# The Certificate IV in Assessment and Workplace Training: Understanding learners and learning Support document

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# Literature Review

# Introduction

The current National Strategy for Vocational Education and Training (VET) acknowledges the vital role that VET professionals need to play to ensure the provision of quality learning opportunities for individuals, enterprises and industries (ANTA 2003, p. 10). Since the earliest training reforms of the 1990s, the role of those working in public and private training providers has changed dramatically in response to successive demands for a more client-driven, responsive and innovative training system. The VET system has expanded and now includes over 3000 private training organisations as well as TAFE providers (Harris, Simons & Clayton, 2005). Enterprises are increasingly engaging in the process of providing learning opportunities for their staff, both within and outside of the national VET framework. Many of those now engaged in the process of facilitating learning in the VET sector are drawn from a wide range of occupations. These persons may hold a variety of qualifications (for example, specific trade, human resource development/management, adult education and other professional qualifications) and working under a variety of non-teaching awards and conditions (ACIRRT 1998, p. 8).

This increasing diversity in the VET teacher and trainer workforce poses considerable challenges for those concerned with the quality of VET teaching and training. On the one hand, efforts need to ensure that all teachers and trainers, regardless of their context, are provided with relevant and effective training for their role. On the other hand, this effort needs to reflect the reality that, for many people, training often only comprises a proportion of their work role and is increasingly being undertaken by a growing cohort of part-time, casual or contract workers who often may work for more than one registered training organisation (Harris *et al.* 2005). What can reasonably be expected of these people in relation to investment in training for their role has been an ongoing source of debate. These debates have shaped what has been made available for the initial and on-going development of VET teachers and trainers and the research activities to underpin these developments.

A large proportion of the VET literature on professional development for teachers and trainers has been descriptive in nature, focussing on the development and outcomes of a wide range of professional development initiatives at both state and national levels (for example, Mitchell 2000; Mitchell, Young, McKenna & Hampton 2002; Mitchell & Wood 2001; Mitchell & Young 2001). A smaller body of work has examined the nature and extent of initial and on-going professional development undertaken by VET teachers and trainers at a general level (Harris, Simons, Hill, Smith, Pearce, Blakeley, Choy & Snewin, 2001) or in relation to particular aspects of national training reforms such as competency-based training (Lowrie, Smith & Hill 1999; Simons 2002) or on-line learning (Brennan, McFadden & Law 2001; Harper, Hedberg, Bennett & Lockyer 2000; Kemshal-Bell 2001). Studies have also addressed perceived gaps in knowledge, skills and attributes of specific groups of VET practitioners and some of the barriers staff face in accessing appropriate and timely professional development (Harris *et al.* 2001; Western Australia Department of Training/David Rumsey & Associates 2002). However, there has been little critical analysis of the curricula (or learning pathways) used to inform initial VET teacher /

trainer development programs, particularly those that lead to the Certificate IV in Assessment and Workplace Training.

The vocational education and training (VET) sector has aspirations to embrace the learning needs of a wide range of learners and to promote learning across diverse contexts (institutions, workplaces, virtual learning environments). The sector is also concerned with promoting lifelong learning. Part of ensuring quality education and training in the sector relates to understanding how these aspirations are played out in the practice – specifically for this project, through the implementation of the Certificate IV in Assessment and Workplace Training. Completion of this certificate is viewed as a means by which teachers, trainers and all those concerned with promoting learning within the VET sector are equipped with the necessary knowledge, skills and attributes to undertake their roles. Part of this process inevitably includes developing knowledge of how learning takes place and particular characteristics of learners. The ideas around learners and learning are critically important as they frame the actions of teachers and trainers in the sector. They gives rise to assumptions about the ways in which learner 'needs' might be addressed and what constitutes quality teaching / training in the sector.

The starting point for this literature review is an overview of understandings of learning, the process of learning and the characteristics of adult learners from the wider education literature. Focus then turns to the VET sector and recent literature exploring the nature of teaching and learning required of the sector in order to meet the established goals for the sector. The final section of this review focuses on the content of the units of competency that comprise the current Certificate IV in Assessment and Workplace Training and the recently released Certificate IV in Training and Assessment with particular reference to the content of the units in relation to issues relating learners and learning.

# Conceptions of learning

Learning within the VET sector is concerned with developing competence in workplace performance, although what this looks like and how it might be achieved is a highly contested issue (see for example, Stevenson 1996). Within the sector, learning is largely undertaken by persons who see themselves as adult. Further, the learning is a form of facilitated learning – that is learning that is the end point of 'an educational process that is directed and facilitated by others' (Moore, Willis & Crotty n.d. p. 17). Learning is sponsored and facilitated within a particular context (workplace, private training provider, TAFE College) and, as such, is located within a specific culture.

The concept of learning can be understood in a variety of ways. Most 'commonsense' understandings contain some blending of the idea that learning is something that a person does – it is a *process* - and learning results in achievement of some kind – a *product* (Merriam & Caffarella 1999 p. 250; Tight 2002, p. 23). Hager (2004) argues that despite significant arguments in educational literature to the contrary,

...much educational policy and practice, including policies and practices that directly impact on the emerging interest in learning at work, are clearly rooted in the learning-asproduct view (Hager 2004, p. 5).

Illustrative of this notion are expressions such 'attaining competencies and/or generic/employability skills' and so forth. These ideas suggest that discrete entities such as skills and competencies can be accumulated and unproblematically transferred from site to site as needed (Hager 2004, p. 4). Knowledge is viewed as lying outside of the learner, waiting to be apprehended and accumulated, usually with the assistance of a teacher. In other words, a positivist view of learning is emphasised (Candy 1991, p.430).

As Hager (2004, p. 6) and Tight (2002, p. 26) note there are several problems when this view of learning is unquestioningly accepted. Firstly, learning is viewed as able to be apprehended and described fully in order for it to be then codified in ways that can be replicated by learners. Secondly, it usually emphasises an individualised notion of learning. Thirdly, these ideas contrast sharply with what is known about the social nature of learning (Jarvis 1987) and the work of researchers such as Lave and Wenger (1991) where understandings of learning and work intimately involve learning in the company of others as part of 'communities of practice'. This view is also questioned by the work of researchers such as Schön (1983) who has showed that practitioners do not merely 'apply' what they have learned but rather 'reflect in action', acting to create ways of working and that arise out of this process – in other words, emphasising learning as a process.

Jarvis offers five other definitions of learning:

- any more or less permanent change in behaviour as a result of experience;
- a relatively permanent change in behaviour which occurs as a result of practice;
- the process whereby knowledge is created through the transformation of experience;
- the processes of transforming experience into knowledge, skills and attitudes; and
- memorizing information (Jarvis cited in Tight 2002, p. 25).

In these definitions learning results in some form of change, is grounded in experience and possible outcomes from the process include changes to knowledge, skills and attitudes. The fifth definition carries with it the notion of learning as a continual accumulation of facts and information. It has a strong connotation of the 'product' of learning being the internalisation of the 'correct information'.

Beyond these fairly straight forward understandings of learning, there are a wide range of explanations (theories) of learning. These theories attempt to answer, in various ways and to varying degrees, four central questions:

- who are the subjects of learning?
- why do they learn?;
- what do they learn; and
- how do they learn? (Engeström 2001, p.133).

There are a variety of ways of classifying this wide range of theories. Most classifications offer some schema using the basic orientations of behaviourist, cognitivist and humanistic understandings of learning. By way of summarising this vast literature, the following table (adapted from Merriam & Caffarella 1999, p. 264) summarises these orientations, including their understandings of the learning process and key proponents of these theories.

Table 1: Theories of Learning

	Understandings of the learning process	Focal point for learning	Key theorists	Example of educational practices which draw on this orientation
Behaviourist	Learning focuses on bringing about change in behaviour	Stimulus from the environment (outside the learner)	Pavlov, Skinner, Thorndike, Watson	Competency-based training Skill development and training
Cognitivist	Learning focuses on internal mental processes	Internal cognitive structures of the individual	Ausubel, Bruner, Gagnè, Lewin, Piaget	Cognitive development, Intelligence, learning how to learn
Humanistic	Learning focuses on attaining personal fulfilment	Affective and cognitive needs	Rogers, Maslow	Andragogy, self- directed learning
Social Learning	Learning focuses on interaction with and observation of others in a social context	Interaction between person, behaviour and environment	Bandura, Rotter	Mentoring
Constructivist	Learning focuses on constructing learning from experience	Internal construction of reality by individual	Candy, Dewy, Lave Piaget, Rogoff, Vygotsky	Experiential learning, self- directed learning, perspective transformation, reflective practice

Adapted from Merriam and Caffarella (1999, p. 264)

**Behaviourist** orientations are concerned with changes to observable behaviour as the products of learning. These theories emphasise the role that the environment plays in shaping learning and the value of appropriately timed reinforcement to shaping the outcomes from learning. Behaviourist notions of learning are widely acknowledged in VET as they underpin educational practices associated with competency-based training including identification of behavioural outcomes and modularised instruction.

