective every day which keeps us on our toes literally every day which is draining but at the same time challenging in a good way so you never satisfy the as to how that impacts careers or working life you can't pre-empt I mean you can plan and try to shape things you find a input or a different impact I think that is more feasible than was potentially before I look at my role with a company with 500 staff we've got one trainer! I mean there is a lot of stress!
- But that is not where I actually see my role I see my role in helping the company take training in a completely new direction and taking the form of competency training to the point where it actually becomes a revenue raiser rather than a cost I see it taking it to becoming actually

Thank you – that is all I need.		

INTERVIEW 4 - March 2007

Male, approximate age 50, Construction Industry (builder), now IT (systems) Trainer

Opening Question

Tell me about your workplace learning and how you embarked on learning opportunities - how did you feel prior to the learning, during and after?

- What it do now is IT support and training and so from that aspect we have to the software we use is upgraded frequently and consistently and I have to go through a learning process and not all of the time do we get training in it and with software it is a process of trial and error and before I can implement it for a customer it is a process of self-training in it before I see how it works out and before I can teach it
- Having to diversify I am not afraid of learning and I have had a range of other jobs and learned different skills throughout life and so
- As an age thing I see that I am probably never going to stop learning and I quite enjoy it so on that point of view its the job that I am doing at the moment is based on customers and actually supplying them solutions or outcomes and so there are many ways with the system that we use and the package to provide the required outcomes

Did you always attack learning with the positive attitude that you have now?

• I wasn't highly skilled

When you left school what changed?

• Probably could I see the application of what I was actually doing and before I started my apprenticeship I learned in parrot fashion, fractions and trigonometry and it wasn't until I could apply the practical application of the information in a given area could I work out the height and length of a given piece and it applied I could identify the reason for learning it and

it is not all mathematics I need to know it is only portions of it I need to know and so from there it has just progressed and now to training people I have done train the trainer programs and some are just boring and some I have picked up some information and doing this for 8 years and training kids and coming through this I have picked up lots about his people have trained – I tend to pick up aspects of it that I can - pick up different ways of doing things and in an assignment situation where I am in the moment in terms of my trade background I am in an inspectors role – like a cop – and so I tell people you have done this or that wrong and so from that aspect the way I approach people is that – you know I will come back in a day or so and you will need to fix that – so that wasn't something I was trained in but that I have picked up and how you should deal with people and the body language thing – apart from this morning!

- I think if I am interested I train people who are from the building industry and they have decided they are getting to old to carry stuff around and a) they have the knowledge but haven't really played with the computer and I get the other side of the coin with young people who know more about computers than I do and can navigate around the computer but don't have the knowledge part of it
- I started in computers with both my boys being into the computers...
- If you have an interest in something then you will learn it...

How do you get yourself prepared for it – like this course for example?

- I did a bit of preparation about the course and spoke to John about the course as he had already done and then talked to Dan and looked it up and then made a decision about 'will this course be useful etc'
- I spoke to Dan about RPL and whether this was an option but because it was over 7 years ago I decided that ok I might pick up information and ok I might fall asleep in some session

So you didn't do any pre-reading and happy to turn up and see what happens?

Yes

If you had to face a learning environment where you had no previous knowledge in - what would you do? Have you done this?

- Yes I had to find out about batch files and so I looked it up and started building batch files for myself and this way I could see what to do
- I will go about preparing myself and so have a preconceived idea about what I need to know and what I need to ask to ensure I can keep up.

That' all I need – thank you for your help			

INTERVIEW 5 - March 2007

Male, approximate age 35-40, Electrical Engineer

Opening Question

Tell me about your history with learning?

• Do you want me to talk about school?

As far back as you like – tell me anything you specifically remember ...

- I was always in the top classes and never really did any homework or anything and just cruised through and got accepted to Uni but my Dad died whilst I was doing my HSC and so couldn't accept the position as I didn't want to leave my Mum or the family, to become an engineer and a pilot so I did my apprenticeship (cabinet maker) and stayed at home and finished my apprenticeship and did my qualifications in house and then figured I should go on and do I think I was 32 when I went back to uni to do my degree.
- I had to defer for 2 years while as I was sent to China I had to in Sydney for a year and work for a year in China and in the states for a while so I had to defer for a while for 2 years

When you were faced with this learning what did you do – in preparation if any – how do you feel?

- I'm auditory really as a learner never take notes just read through the PowerPoint later as a recap
- I just sit and listen to what you are saying and after just write out a summary and just re-read it and re-read it more or less rote learn I tend to be able to remember it
- Our training at work is all like that we are just given a thick manual and you pretty much have to memorize it is crap that's stupid really as you don't really learn so what can you do although I can recall a lot of stuff I learned 15 years ago and so it does seem to work but it is not the research ------(indecipherable) is it -
- But that is not really helpful in your research is it?

Well this is a qualitative interview and so I am not really driving it necessarily – it is all about what you want to say....

When you are faced with a new topic for work what do you do?

- No preparation really
- They just take you into the class room and just sit you there for three months and they instruct and you just sit there and listen
- Period exams at the end with a 75% pass mark multiple choice
- So a lot of the assessment has to do with your ability to interpret the English language and not really knowledge based and so if you are good at multiple choice then you are able to I can usually find the right answer without knowing it just by the way the question is worded or whatever and when in doubt pick C you can usually get through them so it is not really about knowledge but multiple choice

How do you perceive yourself if you are faced with a learning environment you expect will stretch you?

- I like a challenge I think I have probably got the if I was going to study medicine I might struggle a bit but you know I don't really have too much of a drama with it and maybe that's because of my experiences that I have learned that I could I don't have too much of a drama with it I wouldn't like to be doing it as a seventeen year old I don't think a lot of them get through it I I think it is probably better with life's experiences
- I don't know my own ability my own opinion....
- That's a hard one I don't know sort of really not had that much of a struggle its just my ability to apply myself when I was younger I just couldn't be bothered I was lazy but now I am not lazy and have the drive to go and do it is now it is the time time is the commodity now that I don't have
- Its not a matter of ability its just the matter of having the resources to be able to do it and the time that you don't have

Do you see yourself doing nay more study?

• I am going to try to knock this over as soon as possible and then do an MBA and I was thinking of doing law or second degree in law – I don't know it might be too time consuming and I won't have the time to do it – a lot of reading – I probably wouldn't have use for it – clerk for 2 years and then go back to the beginning with salary – in fact I probably won't have a use for it.

Thank you for your assis	stance.	

INTERVIEW 6 - January 2008

Male, approximate age 30-35, Pastor

Opening Question

Tell me about your learning history maybe going back to school or your recent adult learning - how did you embark on them and how did you feel?

• How did I embark on your learning or why?

Yes - why probably?

Why did you start learning and what drove you to it?

- I probably would have left in year 10, as I wanted to be a professional fisherman actually. I worked on the weekend and holidays in a trade I ended up picking up.
- I really didn't like school and then I went on to learn a trade.
- Adult learning after school I learned through my trade and I really learned quickly. A year and a half into my trade I was running the show, driving the trucks etc.
- I learned out of necessity and I was quite good at it.
- A lot of my learning there was through instruction and applying what I was told there was no actual in-class time.

- The person teaching me my trade was not a great coach but he would tell me where I went wrong and how to apply the skill.
- He would really push me and tell me why I had to learn something and I related to that.
- The more challenge I had the more I actually learning
- Probably more so now my learning to become a minister a lot of that is self training
- I listened to a lot of tapes and CD's on other preachers and how they preached a lot of it was self-learning
- Probably a lot of the courses I went on I didn't learn much either mostly my own self-learning
- Until your course I didn't really like formal learning
- I only went on the course (your course) because I had to
- I probably only learned as much as I needed to learn what I put into it I got out of it
- I enjoyed the style of learning
- Probably the only formal style of learning that I have had in the last ten years

What did you think before you attended the course?

- I was thinking that I have to do this other than that I would not have done the course
- I didn't really want to do it I realised I needed to do it but that style of learning to me is something I don't often enjoy

How did you feel the first couple of days – I remember you made a couple of comments about your own ability to learn

- I was very tired at the end of every day and my troubles with learning things was with the government and bureaucracy as this really frustrates me
- Looking at my area of ministry and how I have seen people coming through to study and become really ineffective ministers and yet I haven't studied a lot but been very effective when I look at the bureaucracy then I think that the structured learning doesn't provide the learning that people really need —
- I think that you can learn a lot but unless you are out practically doing it then the information (if it is not practically outworked) then it is very frustrating
- A lot of the government requirements just cement my opinion about it
- I remember we did a case study of a person and part of it was this guy who had learned all this stuff and was very effective but he didn't do the assignment and other people in the group were saying he was lazy but for me he had improved and was very effective so that is where my style of learning is similar
- I really enjoyed the course and the project that we did after it as I had to practically put in it what I had learned.

Was there a time that you felt that you were learning 'easily' or without any real effort?

- Part of the stuff we learned I found easy as art of the teaching and learning style is something that I do here and I have done a lot of working in teams (with volunteers here) and so those things were easier for me to learn you can just think that way
- What you made me do was to solidify some of the content in my head and the theories behind them although I knew them I had not really placed in that way

If you had to fact another formal learning how will you face it?

• The same way – probably if I have to do it then I have to

- I may have changed my view a little bit though because of the formal learning I am now involved with
- People are coming here to learn and get a certificate but I want them to come here to change their life –
- I started your course that way and then I realised I could actually use some of this stuff
- I was able to look back and say maybe I did really use something useful!

So, apart from that - if you are now in a situation where someone asks you a question that you don't know the answer to how will you go about finding the answer?

• I will probably ask someone and if I don't get the answer I want I will do a search on the internet

And what is your plan for the future?

- I am loving what I am doing now and I would probably not say it was a plan of mine
- Probably for me part of my God aspect is that I have confidence in my heart and in a spiritual trust in God that I can put that practically and I would never say that it was part of my plan to be running the internship program I would rather have been running a church as a pastor but I didn't feel that in my heart that that was right. My wife and I both felt that this is the right thing to do and I am very happy doing what I am doing.