**Cognitivist** theories emphasise the role of the mind and internal mental processes in learning. As Rogers (2002, p.10) notes:

[cognitive theories]...stress the processes involved in creating responses, the organisation of perceptions, the development of insights. In order to learn, understanding is necessary...

Humanistic understandings of learning emphasise growth and personal development in learning. Theorists place great importance on the activities of individuals in creating learning, intrinsic motivation, the drives of personality, the active search for meaning and personal self fulfilment. Humanistic orientations also emphasise 'that perceptions are centred in experience' (Merriam & Caffarella 1999, p.256) and have played a significant role in shaping the tenets of self-directed learning and the value of experience in the learning process. These concepts are central to many adult educators' understandings of learning which have been shaped by the work of Malcolm Knowles and his work on andragogy (see below).

**Social** learning theories emphasise the role of interaction with others in the learning process. These explanations of the learning process draw on behaviourist and cognitive orientations (Merriam & Caffarella 1999, p. 258) and the process of observation (see, for example, the work of Bandura 1976) and the importance of the social situation.

Constructivist understandings of learning

...maintain[s] that learning is a process of constructing meaning; it is how people make sense of their experience (Merriam & Caffarella 1999, p.261).

Generally, two subsets of understandings of learning can be deduced in writers adopting a constructivist orientation – personal and social constructivism (Driver cited in Merriam & Caffarella 1999, p.261). Piaget for example, focuses on meaning making by the individual. The social constructivist view of learning, on the other hand, suggests that knowledge is developed by way of interactions with others. Candy (1991, p.275) argues that

...[learning] involves acquiring the symbolic meaning structures appropriate to one's society, and, since knowledge is socially constructed, individual members of society may be able to add to or change the general pool of knowledge. Teaching and learning, especially for adults, is a process of negotiation, involving the construction and exchange of personally relevant and viable meanings.

Current understandings of workplace learning such as those associated with situated learning, cognitive apprenticeship and communities of practice draw from constructivist understandings of learning. These perspectives of learning also sit well understandings of learning particularly associated with adult learning – namely andragogy, self-directed learning and experiential learning.

One of the distinguishing features of learning in adult education more generally, and in VET specifically, is an emphasis on the nature of learners as 'adult'. As such, ideas which emphasise or distinguish the nature of adult learning from that connected to children have received widespread attention. Perhaps the most dominant of these views are those associated with the work of Malcolm Knowles who articulated his model of andragogy.

Knowles' model of andragogy, which evolved over a period of several decades, rests on six assumptions:

- Adults need to be able to make sense of the reasons for their learning and be able to make sense of how useful the learning will be for them
- Adults have a strong self concept and need to be self directing which needs to be acknowledged in learning situations
- Adults bring a wide range of experiences to any learning situation which can have both positive and negative impacts on learning situations
- Adults' readiness to learn is connected to their need to be able to cope effectively with their 'real life situations'
- Adults adopt a task-centred / problem-centred orientation to their learning
- Adults' motivation for learning is largely derived from intrinsic sources (Knowles 1990, pp. 57-63).

In his writing Knowles does not explicitly define learning although Pratt (1993) deduced that andragogy views learning as resting on two beliefs, namely that 'knowledge is assumed to be actively constructed by the learner' and 'learning is an interactive process of interpretation, integration and transformation of one's experiential world (Pratt 1993, p. 17). These ideas however, do not take account contemporary explanations of learning which acknowledge the situated nature of learning. Andragogy has also been discredited as providing a uniquely adult—focussed explanation of learning (Merriam 1993; Tight 2002) and for its overly individualistic focus (Pratt 1993). Questions have also been raised in relation to the lack of empirical evidence to justify the notion that self direction and a problem-based orientation to learning are is a peculiarly adult traits, an apparent preference for learning attached to social roles rather than reflective or personal ends (Tight 2002, p.113) and the unresolved tension between the autonomy of adult learners and the providers of education (this is a particularly salient issue in an industry-led VET system). While the critiques on the concept of andragogy have been widespread and sustained over time, it still retains its place as one of the most influential pieces of thinking on adult

education practice (Pratt 1993, p. 21). From the perspective of contemporary VET practitioners, it is best perhaps understood, not as a theory of adult learning which provides the one overarching and persuasive answer to questions relating to how learning might be best facilitated for VET clients, but as providing some valuable starting points for guiding thinking about teaching and learning.

A related field of thinking in adult learning is that of self-directed learning. Three related ideas are usually associated with the concept of self-directed learning:

- ...a self initiated process of learning that stresses the ability of individuals to plan and manage their own learning;
- an attribute or characteristic of learners with personal autonomy as its hallmark;
- a way of organising instruction in formal settings that allows greater learner control (Caffarella 1993, pp.25-26).

Self-directed learning has drawn attention to the ways in which adults might go about the process of learning and the role that a 'teacher' might (or might not) play in this process. Rather than 'teacher', terms such as 'facilitator', 'lecturer' and trainer are more widely used. These terms emphasise the 'helping' role ascribed to those working with adults, with the role seen as:

...[involving] negotiation, recognition of experience and a... degree of partnership between the learner and teacher...(Tight 2002, p. 29).

One final concept that is also central to adult learning is the concept of experiential learning. The act of reflection on experience is central to understanding how experience is transformed into knowledge. This is perhaps best exemplified by the work of Kolb and his experiential learning cycle (1984) which has been the catalyst for a body of work on learning styles or preferences. This literature has reinforced strongly held beliefs in relation to the role of the teacher / trainer in addressing the range of learning styles that will always necessarily be present in any group of adult learners by way of adopting a wide range of teaching activities, albeit that this may not be feasible or desirable. The concept of experiential learning is also closely linked to the notion of recognition of prior learning (RPL) which acknowledges that many adult have prior knowledge, understandings and skills which should be recognised in a formal sense (Tight 2002, p. 107).

In addition to understandings of learning, facilitating learning has also been informed by a body of knowledge which has examined the characteristics of adult learners.

# Characteristics of learners

Describing the nature of adult learners in any depth is an exhaustive task as many characteristics could be chosen. Cranton (1992, p.20) divides a number of characteristics into two groups. Firstly there are those characteristics which are relatively stable themselves, but are likely to impact on the process of learning. Characteristics such as personality type, culture, philosophy, experience and developmental phase are included in this group. Secondly there are those characteristics which themselves are influenced by, but also influence the learning process. These include learning style, autonomy, values, experience, developmental stage and self-directedness (Cranton 1992, p. 21). Those characteristics that are likely to affect the learning process are more likely to be the focus of efforts to guide teachers and trainers, since these can have 'flow-on' effects for other learner traits such as motivation (Wlodkowski 1999) or persistence (Mackinnon-Slaney 1994).

Characteristics such as values, autonomy, personal experiences, culture and philosophy are important underlying constructs that influence the learning process, but are not as easily measured or studied systematically as characteristics such as personality type, learning style or

developmental stages or phases (Cranton 1992, p. 56). This collection of characteristics, nonetheless, do influence the learning process and as such

...the best that an educator can hope to do is have an awareness and understanding of [these constructs] which explain and influence learner behaviour (Cranton 1992, p. 56).

Experiences (personal work-related, spiritual etc) can be used as a way of learning (see Dewy) or as a resource for learning (see Knowles) (Cranton 1992, p. 57). Reflection on experience with its potential to generate new perspectives is a central tenant of adult education practice (Boud, Keogh and Walker 1985; Mezirow 1990) and is foundational to the learning process. Experience can facilitate or act as a barrier to learning and as such 'it is impossible to ignore' (Cranton 1992, p. 58). Working to understand the experiences that adult learners bring with them is integral to facilitating learning.

Philosophy deals with the theory, principles and ideas that underpin a person's behaviour can include fundamental belief systems as well as ideas around the acceptance of stated socio-cultural norms or those that derive from childhood and family of origin experiences. For example, how a person views learning (as a process or a product) will influence the ways in which a learner might chose to interact in the learning environment. Cranton offers the contrast between one group of learners who want the 'correct answers' with another group that seek to challenge and critically examine every detail (Cranton 1992, p. 59).