If you see an opportunity you will "decide at the time?

Yes.

Thank you – that is all I need to ask.

INTERVIEW - 7 - March 2008

Female, approximate age 25-35, Team Leader Queensland Government.

Opening Question

Tell me about yourself as a learner – tell me what ever you like about you and what you do when you are faced with new learning experiences?

- I have never really stopped learning. Every single year I have done a new course or some learning, because I always have a yearning to learn something useful I may never use it but is good to still have that knowledge.
- On the job I am happy to be put into a situation of told to get on with it but I kind of need that backup of knowing exactly what they expect so getting the learning or training then I can do what they expect using the training package or whatever.
- I tend to be more self-training on-the-job because I didn't have much experience after school just admin/reception which was just learning as you do the job as I got more skills I can actually get into training courses myself and learn that way like with my Masters I am doing ***unclear*** learning which is completely different to going to courses. I started a course in Homeopathy I was 18 but I didn't have the motivation you know coming

home and getting into study - sometimes you don't have that motivation unless it is face-to-face but know I am motivated to do it – and I am trying to link that to the workplace. This has put me into the position now – like now I am doing recruitment – I have never really worked in recruitment – they just put me on – I haven't actually done it – but I have kind of changed in the fact that me as a person wanting to do it rather than opposed to having to do it

What do you think about prior to new learning environments?

• I used to think that I would never be able do it – that I am useless even now I think that – when going for a job they say you can get \$50,000 but I say why – I am useless I can't do that - I think that I prefer the one-to-one thing rather than the group – as I can ask whatever questions I have at that point – rather than waiting for the opportunity to ask and worried that you will sound like an idiot – but as I am getting older I don't really care any more – well if people don't like it – tough luck – they are not going to remember what you asked at the end of the day anyway it is about what you needed to know at the time – but at the beginning you always think they will remember you as the person asking the stupid question – they do forget – but you don't because you asked the right question

If you had to perform ad-hoc what would you do?

- I now think not to give myself such a hard time and actually just chill out whatever is going to happen will happen I am a very much a perfectionist and that sort of comes out in everything I do and in my work so if I can't do it to the best I can do it then I will not be able to sit back and say well I did the best that I could not I should have done this or should have done that
- If I am in a particular role if they are wanting me to work with a new computer program or something I will constantly ask questions to be sure what they are expecting me to do so that I am not in a position of being not sure about myself so I will make sure I ask along the way
- I don't think I have the motivation to learn I didn't want to learn I wanted to learn but I want to learn it my way I think my learning style is auditory I can actually sit and listen to whatever was they were saying and then go and write it up later I can just listen and then remember it to me it is easy to just write something but I didn't actually have to study I didn't really feel the need to do the study I did it because I had to
- In terms of actually listening and remember things I can still do it but most of the time I cant actually remember what someone said I would rather just listen and read it and then make notes for someone to say it verbally I will then have to do it but now
- I am not quite sure what kind of learning style I haveauditory?
- When I was born I was completely ambidextrous and my mum (she was a teacher) got me using my left hand but that kind of mixed up my brain I couldn't write properly so my brain it is confused between the two sides I couldn't write something like I couldn't pick up the pen and just write something and even now things don't get passed between the two sides it is a bit odd I can think something but I have too much going through my head for but it can't come out my mouth I don't know whether that has had a kind of an impact how it impacted my learning
- ******** indecipherable ******* but it is difficult it just wouldn't go in but if I could look it up and write it down I could remember it

What do you do if you have to learn something new?

- If I can read from the beginning to the end the whole course then I can put it into perspective and understand what is coming up If I can't do that I find it difficult to put it into perspective.
- Once I have finished the course I can put it into perspective I can read through all the information and it makes sense whereas if I can't see something before it just doesn't make sense I can not just put it into the reality of it
- Now that I have finished a course I can then go back and read through it

If you were going to learn something for fun how would you do that?

- I am trying to learn French at the moment and it is just I get very frustrated with it very easily I have a program where I talk and it talks back to me and I actually have to change how I am actually trying to learn it if I am trying to do it by myself it just doesn't register and I don't have that situation where you can kind of add on it gets too difficult whereas if you are in a group of people learning it so I suppose not to change not how you actually start the course or what you do before it but actually make the effort during it and physically go and speak to someone in that language or that kind of thing it does make sense but it will be more conceptually organised although I remember a lot of it most of it I don't it sort of went into my head and but I don't remember it as I am not constantly using it
- If it is just theory it just doesn't register I need to apply it

Where do you see yourself in the future?

- I am not sure I keep on getting drawn back into psychology and the naturalistic type work and so I think that is where I will end up
- I have my dream list of having a 30 acres of land, a farm
- I can't see myself not studying I want to keep my brain active I want to make sure I can help if I don't have a degree to fall back on then I have nothing for a career you need to be very flexible today...

Thank you – that is all I need to ask.

Appendix H - Interview observation notes

Not all interviews were recorded as field notes due to limitation of time. Those recorded below demonstrate the researcher's evaluation of the interview environments.

Interview Responses	FIELD NOTES -	INTERVIEW 1			
	Male aged approximately 40-45				
room seated at a small 'breakout' the training room (i.e. facing the w	This interview took place between 10.00 am and 11.30 am on a Friday and was held in a large training room seated at a small 'breakout' round table. The participant chose a chair seated facing the front of the training room (i.e. facing the whiteboard and trainer's area) and I took the seat to his left, facing the windows running along the length of the room. The weather was sunny and the room was airconditioned.				
	Participant's comment (verbatim)				
	ector with regard to the skills sector y between what the organisation ha				
Body Language	Voice	Categories			
Noticeable downward stare with mid-range gaze, body forward with slightly heavy lean on table, facial expression not specific but a little loose and appearing a little tired	Voice had touches of despair, disappointment, and anger, yet with a tinge of perseverance and resoluteness, non-animated speech	Learning environment Reason and benefit for learning Motivation			
	Participant's comment (verbatim)				
	o jump through the hoopsthe outco for not complying – such as probatio				
Body Language	Voice	Categories			
Use of saying - depicted loathing of the system Comment made after a payer and	Voice raised and more energetic indicating emotional undertones of despondency – although not that	Benefit of learning Self-directed learning (SDL)			
Comment made after a pause, and what appeared to be a deliberate and decisive statement - but almost as though talking to self	of a person lost just unable to affect a change Back to monotone but without	Flexibility Adult learning environment			
Looking up and around the room and then back at mepausing after complyingthen with a steady knowing gazecompleted the sentence and then paused again at the endslightly leant back in	raised emotion more of a flat tone but yet still slightly subdued –	Compliance			
chair at end of sentence, no hand movements, sitting loosely on the table or on lap	Voice deepened and slowed over the words ramification and complying - complying spoken with a staccato effect and with slightly louder volume - pause allowed word to 'hang' - then in a softer tone, but slightly fasterwent onat the end of the sentence stopping completely for a breath and exhaling slowlywaiting for my next question				

Participant's comment (verbatim)

I adhere to learning to satisfy the organisations (that is the funding)...

Body Language	Voice	Categories
Turned body toward me to await another questionwhen I just raised my eyebrows and leaned in without speakinghe went onsitting up a bit as though 'getting back to the original question'continued with a slightly more animated speech, with change of tone conveying emphasis now evident for certain words	Voice more crispand faster with a raised tone	Motivation Learning environment Workplace learning Compliance

Interview Responses	FIELD NOTES - INTERVIEW 2	
Male aged approximately 40 - 50		

This interview took place in a small boardroom (possible seating of about 10 people) sitting at the side of the table facing the windows, which stretched across the full length of the room at waist height. The participant and I sad side-by-side. The interview took place at about 4.15 in the afternoon. The room was air-conditioned and the day was sunny and about 28 degrees Celsius. The participant was offered and accepted a coffee but declined. After a small chat reiterating the interview process (and a little uncomfortable shuffling around) we proceeded. There were a couple of other people still in the workplace but who were working in a completely different room and using computers.

Participant's comment (verbatim)

It is amazing the different worlds we all live in – I am surprised and the one thing I have learnt from this - I used to live in X and work for the Y in Australia...

...you meet so many people coming in and buying stuff you think you know stuff...

...and I met the person from X and I bought the business off a guy who lived in Y for ten years and who was so......(participant indicated narrow with his hands)...

...but being in this room for 3 days I think I am coming in there (indicates narrow again)...
...see the X guys and you know? (this was posed as a question...I conveniently look down at my notes rather than provide any lead...)...

Body Language	Voice	Categories
Participant appeared comfortable	The participant spoke very quickly	Learning history, perception of
sitting alongside me at a board	and had an air of 'concealment'	self as a learner
table, facing a long window. We	about what he was sayingfacial	
talked briefly about the interview		Reason and benefit for learning
and recording process (although	direct gaze – almost staring, wide	
this had already been pointed out)	eyed, raised eyebrows and slight	Learning style
then I asked my first question (as	turn of the head. The tone of	
above). The participant answered	voice was low and slower than the	Understanding of learning
with what appeared to be a little		environments
apprehension, I observed either	have demonstrated – lowering	
possibly due to the participant		Knowledge of self
trying to make sense of my first	was evident at the last statement	
question – or being unsure of the		Self-perception of self as a

Interview Responses	FIELD NOTES - INTERVIEW 2	
recording and formality of the 'real interview' once it had begun. The context of speech was also very disjointed and difficult to find an 'answer' to the question. After a few minutes, the animation evident in his body language appeared to be more relevant to his interest in being a participant than nervousness at the start. For some time he sat straight up in his chair slightly leaning in when tone dropped at last statement). Hand movements animated most of his words and many sentences begun only after the gestures – as though words in their own right.		learner (changing) Perception of self as a learner and comparison to other learners
Body Language	Voice	Categories
After a slight pause where I did not provide a further question but looked on expectantly the participant looked around the room and then, with a nod of his head (by lifting his chin upwards first) and recovering to a position slightly leaning backhe continued his conversation. Whilst speaking he moved further back in his chair with a more open seating position. He occasionally punctuated words with head movements (sort of a wink but with the head moving sideways and backwards) and many hand movements still.	The participant altered his speech pattern now – slower with a little 'confidence' overriding the previous air of confidentiality – the tone also indicated he was talking to me as 'though talking about other learners' in definition of himself. His tone was deeper, louder and slower indicating control and more purpose in his answers (it seemed).	Low perception of self as a learner Application of knowledge - and comparison to other learners (perception of self as a learner) Common sense – as apposed to intelligence in demonstration competence

Participant's comment (verbatim)

I always think of outcomes - good and bad - and try to relate it to a scenario or give myself a couple of different scenarios of how it could go and also look back at a previous situations and at that outcome of what happened or where it could have gone...