Closely related to an individual's philosophic framework are their values. Brundage and Mackeracher (1980, p.69) alert us to the importance of raising the awareness of a learner's values system and the ways in which they influence the choices that they may make. Further they place great emphasis on educators respecting and valuing the feelings of learners and providing learners with feedback that indicates this valuing is genuine and transparent. Conversely, as Cranton (1992, p. 61) notes, sometimes it is the educator's role to challenge these values and the context in which the learning takes places is significant in weighing the importance of particular values and their appropriateness (or lack thereof) to the learning process.

Autonomy relates to an individual's ability to act independently. It is shaped by social and political factors and brings into sharp relief issues relating to the empowerment of learners (Cranton 1992, p.62). For educators, some learners are able to act autonomously and view their learning as a means of promoting their freedom to choose. It may open potential pathways that might not otherwise be available to them (for example learning in VET to attain recognised qualifications can open up new career directions, thus providing greater choices for individuals). Conversely, individuals who are mandated to attend training have an entirely different experience as they may feel that their autonomy has been restricted in some way. This can, in turn, impact on their expectations of the training and the ways in which they might engage with the learning process.

As noted above, there are some characteristics of learners that have been subject to systematic study and these are discussed in further detail in the next sections of this review.

# Personality type

Personality type has been shown to have a 'clear and powerful influence on learning preference' (Cranton 1992, p. 28). This concept was introduced by Jung but is more popularly known through the work of Isabel Myers and Katharine Briggs and the Myer-Briggs Type Indicator (MBTI).

The basis of the theory rests on the assumption that every person uses four basic mental functions – sensing, intuition, thinking and feeling (Myers & McCaulley (1993, p. 12). These functions are shaped by the priorities an individual gives to these functions and the attitudes of introversion and extroversion 'in which [people] typically use each function' (Myers & McCaulley

1993, p. 12). Two further functions – judging and perception – which centre on an individual's behaviour towards the outside world - were further developed in the work of Myers and Briggs (Myers & McCaulley 1993, p. 13). Combinations of these functions give rise to sixteen 'types' which, in terms of features of the learning process, can be mapped along four dimensions:

#### ♦ Extroversion – Introversion

- Extraverts prefer outside stimulation and interaction in order to engage in learning. They like to dialogue with others and work on activities with a group focus.
- Introverts show a preference for solitary thought and reflection. They value ideas, forming theories and developing an overall view. They like to work alone.

## ♦ Sensing – Intuition

- Sensing learners like details and facts. They work systematically and observe closely.
- Intuitive learners like to come up with conceptual models. They are more concerned with the overall picture than with the details.

## ♦ Thinking – Feeling

- Thinking learners are objective decision makers. They prefer clear instructions and action plans.
- Feeling learners are concerned with human values and are considerate of others. They need appreciation social harmony.

## ♦ Judging – Perception

- Judging learners are decisive and are only concerned with the essentials and like to bring events to closure.
- Perceptive learners are spontaneous and value openness and possibilities. They start many tasks and are easily sidetracked.

Personality theory has been used to explore a number of educational concepts including aptitude (for example training for particular types of occupations, types of work), application and interest (Myers & McCaulley 1992, p. 95). The extension of this understanding has been a growing literature of how teachers might respond to different personality preferences in order to better facilitate learning (see for example, Lawrence 1989).

# Developmental phases and stages

The developmental phases that a learner passed through over the life cycle change in relation to age and external events in a person's life (Cranton 1992, p.35). These changes can impact on adults' motivation to participate in adult learning (Aslanian & Brickell 1980). Brundage and Mackeracher (1980, p. 52) refer to a developmental phase as 'based largely on age related issues in physical, social and psychological areas'.

There is a vast literature examining adult development. Merriam and Caffarella (1999) categorise this literature into three groups. Firstly there is the literature that examines adult development from a biological perspective. Emphasis is placed on the impact of physical ageing as well as the impact of environment, health habits and disease on the learning process (Merriam & Caffarella 1999, p. 90).

Secondly there is a body of knowledge examining psychological perspectives on adult development. Adult development is conceptualised as not being age related but as an unfolding process occurring across different stages in a person's life. There are a range of models that examine adult development in terms of a sequence of events and their resultant impact on learning (for example, Erikson 1982; Levinson 1986; Kohlberg 1973). Life events and transitions (such as birth, marriage) and relational models (which view relationships as central to development) provide alternative frameworks for understanding adult development. Much of this latter literature is grounded in studies on women's development (Merriam & Caffarella 1999, p. 110).

The concept of developmental stages forms another sub-section of psychological perspectives on adult learning and addresses the movement from child-like understandings of the world to more complex understandings which also embrace a deeper understanding of self. These stages of growth in an individual have been addressed through the work of authors such as Rogers (1969) who explored the notion of self-actualisation, Jung (1970) who examined the concepts of individuation and Loevinger (1976) who examined ego development.

Thirdly, there is more recent literature which, rather than taking an individual focus on adult development, focus on socio-cultural understandings of development. That is, it examines the 'work' done by the world around us to 'define who [we are] and what we ought to do as adults' based on race, ethnicity, gender and culture (Merriam & Caffarella 1999, p.118).

An understanding of development phases and stages helps to focus attention on motivations and the rationale for learning held by individuals. Different types of developmental needs and stages give rise to different learning needs and interests and also alert us the 'multiple explanations of what adulthood is all about (Merriam & Caffarella 1999, p.136) which necessarily impact of the work of facilitating learning for vocational purposes.

# Learning styles

Learning style theory has evolved from the earlier research of psychologists who were interested in the relationship between personality and perception and mental processes including learning (Cronbach & Snow 1977; Guildford 1956; Hudson 1966; Witkin, Ottman, Raskin & Karp 1971). This work has largely been reported in the literature on cognitive styles. In essence learning styles describe individuals' approaches to learning in terms of those educational conditions under which they are most likely to learn (Knaak 1983, p. 14).

Although different definitions and terms are used to describe learning styles, some basic generalisations can be made from the literature. Most conceptualisations of learning styles are established as sets of dichotomous approaches to learning – for example empirical – conceptual; field-dependent – field independent; or wholist – serialist. Attempts to develop different categories of learning styles are usually accompanied by inventories or scales which attempt to quantify these preferences. These various approaches attempt to differentiate and categorise methods of processing information (Kolb 1985, Honey & Mumford 1986, Grecorc 1979), personal differences, motivational factors (Vermunt 1994) and general neuro-physiological tendencies (Riding, Glass & Douglas 1993). Specific inventories or scales have their own descriptive categories for learning styles.

Most writers on adult education are quick to acknowledge the value of learning styles (see for example Cranton 1992, p.45; Merriam & Caffarella 1999, p.210) in assisting teachers, trainers and learners appreciate the different ways in which individuals approach learning and how learning might be best facilitated for them. However, they also caution against their uncritical application. There have been arguments put that the concept of learning style is culturally based (see for example Brookfield 1990) which can sometimes suggest a hierarchy of learning styles or the existence of 'better' approaches to learning. While this need not mean the rejection of learning styles, what is needed is caution in their application and interpretation because as James and Blank (1993, p.55) have observed

...although various authors claim strong reliability and validity for their instruments, a solid research base for many of these claims does not exist.

### Self-directness

The notion of self-direction as a characteristic of adult learners is widely accepted, largely as a result of the work of Alan Tough (1971) and Malcolm Knowles (1990). Knowles' work to develop the concept of andragogy has been particularly influential in respect of promoting self-

direction as an outcome of education, not solely as characteristic of adult learners. This latter idea is often misunderstood by educators (Cranton 1992, p. 50). As a characteristic of adult learners, self-direction needs to be understood like other characteristics of adult learners that have been explored thus far and taken into account by teachers and trainers in their planning and delivery. However the concept of self-direction is problematic on a number of fronts. There is no universally accepted definition of the concept. To date, there has been no research which verifies self-directedness as a constant trait of adult learners. The notion that self-direction is an inherent characteristic of adults has been challenged particularly in relation to the extent to which adults choose to display this characteristic in all learning situations and the notion that that adults move towards self-directedness in a variety of ways (see for example Brockett and Hiemstra 1991). Arguably there are also issues related to the relevance of the concept of self-direction across different cultures, and as Caffarella (1993, p. 32) notes 'we should not idealise self-directed learning as the true marker of a mature adult learner'. It is also arguable that any learning can be entirely 'self-directed' since learning can never be autonomous of the environment in which it occurs (Cranton 1992, p. 53). Cranton notes that adult learners may be more or less capable of undertaking a self-directed learning process and that this process does not necessarily preclude the involvement of others including teachers and trainers who have a role to play in encouraging and facilitating the self-directed learning process (Cranton 1992, pp. 54-55).

In summary, the adult learner brings with them a complex array of characteristics which have the potential to influence and be influenced by the learning process. While is not possible to fully understand the impact of all these characteristics on the learners who engage in VET, awareness of the potential ways in which learners might be different would seem to be a critical foundation in the development of sound approaches to teaching and learning However, the broader field of education and adult education serves to provide the backdrop to the practice of teachers and trainers in the VET sector. Within the context of VET, the nature of the learning and decisions that have been taken in relation to the ways in education and training might be organised, planned and accredited place particular demands on teachers and trainers in relation to their practice.

# Learners and learning in the VET context

The training reforms that have unfolded over the past decade in Australia flowed from three core beliefs (Hawke 1998). Firstly, the system of vocational education and training that existed prior to the mid-1980s was ill-equipped to deliver the type of education and training needed to ensure that Australia had a flexible, highly skilled workforce that would enable the country to compete successfully on a global stage. Secondly, the nature of the skills, knowledge and attributes required by the Australian workforce would continue to undergo rapid change where workplace competence would best be developed in authentic learning environments that fostered greater linkages between working and learning. Thirdly, the nature and extent of the cost of increasing the skills and expertise of the Australian workforce to meet these demands was going to be high. In order to contain these costs ways needed to be found to encourage enterprises to invest in training in the workforce in order that the effort and cost for the development of the workforce be more equitably spread between individuals, their workplaces and the government.

The training reforms where predicated on the assumption that system wide change were required to bring about the scale of change required to meet the goals of increasing both the adequacy and standard of vocational education and training. As such, the reform process that was embarked upon in the early 1990s was a multi-dimensional phenomenon which required substantial change to the ways in which vocational education and training was designed, implemented and assessed. Widespread pressure was brought to bear on the vocational education and training sector, with concomitant implications for teachers and trainers involved in the process of facilitating learning and assessment within the sector.

Initial reforms in the sector introduced a competency-based framework as the defining organisational framework for teaching, learning and assessment in the VET sector. The adoption of competency-based training was intended to affect a number of elements of the program design, implementation and assessment including the developing of curricula, the forms of teaching methods adopted, the materials developed to support learning and the assessment approaches and strategies. Competency-based approaches to education and training, as conceptualised within the reforms, have continuously 'framed' the development of curricula by defining the purpose of education and training and have thus provided a schema for integrating key aspects of the curriculum such as content, delivery, assessment and outcomes. The result of this framing is a 'particular pattern of curricula organisation' that has become an integral part of vocational education and training (Carter 1995, p. 37).

Competency-based education and training, it is argued, can embrace understandings of learning drawn from behaviourist and cognitive perspectives (Harris, Guthrie, Hobart & Lundberg 1995, p. 135). Further since competency-based training is concerned with outcomes, rather than process, Harris *et al.* argue that this provides greater freedom for the teacher / facilitator to customise learning strategies to meet particular learning styles or preferences of students (Harris *et al.* 1995, p.136).

Other reforms such as a national regulatory framework for providers of VET and the introduction of policies such as *User Choice* and the development of the open training market has resulted in VET being undertaken in a wide range of settings including schools, workplaces, adult and community education providers using a range of delivery modes including the use of distance and on-line technologies. VET teachers and trainers are now working in a system characterised by increasing diversity, both in terms of the contexts in which they work and the students and clients they work with (Curtain 2000). The growth and change in information technologies has altered the temporal and spatial organisation of VET teachers' and trainers' work as well as their professional identities, particularly for those VET practitioners located in public TAFE institutions (Chappell 2001). This emergent environment has also had a concomitant impact on the understandings attached to learning - central to the core of VET work – and learners – the object of VET teachers' and trainers' labour.

Learning in pre-reform times, was arguably mostly associated with institutional environments and led by teachers and trainers. Curricula were driven by processes which codified 'acceptable' knowledge and skills which were then delivered to learners using pre-defined set of teaching methods. Where learning in the workplace was undertaken it was not connected in any significant way to the learning that took place in institutional settings. Emphasis was placed on the attainment of identified skills and a body of specialist technical knowledge associated with a chosen occupational area.

As Chappell, Hawke, Rhodes and Solomon (2003) note, however, there has been a significant shift is what is valued and understood as learning in VET contexts, the importance of learning as a process and what should be the intended outcomes from learning within the sector. Increasingly learning is been viewed as occurring across both on and off-job learning sites and the current VET system aims to particularly recognise learning from across both contexts. Integration of learning – in both the institutional sense and as a personal act for learners (Harris, Willis, Simons & Underwood 1998) is increasingly being viewed as important. Further learning, is no longer viewed as taking place in environments separate from the world of work. Learning is viewed as co-terminus with work (Van der Krogt 1998, Poell, Van der Krogt & Wildereersch 1998). Learning is increasingly being linked to organisational processes including human resource development (Chappell *et al.* 2003, p.16-17) and facilitated by attention to the way in the structure and process of work is managed, and the ways in which workplace relationships and culture are attended to (Harris, Simons & Bone 2000). Curricula are not content driven, but work-driven and linked to the immediate needs and concerns of the workplace (Chappell *et al.* 2003, p. vi). The facilitation of learning is no longer the sole providence of designated trainers or teachers.

Increasingly learning from one's work colleagues is more likely. Learners are also workers and potentially undertaking various roles (worker, learner, facilitator of learning – both of one's own learning and that of others), sometimes simultaneously.

In addition to these identified shifts which give greater priority to authentic learning environments and a stronger focus on the process of learning rather than training, there have also been shifts in thinking in relation to the outcomes that VET should seek to attain. Employers are increasingly stating a preference for the attainment of generic or employability skills as well as occupational specific skills (ACCI/BCA 2002). Teaching and learning that fosters the development of these attributes necessarily takes on a different character those approaches, for example that focus only on the development of technical skills.

These changes to understandings of learning and the outcomes required from VET therefore require new approaches to facilitating learning which represents a significant shift from current notions of learning as product and the transmission model of learning that underlies this conception (Chappell *et al.* 2003, p. 15). Rather constructivist understandings of learning, which promote 'experiential, problem-based and project-based learning' are deemed to be more appropriate (Chappell *et al.* 2003, p. vii). This however

...does not mean that teacher-centred pedagogies are no longer useful or relevant, rather they are one category of a much larger available pedagogical repertoire (Chappell *et al.* 2003, p. viii).

### Rather it requires

...[VET] practitioners who have a sophisticated appreciation of the pedagogical choices that are not only available to them but which are consistent with the contexts, clients and learning sites that make up the arena in which they work (Chappell *et al.* 2003, p.13).

Constructivist notions of learning promote a particular understanding of the role of VET teachers and trainers:

The vocational teacher's role is not to set tasks but to organise experiences that allow learners to develop their own knowledge and understanding (Kerka 1997, p.3).

These shifts in thinking about teaching and learning in VET have been emphasised in other recent research. A scoping study examining teaching and learning practices associated with the implementation of Training Packages (CURVE & University of Ballarat 2003) found that quality teaching and learning practices exhibit particular characteristics. Firstly, they display a learner-centred approach with the teacher / trainer acting as a facilitator. Secondly, teaching and learning practices have a strong workplace focus with an emphasis on the application of learning experiences to the workplace regardless of the context in which learning takes place. Thirdly there is an emphasis on flexibility and innovation which enables the development of learning strategies which are characterised by customisation and a holistic understanding of the learning and assessment processes (CURVE & University of Ballarat 2003, p.50).

The imperative for new thinking around teaching and learning in VET has implications for the view one might take about understanding the work of VET teachers and trainers. Rather than promoting the view that VET teachers and trainers act as 'technicians' who deliver and maintain training services, teachers and trainers are viewed as 'professionals' in the sense that they are reflexive, critical and act to create (and recreate) learning systems through their work (Simons 2001, p. 196). This view is in keeping with understandings of professional work that emphasises the interrelationship between theory and practice, where practitioners are 'practical theorists' (Foley 2000, p. 8) who work in complex environments where they are engaged in making decisions, reflecting-in-action and thus theorising about their practice:

...[practitioners] theorise...to attempt to make connections between variables, to explain outcomes...theorising involves the application of concepts...Theorising is something that we inevitably do and it is inevitably selective...(Foley 2000, p. 9).