	11 8	
Body Language	Voice	Categories
participant now seems to focus on the topic and a more casual seating position is adopted and facial	higher, more aspirated voice – less starkness between words and words have a lyrical flow like friendly	History of learning Perception of self as a learner (historical and changing)
expression looses raised eyebrows and wide eyed gaze – expression now one of thoughtful importance. Body less animated and arms become folded loosely on chest.	prepared answers or deliberately	Reflective understanding of perception of self as a learner
	Participant's comment (verbatim)	

Participant's comment (verbatim)

You have to go throw a little bit of caution to the wind even if it means going a little bit off the track...

Interview Responses	FIELD NOTES - INTERVIEW 2	
Body Language	Voice	Categories
Client showed a slightly more animated body language with this sentence, some slight jerkiness in hand movements (almost indicating throwing away something)	Voice had a slight tinge of 'loss' and almost an 'edge' as though (I interpreted) there were things outside his control and this was uncomfortable. A certain wistfulness in the tone over the top of annoyance – hard to define.	Risk and learning Ability to handle new learning situations Historical reflection of achievement

Participant's comment (verbatim)

everyone has a different way to achieve... however it takes ...and work out what works for them and go...

Body Language	Voice	Categories
Participant's body language conveyed ease, comfort and 'story telling' with looking up at the	almost 'buddy' like with a hint of 'pride' and 'achievement' included when emphasising 'everyone' and 'them' (almost as though he was really talking about himself)	Historical reflection on learning Perception of self in relation to others Current self-perception of self as a learner

Participant's comment (verbatim)

Yeah...to a point you have to be - you cant predict the future but you have to be ready for the left ball or something coming in from there...

Cant' think...

Body Language	Voice	Categories
	Voice tone, pace, and pitch all quite conversational, pausing more than	Reason, benefit for learning
position (alert but leaning back – I	previous and searching for words	
notice the leaning back seems	, , ,	Perception of self in future
3 & &	mindvoice trails off at end as	learning environments
as though to emphasise calmness	thread of story seemed lost(I	
with the interview process or to	make a mental note that perhaps I	
dispel any concept of his nerves	did not ask the question well or the	Motivation
on my part?) – not sure –	wording used was not ordinary –	
movement to rest backward on the	and to check the transcript after the	
chair seemed slightly exaggerated.	interview).	

Interview Responses

FIELD NOTES - INTERVIEW 3

Male aged approximately 30 - 35

This interview occurred from 9.00am.30 am on a Friday (within the participant's workplace with several staff in the adjoining rooms) and was held in a conference or large training room. The weather was overcast, cloudy and fine. The room did not have any windows as was an internal office but had large folding doors facing the front of the building, which featured a ceiling high glass front. The interview occurred at a small table just inside the folding doors with a view outside and the front information desk only meters away. The chairs were large straight back leather office chairs.

Participant's comment (verbatim)

My very first taste of the working environment and training was very good and in fact I've still got fond memories of watching a movie on relations on how to talk and not – a perfect person to present the parody of it – so that was great but very much let down after that – you just get whacked into the environment and it doesn't continue then - so high expectations were set and were not matched.

Body Language	Voice	Categories
The participant sat down and had an expression of seriousness and	This participants normal speech patterns appeared to be a quick,	Learning in the workplace
almost of reverence with the	elaborate manner of speaking with	Learning environment
interview about to take place. He		influence
smiled with what appeared a little	choice of his words – his voice was	A 1: C
2 1	tuneful, with a mixed pace and tone and also had the occasional use of	Application of competence
and moved in the chair as though to convey comfort but appeared slightly uncomfortable – his body		Support (coaching)
	attributes of those he spoke about (and often mimicked his own	Learning outcomes
angled towards the table with his	experiences likewise) - this gave his	
feet stretched out a little in front.	stories an almost 'observers' point	
	of view (even when talking about	
table from his elbow down and the	himself)	
other he dangled loosely over the on his knee.		

Participant's comment (verbatim)

...trying to pay my way through university and that was an environment with up to grade six in after school care – and no training in that environment – I literally followed someone round for 1/2 day, the afternoon, and see what you were meant to do and there was this expectation for you to think on your feet so it was – you'd sink or swim – you'd figure out a way to do it that doesn't hurt anybody –

D 1 1	***	
Body Language	Voice	Categories
with a more upright seating position with his legs brought back and folded near the chair and his upper body was leaning in – hand	The animated voice and language were consistent throughout this interview. The participant enjoyed remembering and telling stories – a very positive twang to his voice at	Self-perception of learner at school Self-perception of learner at University
movements became more fluid	all times.	Changing self-perception Coaching and learning transfer
	Participant's comment (verbatim)	

I had a bit of an understanding and I did my own research - my own training as to what I should and could do in the workplace but again nothing at all for what was expected nothing – no formal approach – certainly nothing readily available for someone who was interested in branching out and starting their own business –

Much more animated body language with many smiles, raised eyebrows and turning head on the side – hand movements also more mobile. Voice altered with higher pitch and faster pace. Very few long pauses but many changes of tone – perhaps this is the person's normal speech habit – but seemed highly emotive and engaged with the use of feeling conveyed in the voice	Body Language	Voice	Categories
mobile. habit – but seemed highly emotive and engaged with the use of feeling	language with many smiles, raised eyebrows and turning head on the	faster pace. Very few long pauses but many changes of tone – perhaps	Understanding of self and
100-11 ty two t t t	mobile.	habit – but seemed highly emotive	goals

Interview Responses	FIELD NOTES - INTERVIEW 4	
Male, approximate age 50		
mi : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 :		

This interview occurred within an office, which seats two people and using the 'interview' table in the centre of the room. The office has a large window and is approximately 5 meters by 5 meters square.

No staff were working the day of the interview.

Participant's comment (verbatim)

From the opening question this participant spoke about personal change - in respect to learning he had a very clear understanding of the effort he had exerted in re-learning and learning new material to remain actively employed - the following comments demonstrated this. The participant also had a very positive outlook on learning and further learning prospects.

"Having to diversify I am not afraid of learning and I have had a range of other jobs and learned different skills throughout life and so..."

"As an age thing I see that I am probably never going to stop learning and I quite enjoy it so on that point of view its the job that I am doing at the moment is based on customers and actually supplying them solutions or outcomes and so there are many ways with the system that we use and the package to provide the required outcomes..."

Body Language	Voice	Categories
This participant was very	At the beginning of the interview	Positive self perception as self
comfortable talking about his	this participant spoke tentatively	as a learner
	about his experiences. Although	
relaxed and confident body		Personal change - including
	indicate reticence to speak of his	some negative but mostly
	history - he seemed to speak with	positive change
good self knowledge and had	a certain calmness, devoid of too	
reflected on his own success - this	much emotion - as though not to	
was somehow evident in his	over emphasise his own successes	
position (i.e. straight yet		Changing perception of self as a
comfortable sitting position) and	more animated as he seemed to	learner
his general calmness in answering	become easier with iterating his	
- he found many examples of his		Clear understanding of himself
learning history easily - as though		as a learner and in a learning

Interview Responses	FIELD NOTES -	INTERVIEW 4
these had been part of his own thinking process for some time - or that he had reflected upon his own success and visualised his progress many times. His facial expressions became more open as he relaxed whist talking about is background. He became less rigid in his seated position allowing his hands to relax on the table (where as they had been in his lap). He then leaned forward more and then sat back with arms folded loosely in front - a more comfortable, conversational body language.	His voice quickened as he spoke of his successes and pitched slightly higher - with more terms related to self and positive than negative. He also spoke with a 'proud tone' when remembering how he had come through some learning incidences.	environment Understanding of change in perception Recognising perception of self in terms of others' perception of her

Interview Responses FIELD NOTES - INTERVIEW 5		
Male, approximate age 35-40		

This interview took place between 3.30 and 4.30 pm in the afternoon. It was undertaken in one of the offices in the researcher's training business. Researcher and participant sat opposite each other without a table between (sitting on the office chairs for opposing desks). The office was utilised due to other staff not being present. The open conversational seating was conducive to immediate rapport.

Participant's comment (verbatim)

To the opening question - tell me about your learning history....the participant responded:

"I was always in the top classes and never really did any homework or anything and just cruised through and got accepted to Uni..." and

"I'm auditory really as a learner – never take notes – just read through the PowerPoint later as a recap...."

and

"I just sit and listen to what you are saying and after just write out a summary and just reread it and re-read it — more or less rote learn — I tend to be able to remember it..."

Body Language	Voice	Categories
This participant was very	This participant's speech was very	Motivation to learn
	fast, with high degrees of variance	
The state of the s	7 1	Self as a learner
	story telling was very concise -	
able to assist with the research and	1 1	Positive (and some negative)
	but merely provided a clear	perception
	indication of events (as though he	
	had thought about them often).	Understanding of expectation of
in his keenness (mostly mirrored		external forces
in his voice and tone) to talk about	He had some change of voice	

his history. This was evident in his answers - perhaps he was trying to think what would suit the research rather than answer the question - but - evidence of his 'over thinking' the answers (in light of what he thought was expected) diminished once he progressed into his own story....