Theories or explanations of learning and the characteristics of learners form part of the frameworks that VET teachers and trainers draw from and use to inform their practice. They can be formal (that is codified in the literature) or informal (drawn from personal experience). Formal theories can challenge the everyday understandings that form the basis of teaches and trainers' practice (Foley 2000, p. 12):

Theorising is not just an abstract, impractical activity, engaged in by intellectuals...removed from the 'real world' but is something that we do all the time. We can come to understand more clearly how we theorise ....formal theory ceases to be seen as something external to us that we have to master and apply, and becomes something that we can take into our existing understanding, and which can illuminate both our implicit, informal knowledge and our practice (Foley 2000, p.16).

Arguably, this literature points to the importance of quality teaching and learning practices if VET is to deliver its promised outcomes. Implications for how we understand the role and function of VET teachers and trainers flow from this goal.

# Competency standards and qualifications for VET teachers and trainers

As part of the implementation of the training reforms, policy makers were keen to ensure that learners within workplaces should have access to support from suitably qualified trainers. One of the first set of competency standards to be developed was for workplace trainers (CSB-Assessor and Workplace Trainers 1994). The purpose for the development of these standards was essentially practical, focusing on assisting those responsible for hiring and training workplace trainers (Garrick and McDonald 1992) and addressing the needs of trainers located in workplace environments (NAWT, 2001, p. 23).

These initial standards were designed to address the work functions of two different groups of workplace trainers:

...people providing training in the workplace but for whom the training function is not a major part of their job...[and]... people for whom training is a large part of the their job (Workplace Trainers Ltd, 1992 cited in NAWT 2001, p. 23; CSB Endorsement submission to NTB 1992 cited in NAWT 2001, p. 23).

Standards for the first group were designated 'Category 1' standards and 'Category 2' for the second. They included seven units of competency encompassing identifying needs for training, designing and developing training, organising training resources, delivering and evaluating training, assessing training, promoting and managing training (NAWT 2001, p.23). Units of competency for the 'Category 2' trainers were distinguished by more elements of competency and different performance criteria across the seven units.

Competency standards for assessors were subsequently developed and endorsed in 1993. These standards were directed to 'all persons who carry out an assessment role either in a workplace or institutional setting' (NAWTB 1993, cited in NAWT 2001, p. 24). They consisted of three units of competency: 'plan assessment, carry out assessment and record assessment results and review the procedure' (NAWT 2001, p. 24).

The workplace trainer and assessor standards were revised in 1994 and 1995 respectively with the outcome maintaining two 'categories' of trainer but providing greater distinction between the two

roles. The Category 1 Workplace Trainer Standards consisted of three units of competency – Prepare for Training, Deliver Training and Review Training. In the context of this project, it is interesting to note that the word 'learn' or 'learning' only appears four times in these units – once in the unit focussing on reviewing training with the remaining three mentions occurring in the unit entitled Deliver Training (CSB-Assessors and Workplace Trainers 1994, p. 4). The overwhelming emphasis is on training. One element of competency refers to the need to revise and modify instruction processes to meeting trainees' 'learning needs'. The other instances refer to the use of feedback to help trainees to 'learn from their mistakes' and providing practice 'according to the specific learning situation'. Trainee characteristics are acknowledged as a key factor to consider when selecting training methods (CSB-Assessors and Workplace Trainers 1994, p. 2-4). In keeping with the framework for presenting competency standards in use at the time, the absence of any range of variables statements and evidence guides precluded any significant elaboration of the process of learning and understanding learners. The units of competency arguably emphasise a transmission mode of learning where trainees are 'instructed' using a 'systematic approach' with reference to processes such as 'explanation, demonstration, review, trainee explanation, trainee demonstration and feedback (CSB-Assessors and Workplace Trainers 1994, p. 4). Emphasis is also placed on learning by doing with an emphasis on practice and feedback. The view of learning as a product is also emphasised by way of reference to trainees discussing 'their ability to apply their learning outcomes' (CSB-Assessors and Workplace Trainers 1994, p. 6).

The revised Category 2 standards consisted of four units of competency – prepare for training, deliver training, assess training, review and promote training. By way of contrast to the Category 1 units of competency units in this group place greater attention (by using frequent references) to the importance of attending to barriers to learning and characteristics of learners (CSB-Assessors and Workplace Trainers 1994, p. 10). The use of learning outcomes (in keeping within a framework where national curricula were in use at that time) and emphasis on a variety of learning processes (teacher-directed, individual and group-based) were singled out for particular attention (CSB-Assessors and Workplace Trainers 1994, pp.14-15). This suggests that these units of competency recognised that learning can occur in a variety of contexts.

The next iteration of the competency standards for Assessment and Workplace Training were developed after the advent of Training Packages:

Two fundamental shifts occurred with development of the Training Package – the two categories of Workplace Trainer disappeared and the units were packaged into designated qualifications... a Certificate IV... and a Diploma (NAWT 2001, p. 26).

The new Certificate IV represented a combining and significant revision of the units of competency that previously comprised the Category 1 and Category 2 qualifications. These units of competency, in keeping with current ANTA requirements relating to the format of industry standards included the addition of Range of Variable statements, expanded Evidence Guides and the inclusion of the Mayer Key competencies. The certificate now comprised eight units of competency. The content of the unit *BSZ404A Train Small Groups* was drawn from the Category 1 units of competency and, as such, continued to reflect a strong preoccupation with training as opposed to learning, with the term 'learning' only occurring three times in the unit – twice in relation to issues relating to the learning process and once in reference to experiential learning as an example of 'training delivery methods and opportunities for practice' (NAWT 1999, pp.53-54). The characteristics of 'training participants' were noted as a significant variable which needed to be taken into account in the training process. These characteristics included language, literacy and numeracy needs, cultural, language and educational background, gender, physical ability, level of confidence, nervousness or anxiety, age, previous experience with the topic and experience in training and assessment' (NAWT 1999, p.55).

Other units related to planning and delivery of training BSZ405A Plan and Promote a Training Program, BSZ 406A Plan a Series of Training Sessions and BSZ 407A Deliver Training Sessions make specific reference to 'principles of adult learning' as required knowledge and skills, but in keeping with the minimalist revisions undertaken as part of the development process (NAWT 2001, p.27), few direct references to the process of learning are evident in these units. Arguably, a strong emphasis on training remains along with a strong teacher / trainer led focus on these activities. However, the emphasis on the various contexts in which training might take place and the importance of acknowledging various characteristics of participants (noted above) are also featured in these units.

The review of the current Training Package (NAWT 2001) undertaken to develop the new Training and Assessment (TAA) Training Package has taken up a number of issues relating to how learners and learning are depicted in the previous Training Package. These include recommendations for:

- broadening the focus of the units of competency to embrace a wider range of delivery approaches and models (including mentoring, coaching, action learning, flexible delivery); and
- separating out group facilitation as a unit of competency rather than embedding these competencies in a unit covering the delivery of training and providing a clearer focus on work-based learning

The review also acknowledged that existing units of competency also contained gaps in relation to adult learning principles/theory, reflective practice amongst other issues (NAWT 2001, p. 86).

# Conclusion

The development and refinement of the competency standards used in successive iterations of the Training Package are important as they provide 'information that informs the content of vocational education and training programs' (Chappell et al. 2003, pp.19-20). Thus, while some inferences can be made about the understandings attached to the concepts of learners and learning by way of analysing the standards, it is the choices made by people engaged in the delivery and assessment of certificate IV programs that more fully reveals these understandings. This is notwithstanding the critiques of the implicit assumptions contained in Training Packages which suggest that by their very structure they promote a transmission understanding of learning and miss contemporary understandings that view competence as conceptually bounded, not residing in individuals but in the collective (the interaction between people at work) (Chappell et al. 2003, p.20-21). The issue that is of relevance particularly to this research study is the extent to which the competency standards and the overall Training Package are able to convey the emerging understandings of what is required of persons engaged in supporting learning within the VET sector and that the Training Package is used as a way of promoting high quality teaching and learning in VET to those most intimately concerned with this outcome - namely the teachers and trainers.

# Research design and method

# Design of the study

The purpose of the study was to explore how the concepts of learners and learning are embedded in the *intended* curriculum, the *delivered* curriculum and the *received* curriculum (Glatthorn cited in Print 1993, pp. 3-4). Different perspectives – including those of the teachers and trainers implementing the course and graduates from the various courses – were required. The study therefore relied on a subjective world view where phenomena are best studied using methods that permit the researcher to 'get inside them' (Simons 2001, p.56). The study required an in-depth analysis of instances of a particular unit – in this case, registered training organisations and their Certificate IV courses. The purpose of this approach was to 'probe deeply and to analyse intensively the multifarious phenomena that constitute the life cycle of the unit' (Cohen & Manion 1994, p. 106).

A case study approach enabled the researchers to focus on particular aspects of the Certificate IV courses that were of central interest to the study (that is how learners and learning are understood) and to analyse and describe these aspects in detail within the context of the courses which were delivered by particular teachers and trainers to specific groups of students.

# The research process

The research process was designed to comprise three interrelated stages:

Stage 1: Planning and preparation

Stage 2: Data gathering and analysis

Stage 3 Cross case analysis and report writing

# Stage 1: Planning and preparation

Following a preliminary reading of the literature in the areas related to the research questions, potential sites for the case studies were sought. In the first instance, an audit of all registered training organisations offering the Certificate IV in Assessment and Workplace Training was undertaken using the National Training Information Service (NTIS). From this data base, a list of seventeen potential sites was generated. These sites were selected to ensure that the various different types of public and private registered training providers were represented in the sample. The sites also included higher education institutions which were registered training organisations and where the Certificate IV was offered either as a 'stand alone' course or embedded in degree programs. These sites were located in five different states/territories. Fourteen were based solely in the VET sector (four in Queensland, four in New South Wales, four in Victoria and two in South Australia) and three were higher education institutions (one in each of New South Wales, Victoria and an Australian Territory).

Parallel to this process the case study protocol was developed. Information derived from the literature review was used to inform the development process. For each site (case), interviews were to be conducted with at least one teacher and/or trainer involved in the delivery of Certificate IV programs and two recent graduates from their courses. As the training package, at least in part, established the intended curriculum for the Certificate IV qualification, the protocols

were designed to collect data on the *delivered* curriculum from a number of Certificate IV courses (through the experiences of teachers and trainers who offer the course) and the *received* curriculum – what graduates from the Certificate IV courses report as their learning from participating in the courses. The protocols were circulated amongst the research team for comment and were tested with a small number of potential respondents. Minor amendments were made to the protocols as a result of these processes.

The final part of the preparation process involved attention to processes relating to the ethical issues associated with the conduct of the study. Ethical approval for the study was sought from the Human Research Ethics Committee of the University of South Australia and the New South Wales Department of Education and Training for those case studies which were to take place in TAFE institutes in that state.

# Stage 2: Data gathering and analysis

Where possible, visits were made to each of the sites selected for the study. Each visit took between one and two days and was sometimes supplemented with follow up telephone calls for interviews with participants where they were not able to be scheduled within the timeframe of the visits. Where face-to-face interviews were not possible, telephone interviews were conducted. The interviews were audio-taped and later transcribed. Individual case studies were then developed by members of the research team using a format that was agreed by the team and returned to key personnel at each site for verification.

In total, sixteen case studies were conducted for the study. One case study was not able to be completed during the time that the field work for the study was undertaken. Table 1 provides details of the distribution of the organisations by state and the number of interviews that were conducted at each site. A total of 18 interviews were conducted with teachers and trainers who deliver the Certificate IV course and 27 interviews were conducted with graduates. In some instances the number of interviews fell short of the targeted numbers. This was largely due to the challenges inherent in attempting to follow up graduates from courses.

# Stage 3: Cross case analysis and report writing

Once each individual case study had been completed, analysis of the data was undertaken in a number of discrete stages. In the first instance each case study was analysed using the research questions to guide the process. The second stage involved a cross case analysis to synthesise key themes and issues. Particular attention was paid to the ways in which the various data supported and/or contradicted each other. This was done by bringing together the data for each individual teacher/trainer and graduate, and then returning to further scrutiny of the data within their respective cases. The final stage of the data analysis process focused on drawing conclusions, elaborating meanings and verifying the findings in the light of the available data. This was aided by a return to the research objectives which had guided the study and their use in formulating a series of tentative conclusions which were then passed through several iterations becoming increasingly grounded and explicit with each iteration. A verification process which required extensive reference back to the literature and the original data was undertaken to provide extended arguments to support the conclusions drawn from the data.

Table 2: Distribution of case studies by state and number of respondents at each site

State	Location	RTO Type	Number of interviews at site
South Australia	City	Private – community- based	1 Teacher / Trainer and 2 Graduates
	City	Public	1 Teacher / Trainer and 2 Graduates
New South Wales	Regional	Public	2 Teacher / Trainer and 2 Graduates
	City	Public	1 Teacher and 1 graduate
	Regional	Private – community- based	2 Teacher / Trainer and 2 Graduates
	City	Private – Enterprise based	1 Teacher / Trainer and 2 Graduates
	City	Private – government - other	I Teacher and 1 graduate
Queensland	Regional	Private – commercial	1 Teacher / Trainer and 2 Graduates
	Regional	Public	1 Teacher / Trainer and 2 Graduates
	City	Public	1 Teacher / Trainer and 2 Graduates
	City	Private – community based	1 Teacher and 1 graduate
Victoria	City	Private commercial	1 Teacher and 1 graduate
	City	Public	1 Teacher / Trainer and 2 Graduates
	Regional	Public	1 Teacher / Trainer and 2 Graduates
	City	Private – enterprise	1 Teacher / Trainer and 2 Graduates
	Regional	Private – other – government	1 Teacher and 1 graduate

# The respondents

# Persons delivering the Certificate IV (teachers and trainers)

The persons who were offering the Certificate IV were a highly qualified and experienced group of educators. With the exception of one participant who was currently completing an undergraduate degree in adult and vocational education, all held a combination of graduate and post graduate qualifications in education. Over half the group held secondary teaching qualifications and/or specific qualifications in adult and vocational education. Three participants were currently undertaking studies at Masters Level and another person was undertaking certificate level studies in on-line learning from an institution in the United Kingdom. In addition to their qualifications in education and training, eight participants specifically referred to their industry experience and vocational qualifications which they held in addition to their educational qualifications. Nine respondents also cited that they held more than ten years experience as a teacher.

# The Certificate IV graduates

The graduates from the Certificate IV programs were a diverse group, both in terms of their educational backgrounds and their current work roles. This latter characteristic particularly highlights the wide range of occupations for which the Certificate IV may hold some relevancy. Just under one quarter of graduates (six in total) were currently employed in public vocational education and training providers. Two of this group were employed as teachers, one as a VET coordinator, one as a support officer for teachers working in flexible delivery, one as a short course administrator and one as an internal auditor.

Five graduates were employed in teaching/tutoring roles in community based organisations while a further two had undertaken the Certificate IV as part time employees in an enterprise (their employment being undertaken while they were studying at university).

The remaining graduates occupied a range of work roles including

- ♦ Marketing coordinator
- ♦ Educational officer for a state department
- ♦ Consultant in a nursing agency
- ♦ Manager of interior design business
- ♦ Trainer for an educational publisher
- ♦ Quality, risk and safety officer in a hospital
- ♦ Manager of wards in a hospital
- ♦ National sales development manager
- ♦ Trainer / assessor for enterprise
- ♦ Private dog trainer / Coordinator of respite centre
- ♦ Volunteer coordinator
- ♦ Workplace learning coordinator
- ♦ OHSW officer in enterprise
- ♦ Trainer of apprentices in an enterprise.

Just over 40% of the Certificate IV graduates held graduate and post graduate level qualifications. A further 40% held vocational qualifications and almost all listed a diverse range of occupational experience.

# Limitations

The case study method adopted for this study is not without its limitations. Since the purpose of the study was primarily interpretive, the findings from this study are not able to be generalised to all registered training organisations offering the Certificate IV qualification. However, since the purpose of the study was to illuminate practices and experiences, generalisability can be gauged with respect to the use of a sample of registered training organisations that is diverse enough to allow assertions of broader applicability. While every effort was taken to ensure that respondents were encouraged to express their views about the Certificate IV programs in which they were participants in an open and frank manner, the absence of observation of the actual programs necessarily limited the verification of findings from the study. The data relied solely on the reports and recollections of the teachers, trainers and participants from the programs.