As he spoke about his history he altered his seating position many times and almost 'acted out' the story with his hands. His body language was emotive, mobile and mirrored his animated voice. He appeared to be a person with a good understanding of self - and had also spent some time thinking about how he learned and what would assist him being successful.

Not all of his story was positive and his body language when taking about those times was less mobile

At the end of the interview the participant seemed to be talking more about his future in learning than past - and his comments seemed to present indecision as to what his future aspirations were. His body language became slightly slouched - unsure why but it was different to his positive voice.

when he considered whether he would do more study - this seemed in terms of others' perception of to be related to the lack of definite her choice of study area than any negative aspects of further study there seemed to be a slight hesitation about his future - in particular with his last comment -

"I am going to try to knock this over as soon as possible and then do an MBA and I was thinking of doing law or second degree in law – I don't know it might be too time consuming and I won't have the time to do it - a lot of reading -Iprobably wouldn't have use for it – clerk for 2 years and then go back to the beginning with salary – in fact I probably won't have a use for it...."

At this time his voice trailed off and then stopped - I waited for any further comments (as he appeared to be thinking about the answer) but after a pause this seemed like a good point to stop the interview.

Recognising perception of self

Interview Responses

FIELD NOTES - INTERVIEW 6

Male, approximate age 30-35

This interview took place between 5.30 and 6.30 at the participant's workplace and in his office. The office was slightly darkened with high windows not providing much light. Prior to the interview the participant showed the researcher around his whole workplace including his office, and those of his peers and management.

Participant's comment (verbatim)

From the opening question the participant clarified the question - the question was double-barrelled and so I made a note to try to keep questioning concise and short...this would then mean less leading and more open responses from the participant.

Without prompting the participant immediately spoke of his learning history back to when he left year 10 and spoke about his aspirations as a young adult - as such:

"I probably would have left in year 10, as I wanted to be a professional fisherman actually. I worked on the weekend and holidays in a trade I ended up picking up.

I really didn't like school and then I went on to learn a trade.

Adult learning after school – I learned through my trade and I really learned quickly. A year and a half into my trade I was running the show, driving the trucks etc.

I learned out of necessity and I was quite good at it.

A lot of my learning there was through instruction and applying what I was told - there was no actual in-class time"

Body Language	Voice	Categories
This participant was very relaxed and confident and was seated	His tone was fairly emotive - but mostly monotone as though	Self perception as a learner and change of learner image
opposite me but leaned in slightly	reading a witness statement - in	enunge of feather mage
when we 'began' the interview -	the beginning (this I put down to	Reason for learning
prior to the beginning he sad back in his chair. This I felt was	the fact that his interpretation of the research interview was that it	Motivation
indicative of his understanding	was more formal) - once the	Wiotivation
that the 'research' had started - or	conversation began to move more	Career change (i.e. learning
perhaps a respect for the formality of and seriousness of it being not	fluidly his voice became more varied and tone, pitch and pace	requirements for career change)
just a meeting but research related.	were mirrored in the terms he used	Understanding of external
	to tell his story.	forces on learning
His body language was slightly		
leaning toward the professional meeting at first but during the	He spoke slowly and relaxed most of the time but quickened his pace	
conversation became more casual	when iterating how he disliked the	
- i.e. relaxed arms, feet crossed	processes of government or	
and resting back further (rather	bureaucracy (as he said). His tone mirrored his frustration - and when	
than leaning in).	he spoke about his current position	
	and how he perceived himself in	
	that environment his tone	
	lightened.	

Interview Responses FIELD NOTES - INTERVIEW 7		
Female aged approximately 25 - 35		

This interview occurred within an office, which seats two people and using the 'interview' table in the centre of the room. The office has a large window and is approximately 5 meters by 5 meters square.

No staff were working the day of the interview.

Participant's comment (verbatim)

I have never really stopped learning. Every single year I have done a new course or some learning, because I always have a yearning to learn something useful – I may never use it but is good to still have that knowledge.

I used to think that I would never be able do it – that I am useless even now I think that – when going for a job they say you can get \$50,000 but I say why – I am useless I can't do that - I think that I prefer the one-to-one thing rather than the group – as I can ask whatever questions I have at that point – rather than waiting for the opportunity to ask and worried that you will sound like an idiot – but as I am getting older I don't really care any more – well if people don't like it – tough luck – they are not going to remember what you asked at the end of the day anyway it is about what you needed to know at

Interview Responses FIELD NOTES - INTERVIEW 7

the time – but at the beginning you always think they will remember you as the person asking the stupid question – they do forget – but you don't because you asked the right question...

question – they ao jorge	ei – bui you don i because you asked	i the right question
Body Language	Voice	Categories
This participant displayed a very controlled and respectful	At the beginning of the interview this participant spoke quietly and a	Motivation
demeanour – appearing to treat the		SDL
serious interaction and showed	S	Lifelong learning
her answers – her body language was initially quite upright,		Perception of self as a learner
professional (i.e. no dropping of shoulders or casually leaning on	this participant's voice increased in volume and was also lower in	Changing perception of self as a learner
ensuring her hands were placed on her lap.	pitch. Her pace slowed and projection increased. The change was slight and yet still evident and appeared to be due to being more	Clear understanding of herself as a learner and in a learning environment
	comfortable rather than any thing else.	Understanding of change in perception
Her facial expressions were serious with very few (if any)		Recognising perception of self in terms of others' perception of her
smiles or grins – occasionally her gaze would wander upwards or out (to the window) and return again		
to the immediate environment (not necessarily looking at me) and		
then continue by looking often at the table whilst telling of her		
memories.		

Participant's comment (verbatim)

I was 18 – but I didn't have the motivation – you know coming home and getting into study - sometimes you don't have that motivation unless it is face-to-face but know I am motivated to do it – and I am trying to link that to the workplace...

Body Language	Voice	Categories
At this stage of the interview the	Voice not altered much but just a	Learning history
	slightly higher tone and faster pace	
language slightly as though talking		Motivation
about another person – likened to		
a daughter – for whom she had		Workplace learning
sympathy with (this showed in her		
slight lowering of her shoulders		Understanding application of
and relaxed back – leaning slightly		learning – skills and transfer
skewed on the chair – perhaps to		
mirror the pose of an 18 yr old?).		
It was apparent her story had an		
emotive aspect – this was mirrored		
in a slight saddening of her facial		
expression (mouth downturned		
slightly and eyebrows raised		
opening her eyes – with a		

Interview Responses	FIELD NOTES - INTERVIEW 7	
perceived innocence or similar)		

Participant's comment (verbatim)

I now think not to give myself such a hard time – and actually just chill out – whatever is going to happen will happen – I am a very much a perfectionist and that sort of comes out in everything I do and in my work - so if I can't do it to the best I can do it then I will not be able to sit back and say well I did the best that I could – not I should have done this or should have done that

Body Language	Voice	Categories
9 1 1		Perception of self as learner and self talk
demeanour began to alter with the second comment – and her facial expressions matched some that of bravado.		Perception of failure and success entangled Motivation to complete

Participant's comment (verbatim)

I don't think I have the motivation to learn – I didn't want to learn – I wanted to learn but I want to learn it my way – I think my learning style is auditory – I can actually sit and listen to whatever was they were saying and then go and write it up later – I can just listen and then remember it – to me it is easy to just write something but I didn't actually have to study – I didn't really feel the need to do the study – I did it because I had to…I can't see myself not studying – I want to keep my brain active – I want to make sure I can help – if I don't have a degree to fall back on then I have nothing for a career you need to be very flexible today…

pitch slightly higher with a greater emphasis and tonal changes in understanding of perception of self as a learner changing	Body Language	Voice	Categories
The state of the s	, , ,	pitch slightly higher with a greater emphasis and tonal changes in	Definite indications of a clear understanding of perception of self as a learner changing over time

Appendix I - Survey Responses for Questions 15 to 19

All survey responses are verbatim including any spelling or typing errors.

Q 15 - Can you tell me, in your own words, about your past and current experiences of learning on-the-job...

Most of my experiences of on-the-job training have been positive encounters. However the majority of training I felt was pitched at a lower level than it should have been. The delivery of this training has been mostly 'death by PowerPoint'.

Have had extensive opportunity to learn as my employer was extremely proactive offering a lot of course and learning experiences on a frequent basis. With new positions I took on in the company I was always offered mentoring and the tools too display my efficiency

Usually provided in house. Appear short but to the point

Spent 10 years in menswear learn to go on and own-operate my own business. The experience then went on to own/operate 3 fast food cafe outlets dealing with all types of people lead me into my current employment

Learning on the job was very much an ad-hoc approach for me. The companies (retail) were very sales oriented and not geared for supporting the non-sales people. All training available was only for sales oriented personnel. Much training I attended has absolutely no relevance to my position within the company, but I had to attend as training was deemed 'compulsory'.

In my particular area of expertise I feel that whilst the theory contents beneficial it's definitely the field training that is the most important you can show somebody what to do but they need to do it in reality.

Cert I, II, III in food processing - work is a RTO so it was hands on which I found to be great for me with no time limits, you can work at your own pace. WPHS - great course learnt heaps, FIRST AID - enjoyed hands on I believed I excelled

Learning on-the-job is the easiest form of learning for me but I like to have a manual / theory for it as well. Practical experience is the better way for me to learn. Generally my colleagues have been understanding in waiting for me to learn.

I learn more quickly by doing - i.e. visually, feeling (tactile) and operating. I was forced to complete courses with set subject - not fun at all!

Filled with poor instruction. Have had to be self-learner

To grasp theoretical concepts, I like a clear explanation or the opportunity to calmly read and understand the information. If it is a practical activity e.g. learning new software program or doing things a different way - I like to know why I am doing things this new way (re the theory behind it) and then have an opportunity to practice before I go online / deliver the produce in the real world

If the job is the right one, then it's always much easier to learn (or absorb) the new knowledge (skills). A truly capable mentor (or boss) means everything sometimes

I have had to do training which I don't like. I find I can do it, but I don't remember things that well. Other things I have learnt that I do really like - I get much more nervous and emotionally worried - which affects my ability to learn - often have issues around self-worth and competency

Most learning has been ad hoc. There has been no written procedures. Generally you follow someone around for the day and then it is your turn. As we work in a lab this is often recorded.

Every job has started with formal training in a group 'classroom' but I have always learnt more and faster through budding and just doing the job and asking questions as I go.

A large amount of my experience is from on-the-job training (one-on-one). I think it best fits my learning style.

I have found that I have learnt a lot quicker by actually doing as apposed to just being told. I find it a lot easier to retain the information.

On-the-job training has been varied - sales training in seminars, workshops, one-on-one, e-learning and self-paced modules. I have always felt left wanting more from the on-the-job training.

I have learnt through experience and through working with others who have years of experience. Also learnt quite a lot through training courses I have been sent on.

Learning on-the-job is par for the course in aviation. I undertake it regularly for regulatory and personal development reasons - I generally enjoy learning.

Often very positive and relevant but occasionally the learning has been forced or pitched at too low a level.

When presented in an interactive environment I have found learning stimulating and experienced a more complete learning experience

Not answered

Not answered

Not answered

My experience is that if I did not seek to learn, others were not willing to show me.

My best 'on the job' learning experiences have been when information has been presented in a practical way, and opportunities to test this learning and discuss has been integral. As I have almost always worked in a business environment, most of the training has been conducted in-house.

Very effective. knowledge of new skill consolidates when learned on the job.

My school experiences were very limited and in the most uninspiring. My education did not start until I left school and started work. All my training was on the job until the early 80's when training really started to move into the workplace.

Not answered

In the past there has been only one form of learning and that is the deep end method. Nowadays the company sees more value in training particularly do to the high turnover, low commitment work environment we are currently caught in.

Learning is constant. When in employment the learning was both structured and unstructured. Now, in my own business, my learning is more structured generally. Each new set of experiences becomes a learning opportunity, and deepening the learning experience depends on my initiative and, significantly, on forging new professional and business relationships

In past experiences of on the job learning, I found it difficult to learn due to my previous

experiences in school, an average student apparently with identified potential. Family breakdowns being a major part or at least a disruption. Past experiences required a focussed approach with sound, written and my preferred methods of visual learning. Current experiences are as you guess, greatly improved as I can multitask on sound, written - speed reading, and visual, and am happiest when all can be discussed, shared and examples discussed to cement the actual learning subjects.

As a member of the ADF learing is usually very structured when attending courses. E-learning courses that are becoming more common do not give the feedback. Always easier to learn when there is an instructor present to enable instant feedback.

Not answered

I am quite a practical person and learn best seeing how the job is performed and then performing it myself. I have found it difficult to complete complex tasks on verbal instruction only.

It has been fraught with problems associated with coworkers being trusted to conduct on-the-job training & I have picked up incorrect process training.

Training on-the-job has proven useful to me but without the correct guidance in on-the-job training comes habits that can be not so useful.

I have found most of my learning on the job to be most valuable for the reason of seeing it done first hand

Learning on the job can be frustrating if the person doing the training does not do it in an orderly, structured way. I need to know the structure to feel comfortable to learn.

As a teacher I need to be continuously learning on the job.

I have found that the trainers have been experienced in there field but not in delivery of training

Part-time study since leaving school. Strong desire to assimilate new information

learned through trade apprenticeship, personal one-on-one training

Prior to the nineties, I'd say no formalised learning on the job. In the nineties a focus on providing some training on the job and now in the naughties... strong focus of continual learning.

Industry has never helped out in the learning as an adult. I have pursued all my own training/learning.

It is largely situational, if the combination of a good on-the-job trainer is available, the role is well defined and there is good reference/manuals than it is a good experience. If there is poor support to learn and minimal guidance provided than it is a bad experience.

Most of my learning has been on-the-job. I find that I retain information more easily and use the info learnt when it's on-the-job.

I have found that on-the-job learning is often difficult owing to poor understanding and training/mentoring skills of those selected to impart the knowledge in the workplace.

Past: Good experiences when 'fed' stretching work - felt achieving & stimulated Bad when dysfunctional environment/boss and not appreciated or respected. Often lasted weeks to months before I left whether I had another job organized or not. **Curent:** good experiences - I enjoy new experiences (often even difficult ones) and I am a fairly independent learner so cope well with finding my own way but prefer a supportive situation where I can ask questions if I need to and I

can make my own decisions without bureaucratic inhibiting people/factors - Bad experience for me mostly when not shown respect or freedom to solve problems or interact with people (many bureaucratic-style orgs)

My experience has been that in exchange for learning opportunities I have had to give something back to the company. That exchange has not always been fair. For example, as a teenager, I offered to do work experience for an engineering company for 2 weeks. All they did was ask me to clean.

I have been thrown into jobs where you have to do everything yourself without any support which was hard. My latest job lots of support and excellent training materials which has made the job so much easier and enjoyable.

Employers do NOT provide as much learning on the job as they should. I have rarely been trained on the job - it is an unwillingness to spend money to do so.

My level of understanding and retention is invariably related to the ability of the trainer to appropriately contextualise the material

Very receptable (sic) to learning, not afraid to speak out, contribute, and ask the questions some are too shy to ask

My on the job training has always been in the form of self training. (At least for the past 10 years or so)

Not answered

Have always felt a little apprehensive- mainly as to what level of achievement was expected and was my prior knowledge sufficient.

I like to understand things in detail and am frustrated when I don't think I understand the subject as well as I think I should. Also if the training is too quick (I like to understand all the reasoning behind things), or in a distracting environment for example if it is totally on the job.

Mixed, Having been in the mining industry for some 16 years, I have experienced a broad range of trainers and have undertaken training in a number of different learning environments. There have been some 'easy' learning sessions, based I believe on the skills of the facilitator to make the learning interesting and relevant. This was experienced when attending a Cert 4 (TAA)course at Carson. There have also been difficult sessions, which whilst enjoying the learning experience, I have had to glean the relevancy and subsequent interest for myself.

Q 16 - Can you describe how you (have felt) feel if required to learn a new process for your job

Excited that I have the opportunity to learn a new skill but in the back of my mind I have a 'fear of failure' thought. Hence, I apply myself to the learning process and try to ask as many questions as possible to avoid this

I am always enthusiastic about learning new skills and provided the process changes are beneficial I feel comfortable with these changes

Accept learning processes that are required or requested. Can be relevant at start

I do feel anxious as if failing to learn the new process without an opportunity to resit means losing my job - annoys me as I do not like to fail

I am always worried about learning something new, as did not with to fail, Once I was participating I calmed down and enjoyed myself.

Not failed I'll try it if I don't think it is relevant or can be done better in my opinion I will change it to suit

A little bit nervous, but confident

I really enjoy learning new things in the workplace. I try to encourage new practices at work if the existing ones are no good

I see new projects as challenges, overall positive process.

No problem, actually enjoy new things

I am not confident to undertake the new process unless I know what I am doing

Happy for the opportunity to learn as long as I have enough time. Curious about the unexpected outcomes sometimes

Depending on what job and what I am learning - sometimes boredom / frustration; sometimes nervousness / worry over my competence; sometimes interest

I don't tend to have any problems learning a new process. This is due to it being fairly relaxed. Execution is most courts. These are re extremely stressful as they can show that you don't know something you should and people then talk about your inadequacies.

In every job I've had process changes frequently. I sometimes get annoyed when I cant see the reason fir the change or I believe the reason is flawed I'm never concerned or worried.

Excited that I'm learning something new but anxious about doing it correctly.

Depending on the training. But usually nervous followed by pride once I know what I'm doing and understand the benefits of the training.

I'm always keen to take on more training - very keen to increase / hone my skill set.

If it is an area that interests me, then I am excited and very willing to learn the new process. If I am not that interested then I am not so enthusiastic.

Generally if I can see value in the learning I learn easily if I cannot - then not.

Generally ok. In my work environment though - changes are regular and fatigue sometimes sets in.

Challenged but exhilarated and motivated to meet and exceed expectations

Fine, no problems at all

At times frustrated due to the number of changes, new processes occurring in my current workplace. Once I get over myself, I can embrace change comfortably.

Not answered

Excited, especially if is about to bring business improvement.

I can sometimes be resistant to learning a new process until I have been given a satisfactory reason for the change. Once I am convinced of the usefulness of the new process I will learn it fully.

Anxious at first ususally but once the new process has been revealed usually feel excited about learning something new.

Generally I enjoy training for job requirements and used to grasp things quickly. I have found that it now takes more effort on my part (age I think) and at times can be a little apprehensive until I can see were it is heading

Not answered

I will analyse it to see if it is an improvement over the way things are currently done. If I am given a directive to learn a new process regardless of whether it's better or not I will just shrug my shoulders and do it just as they want.

Usually enthusiastic at the prospect. Often disappointed about the structured learning experience in the workplace (if any existed)

I have been trained in many areas, and change management is one of them, I am open to learn a new process, understand its effeciency and benefits, and move forward to adopt for business needs.

I have no problem with learning new processes as long as training is comprehensive and there is a degree of mentoring or support available. Unfortunately the individual is often required to take over a job and do the training as they go along.

It is not learning the new process that is the issue, but rather the fact that it becomes an addition to an already time-consuming workload. That is more the barrier to the learning of the new process

I have felt overwhelmed with only verbal instructions. To avoid this now, I usually write it down, then try the new process myself until I don't require my notes any more.

Excited, nervous, worried, keen, eager, frustrated.

I find new processes can be interesting to learn.

As long as the new process is valid i have no problem with learning new methods

Excited.....knowledge is the path to compassion, and understanding. Knowledge gives the opportunity to challenge the mind to look at things from a different perspective.

Very excited. It seems like an opportunity to add a new dimension to my work.

I enjoy change if it is suited to the task

Generally quite exhilarated at the prospect, but sometimes disappointed by the instruction being too generic/rigid, i.e. not allowing time to personalise

comfortable

Mostly interested - particularly if it has been initiated to improve my opportunities and satisfaction.

Never had to.