# Interview protocols

# Interview with staff responsible for delivering the Certificate IV in Assessment and Workplace Training

Please note: For the purposes of this interview when we refer to learners and learning we are referring to the ways in which learners are represented and spoken about in the course of the delivery of your Certificate IV program. When we refer to learning we are referring to the ways in which the process of learning is represented and spoken about during the delivery of the program. In other words, we are interested in focusing on what you tell participants in the Certificate IV program about learners and learning.

#### Introduction

Some information about your RTO

- ♦ How long has your organisation been an RTO?
- ❖ In addition to the Certificate IV what other Training Packages are you registered to deliver from?
- ♦ Do you offer all qualifications from these Training Packages or only some? Do you offer any additional courses that are not part of Training Packages?
- ♦ How many teaching / training staff are employed in your organisation? What percentage of staff are part-time or casual? What percentage are full time staff members?
- ♦ Does your organisation offer
  - Full fee paying courses?
  - Courses for international students coming to Australia?
  - Courses in other countries (if yes, where)?

# Some information about your RTO and the delivery of the Cert IV

- ♦ How did your organisation become involved in the delivery of the Certificate IV? Who initiated this?
- ♦ Why is your organisation currently involved in the delivery of the Certificate IV?
- ♦ How long has your organisation been offering the current Certificate IV? Did you organisation offer the previous workplace trainer qualifications (Category I and II)?
- ♦ Where do most of your students for the Certificate IV come from?
- ♦ How many graduates have you had from your Certificate IV program in the past 12 months?
- ♦ How many of these graduates gained the Certificate IV through a) partial or b) full RPL?

# Some information about yourself

- ♦ Can you tell me a little bit about yourself?
  - Your background
  - Qualifications
  - How long you have been working in this RTO
  - Your history of involvement in the delivery of the Certificate IV

#### Positioning the interview

- ♦ What sort of learning do you think is promoted and valued in the VET sector?
- ♦ Is this the same sort of learning that is valued and promoted in your RTO?
- ♦ How is it similar / different?
- ♦ So what does learning in the VET sector mean for you?

#### Context

♦ Can you please 'walk me through program that you use to deliver the Certificate IV starting with the first session? (include details of the content and processes that you use throughout the program).

## Learning

In this research we are interested in how you talk about and represent learners and learning in the course that you deliver and how the participants are assisted to understand learning and the learners that they will be working with.

- ♦ In the process of delivering the Certificate IV how do you define learning for the participants?
- ♦ How do you explain what happens when people learn?
- ♦ What information do you give to participants about the sorts of environments that support learning? What sorts of useful tips and hints do you give participants about providing a good environment to support learning?
- ♦ What information do you give to participants about the sorts of strategies that support learning? What sorts of useful tips and hints do you give participants about supporting learning?
- ♦ What sorts of learning are you hoping that that the Certificate IV participants will be able to promote in their work?
- ♦ What sorts of activities / strategies do you use to assist the Cert IV participants develop their understandings of learning?
- ♦ Where have your ideas of learning come from? (theorists, books, courses etc)
- ♦ What are the key ideas about learning that you want your Cert IV participants to take with them from the course?
- ♦ Does the way in which you currently deliver the Certificate IV limit the amount of attention that you pay to exploring the process of learning with the participants? If yes, what is it about the delivery of the program that limits you input on this issue?
- ♦ How do you present the process of assessment to the participants? How do you explain the link between learning and assessment?

# Learners

- ♦ How do you describe learners to the participants in your Certificate IV course?
- ♦ What characteristics of learners do you talk about? Why these characteristics?
- ♦ How do you explain the ways in which these characteristics impact on the process of learning?
- ♦ What information do you give to participants about the sorts of strategies that support learning for the various different groups of learners they might work with?
- ♦ What sorts of activities / strategies do you use to assist the Cert IV participants develop their understandings of the learners they will be working with?

- ♦ Where have your ideas about learners come from? (theorists, books, courses etc)
- ♦ What are the key ideas about learners that you want your Cert IV participants to take with them from the course?
- ♦ Does the way in which you currently deliver the Certificate IV limit the amount of attention that you pay to exploring the characteristics of learners with the participants? If yes, what is it about the delivery of the program that limits you input on this issue?

## Closing questions

- ♦ Generally in what ways do you think that graduates from the Certificate IV course should contribute to learning in the VET sector?
- ♦ Are there any aspects of your delivery of the Certificate IV program that you think contradict what you hope the graduates of your program will do when they are teaching? What aspects?
- ❖ Is there any thing else you would like to say about
  - learners in the VET sector
  - learning in the VET sector
  - preparing people be workplace trainers in the VET sector

# Interview with recent graduates of the Certificate IV in Assessment and Workplace Training

Please note: For the purposes of this interview when we refer to learners and learning we are referring to the ways in which learners were represented and spoken about in the course of your Certificate IV program. When we refer to learning we are referring to the ways in which the process of learning was explained and spoken about during the delivery of the program. In other words, we are interested in focusing on what you learned about learners and learning during your the Certificate IV program.

#### <u>Introduction</u>

- ♦ Can you tell me a little bit about yourself?
  - Your background
  - Qualifications
  - Your role in the VET sector
  - How and why you have completed the Certificate IV qualification

# Positioning the interview

- ♦ What sort of learning do you think is promoted and valued in the VET sector?
- ♦ So what does learning in the VET sector mean for you?

#### Context

♦ Can you please 'walk me through the Certificate IV course that you have just completed starting with the first session? (include as much detail as you can about content, processes, resources that were used in the program).

#### Learning

In this research we are interested in about what you learned about learning and learners <u>from the Certificate IV course you have completed.</u>

- ♦ In the Certificate IV how was the process of learning defined?
- ♦ How was the process of learning explained to you?
- ♦ What information did you received about the sorts of environments that support learning? What sorts of useful tips and hints did you get about providing a good environment to support learning?
- ♦ What information did you receive about the sorts of strategies that support learning? What sorts of useful tips and hints were you given about supporting learning?
- ♦ What sorts of activities / strategies were used to help you develop your understandings of learning?
- ♦ How do the ideas of learning and facilitating learning presented to you in the Certificate IV course fit with your previous understandings of learning? (similar, different, contradictory, limited etc)
- ♦ What are the key ideas about learning did you take away from your Certificate IV course?
- ♦ How was the process of assessment explained to you? What links were made between the process of learning and assessment?

#### Learners

- ♦ How were learners described to you in your Certificate IV course?
- ♦ What characteristics of learners were highlighted in the course?
- ♦ How were the ways in which learner characteristics impact on the process of learning explained to you?
- ♦ What information do you get from the course about the sorts of strategies that support learning for the various different groups of learners you might work with?
- ♦ What sorts of activities / strategies id you do to assist you to develop your understandings of the learners you will be working with?
- ♦ How does what you learnt about learners and their characteristics from the Certificate IV course fit with your previous understandings of learning? (similar, different, contradictory, limited etc)
- ♦ What were the key ideas about learners that you took away from your Certificate IV course?

## Closing questions

- ♦ From what you have learned from the course, what criteria would you use to judge the effectiveness of a learning environment?
- ♦ Generally in what ways do you think you can contribute to supporting learning in the VET sector?
- ♦ Thinking about your current work with your learners, how closely does your teaching match with the ideas bout learners and learning that you were taught about in the Certificate IV program? In what ways does it match? In what ways does it differ? Why do you think there are these differences?
- ♦ What changes would you recommend to the Certificate IV course you attended, particularly in relation to the content / strategies associated with learning about learning and learners?