I feel very enthusiastic, and take time and effort to learn the process and how it fits into the larger picture. I ensure I learn a process well before making suggestions to improve it

I find it to be a challenge and most of the time I feel excited. Sometimes a bit apprehensive if it's around numbers.

I enjoy a challenge and this includes learning new processes or adjusting to change in my workplace.

yes - core feelings: curious, stimulated/energized, alert/focussed/challenged, entertained/amused (it's fun). After achieving then satisfied!

It is engaging. If I am not able to continually learn, I become bored and this affects my job performance.

Great a new challenge

Excited; particularly if it means more responsibility or more money

Often excited about the challenge - I would say that my appetite was esoteric rather than focussed. I had a broad tastes in reading and music as a child and I feel this has followed me into adulthood.

Interested when the trainer was focussed on empathetic and diligent training processes but frustrated when they were not.

Slightly stressed in the past. In all situations recently I have had to teach myself specific information because nobody else in the organisation has expertise in my specialty.

Not answered

slightly flustered, new processes seem to always be more complex and not as good as old processes- fear of the unknown I suppose. It is seldom that new processes are introduced with any "pre-training"/ preparation

Excited, apprehensive, overwhelmed, negative.

Exhilaration, love the challenge of learning something new.

Q 17- Please describe what you do prior to attending a training/learning program

Complete any distance learning and research the training program. Research up-to-date reference material so at least I am armed with some prior knowledge

I would usually gather information re the training/learning and establish WIIFM

Usually do not follow any procedure. May question what the training is going to achieve

Ask questions from the previous attendees on their experiences and if there is no precedent of people to ask - bit the bullet and go for it.

Basically worry about not seeming like a complete fool with no ideas. So lots of pre-reading to prepare.

Continue on with my daily routine, deal with the program when I'm there

I will have a quick read over any material found but won't stress over it too much because that's what I'm there for - to learn.

Nothing - generally I am not organised enough

Read info about the program if available, look up on internet!

Usually nothing

Understand the broad scope of the program - I need to know what I am letting myself in for and confirm my readiness / willingness to participate

General research about the program, venue and the trainer

Try not to get nervous. Try to look after health and to ensure am able to operate optimally.

This depends - if with peers I study as I don't want to be made to look stupid. Generally I do some work or reading before attending a training program

Read the info kit and not much else

Try to find out about what will be covered and the assessment.

Do a little research unless there is a pre course package. I like to come in relatively open minded and not pollute the training

I there's any material provided prior to commencement I will read it, however generally I do no preparation other than turn up.

Read any of the pre-course reading and find out as much information about the course as I can.

Usually I try to gain some knowledge on the subject.

Visualise what will happen. Talk to others who have been.

Revise any notes available and identify the location and environment prior

Little bit of research

Pre-reading if available. Own course outcomes for expectation of course.

Not answered

Try and look for any information about the training/learning program I am to attend.

I will ensure I know the location of the training, and the timelines involved. If there is required pre-reading I will do this also, however it will generally be at the last minute. I rarely visualise the potential environment, preferring to investigate and assess during the training itself

Research the location, look at prereading material if available.

Usually nothing unless there is required reading or other prerequisites. Maybe a little research, if the topic is unknown to me. Most training occasions have been very much task and job related so a fair amount of

prior knowledge is already available to me. I try not to form any opinions or preconceived ideas of what the training may contain

Not answered

I will usually seek out people who have already participated in it and just get their opinion of the presenters and the course in general as a background. In addition to this, I will do any pre-course reading required.

Usually do the pre-reading by skimming provided materials. I also chackout the provider (if I can) on the internet through the provider's web site, NTIS etc. Sometimes I will do some light research into the topic. Sometimes I'll just turn up ...

24hr research firstly, clear the mechanism - the mind, and open myself to new knowledge as it is power. Oh, and finish current projects, handovers and communicate to my clients and staff on my availability so I can focus on the training at hand. If pre course notes are available - I will read up on expectations and course content to add value for the group or individual so we can self pass.

Background research about the establishment and its facilities. Is prior learning for the course required.

Find out a little about what the training/learning might entail (topics, units of competency etc) Travel planning so that I know where being held

Try to find out the number of people attending

Ascertain type of learning set-up, eg small groups, individual, hands-on, etc

Ascertain the method of assessment (if required) - oral, short answers, project, exam etc.

I look forward to what the course is going to offer me so I often think about that, how I will be able to use it. I also think of any questions I may have, write them down and at the end of the course ask them if they haven't been addressed throughout the course.

Evaluate how much I know already about the topic, try to figure out if it will change the way I do my work now, clear my mind of any preconceived ideas about the topic/trainer before going into the session.

Relax and learn some information about the program

Try to gain some information to get into the right mindset to see what i will be covering

Gather some information/research to either about the subject or the training provider. This helps me prepare and feel comfortable with the process.

Look into the background of the course, look at what subjects I'll be learning, activate my schemata.

I research facility ie location and trainers. I look at there web page

Try to keep an open mind and think of why I need it

try and wash:)

I usually try to find out a bit about the course/program. Research on a website etc..

Learn as much about the subject before the day.

If there are learning outcomes/units of competency I become familiar with them, and look up terms (using WIkipedia or other internet reference) if I do not understand what they mean.

If there is reading material I will go through it otherwise nothing other than have a good nights sleep and look forward to the programme

I would usually perform some research in preparation prior to attending. At the very least have an understanding of what the training/learning program contained.

most often do pre-reading content headings/book & course requirements - if unknown/not given content then probably do an environmental scan of topic

I typically have an interest that I wish to pursue and then research training options online. When I find something interesting, I read as much about the topic as I can before attending the course.

Specialist Trainer

Feel somewhat dismayed at the fees - this is not intended to be a humerous comment.

Whenever possible, I would research the field or scan any prereading material provided. If prereading is provided for information only, I will not read in detail - I prefer to maintain an open mind on detailed content. I will only read thoroughly if the topic is of special or current interest, or there are tasks to complete.

Prepare working essentials and think about what the learning program will be like

Very little :) I skim over any pre course reading if required, but only enough to allow me to preframe the training so that I come in with a positive attitude

Not answered

Always research the subject to gain background knowledge. Study administrative arrangements so that no unforeseen complications. Study background of trainers if available.

Make sure I am organised...paper, pens, highlighters, comfortable clothes etc. Make sure I know the exact location of the program and how long it will take me to get there and find parking etc so I am not rushed on the day

Attempt to clear any other concerns from my conscious thought, deal with them first to prevent any distractions. Focus on enjoying the learning experience.

Q 18 - Has your self-perception of yourself as a learner altered over time? If yes, please explain how you believe this occurred..

Yes, I am a more competent and dedicated learner. I have learnt more being an 'adult learner' than when I was a young student attending unit at the age of 17

I have become more analytical in my approach and are more aware of areas I need to concentrate on to make the experience more worthwhile. I have also found my attention span has actually decreased so I need to talk more care to cover material outside of the training course.

Appear to have or want to do more learning over the years (i.e. courses etc).

I did worry about others' opinion about my abilities but as age and experience has shown me that others only worry about themselves. I don't care any more about others' opinions of me

When I was at uni, found it was easier to learn as that was my main focus and had nothing else to distract

me. Now as an adult, too many distractions i.e. life, bills, etc. get in the way. I am not quite as focused as I think about other things that I have to do for work, friends etc. I tend to skim over a course now, just wanting the important elements, not the waffle.

Not really, I don't because often what I have learnt until later when in a particular situation and the content is recalled in my mind

Yes, I do believe I was a learner that had to put everything into what I'm learning to remember as much as I can. I struggled to remember all and confidence of retaining all information was low. Working 15 years in an RTO my confidence has got better knowing I can learn with ease.

Not really. I'm still a keen reader / theorist. I prefer to quietly read, slowly put together the learning. Although I place more importance in practical now that I'm older - does not mean that I practice this!

I personally had no self awareness as to how I learnt i.e. when doing a degree! Now I know that I naturally prefer certain ways of learning and seek out info using y preferred learner style.

I am more motivated now. I appreciate the importance more now.

I have a better understanding of my learning style and learning styles in general. I am now confident to ensure that I can extract from training what I want to achieve

Maybe not? Not 100% sure. If altered, first thing I could think of is the different period of life - schooling/adult

Not really

Yes - I use to think it was boring but mostly I find I can learn ok. A lot of adult learning is more fun and I think I have a wider experience so have something to add. I have also got more confident in my ability than as a child. Therefore changes how you learn. Not so scared if I get something wrong that I will look stupid.

No, I went through school and uni having my learning style and IQ analysed and re-analysed so, I'm fairly familiar with the results. They are always the same.

No. I still think I have to work harder than other to learn skills.

Yes, I am a better learner now than when I was at school. I think this has something to do with understanding the benefits of the study.

Yes - I used to be convince I could learn anything but as time as passed I have realised I have limitations still waiting for the day I can define those limitation though - it would be very handy.

No, I always back myself to learn new information as long as I know I am willing to put the effort in.

No

Yes, as I develop as a manager and move into new roles, my motivation for learning has increased. Particularly as the learning becomes more focused and relevant for my role.

Yes - with maturity has brought about more fear and more confidence. A contradiction in terms but usually with a good outcome.

I enjoy learning more as an adult-learner

Definitely. As an adult I have choice over what and how I choose to learn.

Not answered

Yes, as the training/learning I do now is my choice and not being forced to do it.

I have always enjoyed learning and was a good student. My family has a philosophy regarding the need to be life long learners. For the most part this self-perception has remained very stable. I like to learn something new each day, even if this is a small thing.

Have had to learn in differcult situations so feel that I can probably learn anything if I have the opportunity.

Yes. when I was younger I had an all consuming thirst for knowledge. I left the formal school system at 11 and went bush. Most learning was very much on the job then and you had to learn or you soon found your self unemployed. Now it is also on the job but much more structured and standardised so much easier in a lot of ways. The formal training courses in the most are very good I am afraid most facilitators leave a lot to be desired and this included the formal training organisations like TAFE. I think age has also influenced me greatly as well I have found recall of information and referencing is harder fore me now days.

Not answered

Over time I have embraced the opportunuity to aquire new knowledge and skills more readily. Even if the opportunity was in a field that I may not have been particularly interested in, it has provided me with a way to stimulate my brain on the company's time and expense, and you can't complain about that.

Absolutely. While always a big reader (of non-fiction), my transition to my own business has meant I rely much more on self-directed learning, using my research skills to provide a first-level of knowledge, then carefully selected, high quality books and journal articles to deepen understanding. Experience then rounds out the understanding, allowing me to judge whether the learning has been useful or merely interesting. Often discussion about the central ideas and their context is the best way to gain the experience necessary to carry the learning to this next step.

Yes, as breifly described in question 15. Due to my training in past companies, and learning via hardknocks (no tertiary), I am open and more willing to learn and also to help others achieving and over achieving.

As a child I avoided studying at all costs. Now I realise that studying is needed to progress with my job. Certain types of training are still not enjoyable but needed to be done.

I now feel more confident as a learner. This has occurred because I can now add more of my life/work experiences into the learning situation, thus combining the practical with the theoretical elements. Learning no longer is viewed as something that is done in isolation, nor just fo the behefit of university qualifications.

Yes. As I've gotten older, I seek new information and process it differently to when I was younger. I have learnt that I grasp concepts and theories easier than when I perhaps didn't really care:)

I always thought I was a visual learner but I am finding that I learn best from a mix of both visual and written information. I think that as I get older my need to tangibly hold information in my hands (ie handouts) is increasing. Maybe this is because my memory capacity has shrunk!

Yes. At an early stage of my adult development I placed a great amount of stress on myself to succeed in training and work. I feel that the root cause of this was the fear of failing myself and my employer. This fear was not driven by my employer but was driven by my own demons. Over time, realisation of a few priorities and a little maturity I have developed my own learning method which gives me confidence and

the willingness to acheive rather than succeed.

No

Not really....but i have become more comfortable in a learning environment over time. Primary school was a bad experience (had a child sex offender as a teacher!) which at some times results in apprehension for me as an adult i.e. mind blanks when spelling for example. But I have never felt that i can't learn because of it. If anything i have a thirst for knowledge that drives me daily to learn new things.

Yes. I have gone from a passive learner to an active learner, always looking for the lesson in most things I do; analysing and reflecting to see how I could do things differently.

Yes, the longer I have been in my field and better i have become at my job i am more open to change in the workplace

A sense of 'making up for lost time' (wasted at school) Dropped out of uni after 1 year - went to work - had to study part-time to improve career prospects. Never stopped learning

Went from university learning to trade, found it a different style. Rope (sic) learning to answer, assessment techniques basic at TAFE (trade) using the most basic exam preparation techniques. Don't have to pose an argument at TAFE (Trade), like university.

Yes, I am more confident in my learning now. I wish I had of had this confidence in my 20's and early 30's as I think I would be on a different career path (not saying I am unhappy with my career) but I studied my degree late and chose (education) to suit my 40 lifestyle as a working mum. I think if I had the confidence earlier I may have chosen science, justice or law.

No

Yes, I was very good at school, but at university I found it enjoyable to learn philosophical concepts and theoretical concepts, however difficult to feed it back for the professors on a particular day for 2 hours (exams!). I find as an adult I am more successful with competency based training as it is practical and I am able to apply the knowledge and skills learned in my work and personal life.

Yes, I have realised over time that I do retain a lot of information and am a better learner than I thought I was.

Yes. Upon leaving school I would not have believed I had the ability to pursue further studies. Completing a study program successfully helped build my confidence.

yes... recognized my style & needs and now don't try so much to overcome my 'weaknesses' as much as work with my strengths & collaborate for balance. I saw myself as poor student/performer in state school system (in hindsight, too structured & slow for me) until I went to uni as mature student. Then realized part of my untapped capacity and became hungry for more knowledge - previously obtained education/knowledge/experiences ad hoc - in a more 'envisaged' way (i.e. vision-driven)

Yes. As I get older I realise that I am slower to grasp new concepts and my memory is not as good as it once was. However, I am much better at identifying the key points that need to be understood.

Yes, sometimes I surprise myself of what I retain and other times I think how the heck do I do that again.

Not really.

Yes - as a child, I read and learned purely for the love of it (merely needed to know what something was or how it worked). As the pressures of the world have impinged on my available time as an adult, I do this less often, but now find that also that if the material is something I "need to learn", I must know why I need

to learn, and when and where I can apply it.

Having learnt in a classroom environment and also at self-paced learning environment, I now consider that I learn more effectively in a face to face environment as the comaraderie is in itself motivating. Self-paced learning though was a very disciplined way of learning and I had to dig deep to see it through (which I did successfully!)

Yes. I used to stress out too much and cram when I was at university. I have since acquired more control over my cognitive processes and my attitudes towards study. I find that if I can visualise the benefits, I can reframe the study as a personal challenge rather than a threat. Since I enjoy challenges, I find that reframing in this way to be particularly effective. I also find that when I have clear objectives, I can more easily convince myself that the training is enjoyable, and then the process becomes almost stress free.

Not answered

I believe I have improved with age as far as motivation and enthusiasm is concerned. Also attention to detail seems to have improved, but at same time, concentration and comprehension seems to have slipped a little.

Sometimes I feel like I am on the right track if I get the feeling that I know more of what's going on than my fellow course participants....sounds strange maybe but the question about my schooling reminded me that when I was quite young I was always one of the few "at the top of the class" then I moved to a new city and in the new environment was up there but not right at the top. Maybe this affected me a bit (along with other things) and I shut off from study/learning and did not meet my own expectations (or those others had for me?). Not meaning that circumstances were to BLAME for my situation but I suppose my entire history links in to form my own personal perceptions of my learning style/ability.....??

I believe I have become less tolerant as a learner over time. My expectations have always been high, however my capacity to accept 'lack lustre' training has significantly reduced. I believe this has come about by trying to push myself to deliver the best training possible (by me), and in so doing I expect the same level of effort to be put in by others in respect to subject knowledge, preparation and practice delivery. I dont expect it to be perfect, but I would like to see that the trainer has at least put in the effort to make it as enjoyable an experience as possible for the learners.

Q 19 - Do you have any comments you would like to add?
Not answered
I haliava if I had 2 magiticus available for interview and applicant some to me with a rices of noner seving

I believe if I had 2 positions available for interview and applicant came to me with a piece of paper saying they can do something and the second application doesn't have any paper but has the industry experience I would always go for the latter. I think sometimes people get so tied up with extra learning that they forget about the job at hand. Just because something says you can do it doesn't necessarily mean you can so it's important to put into practice what you learn.

I like to stay on the topic that I'm learning. I have been to come RTO that just get off the beaten track too much - less stories - more information does me good.

I enjoy learning and developing my skills but I prefer lecture based learning
I find the internet a very valuable tool and I find I am not asking experts as often as I used to!
Thank you
Training environment is very important and can impact on my ability to learn i.e. noise, size of the class, dynamics of the group, skill of facilitator, training aids and methods used.
W 11 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Wouldn't be that motivated to learn very much related to (or depend on) Maslows' different level of needs? I.e. where overall are you now - shelter - security; love - socialization; self-actualisation - Would like to know the answer!
Not answered
To me I have always been afraid to look stupid so kept quiet. As an adult this has changed to a degree.
Not answered
1 vot unswered
Not answered
The unbitored
Not answered
Not answered
Not answered
From my viewpoint as an engineer - if the training is justified in the introductions the participants in training learn and participate - if not then they won't.
E.G. at school - very relevant learning; University - somewhat relevant for job; Post-grad - getting close. Specific leadership course - lots of direct learning. As a learner I am more motivated and wanting to put into practice.
Adult learning / training needs to be more actively encouraged and promoted with a high priority in the workplace.
Not answered
Not answered
Not answered
Not further comments
I believe there is a great good to suggest widdle good and alder werehors in dislactic greaters have life
I believe there is a great need to engage middle-aged and older workers in dialogue regarding being lifelong learners. Additionally there is much to be learned from the 'Gen Y' workers as they have been shown to have a significantly different learning philosophy.
Not answered
Not answered
Not answered

Not answered
Not answered
N. d. 1
Not answered
N. d. 1
Not answered
Not answered
Not answered
Not answered
TVOL dils well ed
Not answered
Not answered
If you don't feel passionate about your job find a new job, do what you want to do otherwise when change
or up skilling is required you will only look at it as a negative
Not answered
University vs TAFE university has high quality facilities, with state of the art equipment, however I found
their student to teacher ratios and just the general interest of the educators to be low. TAFE has spartan
facilities (trade) however, I have found the quality of the teaching to be higher. A general observation.
Not answered
Industry should be removed from the training industry.
I enjoy learning, and I enjoy training, and hope to learn more about adult learning to be more successful as
a learner and a trainer.
a rearrier and a traffic.
As an adult learner I find it much more exciting to learn, it's much easier because of my experience.
135 an addit feather 1 find it inden more exercing to feath, it's much easier because of my experience.
Not answered
I was the result of a tall poppy being 'blocked' & slowed down to boredom by the 'system' and treatment of

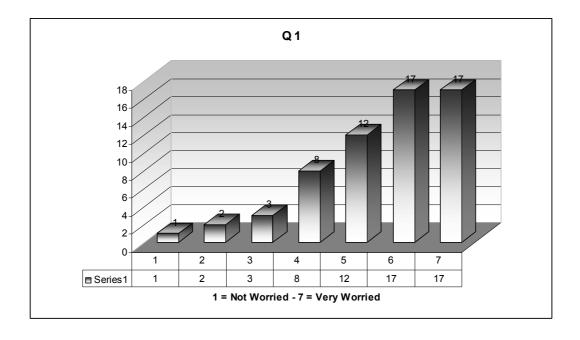
I was the result of a tall poppy being 'blocked' & slowed down to boredom by the 'system' and treatment of teachers. Again in hindsight, I recognize that a few teachers/bosses tried to direct me along the way but I wasn't open to support/guidance until many painful experiences (I WAS a slow learner) & decades opened me to change my direction :-o

We live in an information age, yet I find much of our learning institutions apply industrial age thinking to learning. For example, our kids wear uniforms (uniform - same), they line up for class (production lines), the bells ring (organisation and structure) etc. Today the Government is talking about "National Curriculum" - another "uniform". The information age is about networks, adaptability and innovation. Not about order, structure, herirarchy and uniformity. I think that the fundamental principles that underpin learning need to change. Here's an example that you might appreciate (given your IT experiences). In a globalised and networked economy, universities are teaching skills that can be bought at lower cost overseas. What they are not reaching students is how to orchestrate the provision of services from

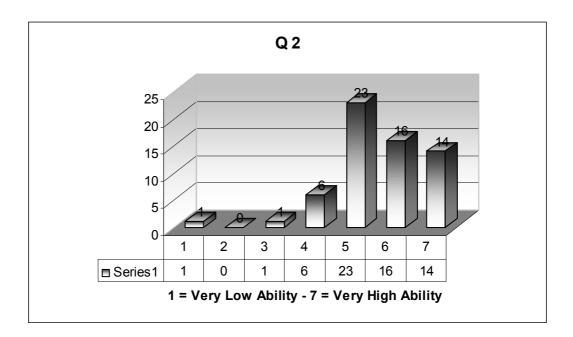
wherever they may be to achieve business goals. I think this may be to bureaucracy and inflexibility. Off the soapbox now. I hope all this helps! Not answered Classes mixed with people of different levels and at different stages and very annoying - it tends to slow down the pace, and can impact upon I have a little experience as a trainer, and found that my observations are more universal than not. In delivering vocational training in Polynesia/Melanesia, the differences I have observed are usually in the level of confidence of the individual in their own ability to absord and retain the information, rather than in the motivations for learning, or learning preferences. These are anecdotal observations though, rather than empirical. I would like to do a cert 4 in workplace training and assessment to maybe help in an indigenous community (stradbroke island) and would love if you had a facility of "last minute deal". I have 40 years experience in small business, cert 4 in real estate, cert 4 in life coaching, blue card etc. Good luck with your PhD, Margaret. I think I said it all:) Not answered no thank you- hope it helps Not answered Not answered

Appendix J - Survey Statistics - Frequency distributions for Questions 1 - 14

- Q1 When faced with a need to learn new information what is your level of worry?
- Mean 5.52

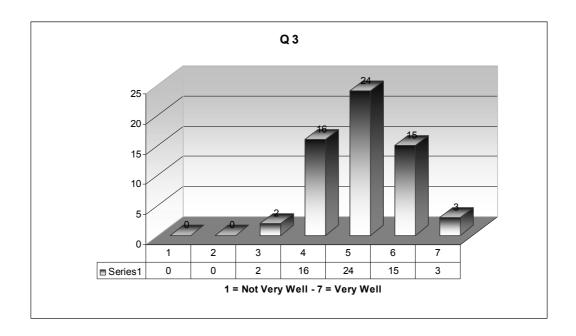


- Q2 What do you consider is your ability to learn??
- Mean 5.60

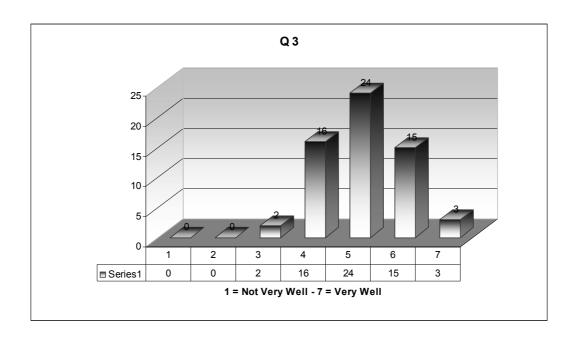


• Q3 - How well do you remember new information?

■ Mean 5.02

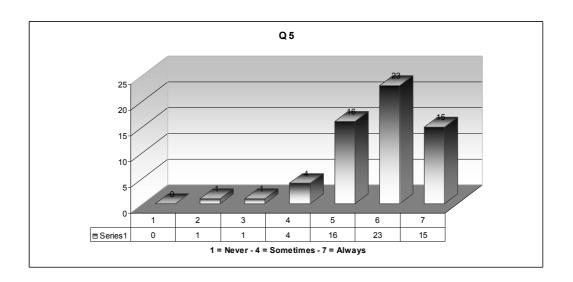


- Q4 When learning something new I find it easier if I have an opportunity to talk about it...
- Mean 5.82

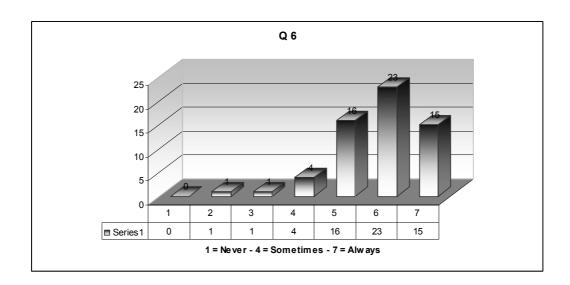


Q5 - I prefer to have visual information to assist my learning

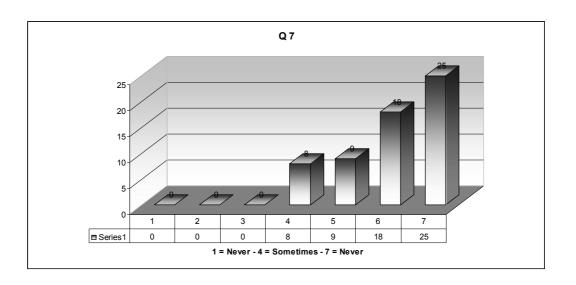
■ Mean 5.73



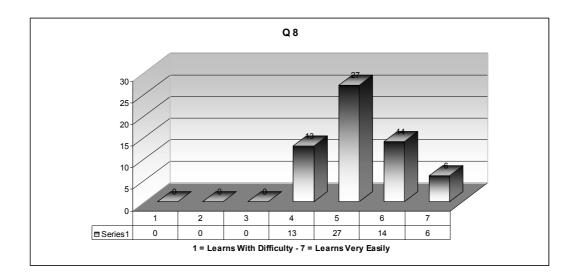
- Q6 I need to consider each step in learning new information before moving on...
- Mean 4.83



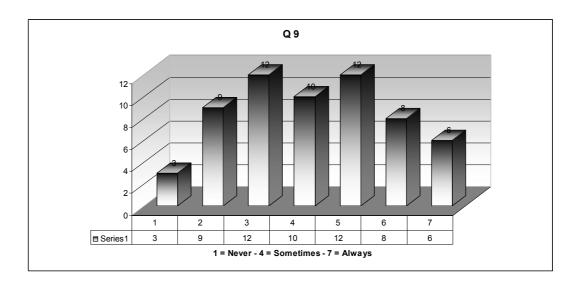
- Q7 I enjoy the challenge of learning new information...
- Mean 6.00



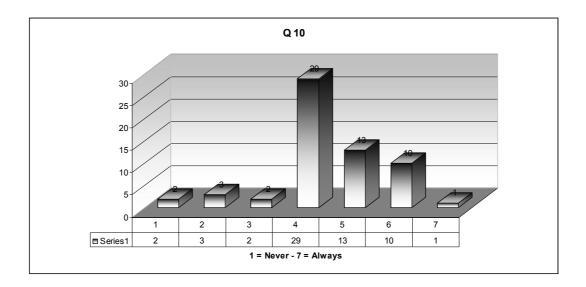
- Q8 Rate your own perception of yourself as a learner...
- Mean 5.22



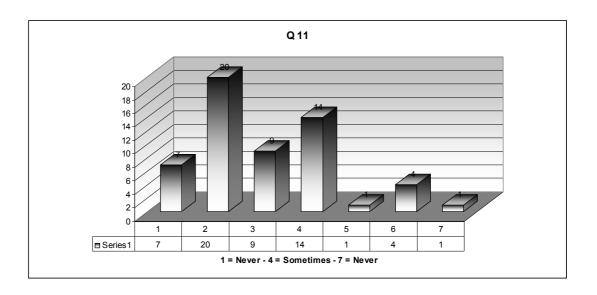
- Q9 Do you visualise the learning environment and your interaction in it prior to attending?
- Mean 4.12



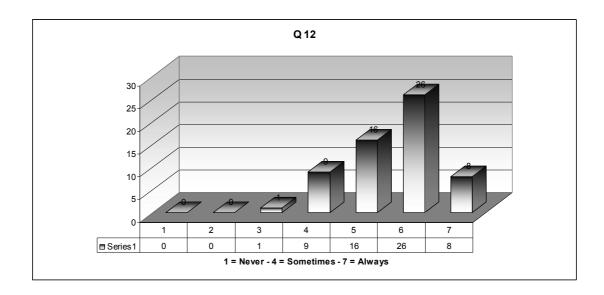
- Q10 I can remember what I learned at school...
- Mean 4.37



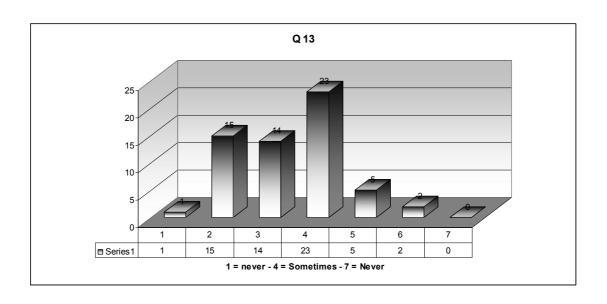
- Q11 My learning at school was a bad experience...
- Mean 3.10



- Q12 Learning I have undertaken as an adult has been very enjoyable...
- Mean 5.33



- Q13 Learning I have undertaken as an adult has been very difficult...
- Mean 3.35



- Q14 I will deliberately seek out and attend learning opportunities...
- Mean 5.33