- ❖ Is there any thing else you would like to say about◆ learners in the VET sector

  - learning in the VET sector
  - preparing people be workplace trainers in the VET sector

# References

- ACIRRT (Australian Centre of Industrial Relations Research and Training) 1998, 'Teacher employment contracts and their impact on educational outcomes', unpublished report prepared for Australian national Training Authority Research Advisory Council, Brisbane.
- Australian Chamber of Commerce and Industry & Business Council of Australia (ACCI/BCA)2002, Employability skills for the future, Department of Education, Science and Training, Canberra.
- Australian National Training Authority (ANTA) 2003, Shaping our future: Australia's national strategy for vocational education and training 2004-2010, Australian National Training Authority, Brisbane.
- Aslanian C & Brickell 1980, Americans in Transition: Life Changes as a Reason for Adult Learning, Future Directions for a Learning Society College Board, New York.
- Bandura, A 1976, 'Modeling Theory', in W S Sahakian (ed) *Learning Systems, Models and Theories*, Rand and McNally, Chicago.
- Boud, D, Keogh R and Walker D 1985 Reflection: Turning Experience into Learning, Kogan Page, New York. Brennan, R, McFadden, M & Law, E 2001, Review of research. All that glitters is not gold: online delivery of education and training, NCVER, Adelaide
- Brockett R and Hiemstra R 1991, Self-direction in Adult Learning: Perspectives on Theory, Research and Practice, Routledge, New York.
- Brookfield S 1990, The Skillful Teacher, Jossey Bass, San Francisco.
- Brundage, D and Mackeracher, D 1980, Adult Learning Principles and their Application to Program Planning, Ontario Ministry of Education, Toronto.
- Caffarella, R 1993, 'Self-directed learning', in New directions for adult and continuing education. An update on adult learning theory, no.57, Spring, Jossey-Bass, San Francisco, pp.25-35.
- Candy, P 1991, Self-direction for life-long learning, Jossey-Bass, San Francisco.
- Carter, D. 1995, 'Curriculum reform and the neo-corporatist state in Australia', in *International Perspectives on Educational Reform and Policy Implementation*, eds. D. Carter &M. O'Neill, Falmer Press, London, pp. 29-39.
- Centre Undertaking Research in Vocational Education (CURVE) & University of Ballarat Assessment Centre 2003, *Doing it well, doing it better. Final report of the ANTA Teaching and Learning Strategies Scoping Project, ANTA, Brisbane.*
- Cohen L & Manion, L 1994, Research methods in education, Routledge, New York.
- Competency Standards Body (CSB)-Assessor and Workplace Trainers, 1994, Workplace trainer competency standards, CSB-Assessor and Workplace Trainers, ACT.
- Chappell, C 2001, 'Issues of teacher identity in a restructuring Australian vocational education and training (VET) system, Australian and New Zealand Journal of Vocational Education Research, vol.9, no.1, pp 21-39.
- Chappell, C, Hawke, G, Rhodes, C & Solomon, N 2003, An analysis of the current and future context in which Training Packages will need to operate, High Level Review of Training Packages, Phase 1 Report, ANTA, Brisbane.
- Cranton, P 1992, Working with Adult Learners, Wall and Emerson, Toronto.
- Cronbach, LJ & Snow, RE 1977, *Aptitudes and Instructional Methods*, Irvington Publishers Inc, New York. Curtain, R 2000, 'The workplace of the future: implications for vocational training', *Vocational Training European Journal*, vol. 19, no. 1, pp.29-37.
- Engeström, Y 2001, 'Expansive learning at work: towards an activity theoretical reconceptualization', *Journal of Education and Work*, vol. 14, no. 1, pp. 133-156.
- Erikson, E 1982, The Lifecycle Completed: A Review, Norton, New York.
- Foley, G (ed), 2000, Understanding adult education and training, Allen and Unwin, St Leonards, NSW.
- Garrick J & McDonald, R 1992, 'Competency-based standards for industry trainers: A critical comparison of international models', *Studies in Continuing Education*, vol.14, no.2, pp.166-186.
- Grecorc, A 1979, 'Learning/teaching styles: Their nature and effects in National Association of Secondary School Principles', in *Student learning styles: Diagnosing and prescribing programs*, National Association of Secondary School Principals, Virginia

- Guildford, JP 1956, 'The structure of the intellect', Psychological Bulletin, vol. 53, pp 267-293.
- Hager, P 2004, 'Conceptions of learning and understanding learning at work', *Studies in Continuing Education*, vol.26, no. 1, pp.3-17.
- Harper, B, Hedberg, J, Bennett, S & Lockyer, L 2000, Review of Research. The on-line experience: the state of Australian on-line education and training practices, NCVER, Adelaide.
- Harris, R, Guthrie, H, Hobart, B & Lundberg, D 1995, Competency-based education and training. Between a rock and a whirlpool, MacMillan, Melbourne.
- Harris R, Willis, P, Simons, M & Underwod, F 1998 Learning the Job: juggling the messages in on- and off-the-job training, NCVER, Adelaide.
- Harris, R, Simons, M & Clayton, B (2005) Shifting mindsets: impact of changes to work in the VET sector on roles of VET practitioners in Australia, NCVER, Adelaide.
- Harris, R, Simons, M, Hill, D, Smith, E, Pearce, R, Blakeley, J, Choy, S & Snewin, D 2001, The changing role of staff development for teachers and trainers in vocational education and training, NCVER, Adelaide.
- Harris, R, Simons, M & Bone, J 2000, More than meets the eye? Rethinking the role of workplace trainer, NCVER, Adelaide.
- Hawke, G 1998, 'Learning, workplaces and public policy', paper presented at the AVETRA National Conference, University of Technology, Sydney, 16-17 February.
- Honey, P & Mumford, A 1986, The Manual of Learning Styles, Peter Honey, Maidenhead.
- Hudson, L 1966, Contrary Imaginations: A psychological study of the English school boy, Methuen & Co Ltd, London.
- James W & Blank W 1993, 'Review and critique of available learning style instruments for adults;, in D Flannery (ed) *Applying Cognitive Learning Theory to Adult Learning, New Directions for Adult and Continuing Education*, no. 59, Jossey Bass, San Francisco.
- Jarvis, P 1987, Adult Learning in the Social Context, Croom Helm, London.
- Jung, C 1970, The development of personality, Routledge, London, (translated by RFC Hull).
- Kemshal-Bell, G 2001, *The online teacher*, Final report for the Project Steering Committee of the VET Teachers and Online Learning, Project, ITAM, ESD, TAFE NSW.
- Kerka, S 1997, Constructivism, workplace learning and vocational education, ERIC/ACVE, viewed 1 October 2004, http://ericacve.org/docgen.asp?tbl+digests&ID=34
- Knaak, WC 1983, Learning Styles: Applications in Vocational Education, The National Centre for Research in Vocational Education, The Ohio State University, Columbus, Ohio.
- Knowles, M 1990, The adult learner. A neglected species, Gulf Publishing Company, Houston.
- Kohlberg, L 1973, 'Continuities in Childhood and Adult Moral Development', in P Baltes & K Schaie (eds) *Life-span Development Psychology: Personality and Socialization*, Academic Press, Orlando, FLa.
- Kolb, DA 1984, Experiential learning: experience as a source of learning and development, Prentice Hall, Englewood Cliffs, NJ.
- Kolb, DA 1985, Learning style inventory, McBer and Company, Boston, MA.
- Lave J and Wenger, E 1991, Situated learning: Legitimate peripheral participation, Cambridge University Press, Cambridge.
- Lawrence, G 1989, *People Types and Tiger Stripes*, Centre for Applications of Psychological Type, Gainsville, FL.
- Levinson, D 1986, 'A Conception of Adult Development', American Psychologist, vol.41, no.1, pp.3-13.
- Loevinger, J 1976, Ego Development: Conceptions and Theories, Jossey Bass, San Francisco.
- Lowrie, T, Smith E & Hill, D1999, Competency-based training. A staff development perspective, NCVER, Adelaide.
- Mackinnon-Slaney, F 1994 'The adult persistence in learning model', *Journal of counseling and development*, vol.72, no.3, pp.268-275.
- Merriam, S & Caffarella, R 1999, 'Key theories in learning', in *Learning in adulthood. A comprehensive guide*, Jossey-Bass, California, pp. 248-269.
- Merriam, S 1993, 'Adult learning: where have we come from? Where are we headed?', in *New directions for adult and continuing education. An update on adult learning theory,* no.57, Spring, Jossey-Bass, San Francisco, pp.5-14.
- Mezirow, J 1990, 'How critical reflection triggers transformative learning', in Jack Mezirow and Associates Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning, Jossey Bass, San Francisco.
- Mitchell, J 2000, Framing the Future. Re-framing the Future: A report on the long term impacts of Framing the Future, ANTA, Melbourne.
- Mitchell, J & Wood, S 2001, Evidence of high-skilled VET practitioners and high-performing VET organisations, ANTA, Melbourne.
- Mitchell, J & Young, S 2001, High-skilled High performing VET, ANTA, Melbourne

- Mitchell, J, Young, S, McKenna, S & Hampton, C 2002, 110 ways to implement the national training system, ANTA, Melbourne.
- Moore, B, Willis, P & Crotty, M nd, Getting it right. Getting it right together, Flexible Learning Centre, University of South Australia, Adelaide.
- Myers, I & McCaulley, M 1993 Manual: A Guide to the Development and Use of the Myers-Briggs Type Indicator, Consulting Psychologists Press, Palo Alto, CA.
- NAWT 1999, Training Package for Assessment and Workplace Training, ANTA, Melbourne.
- NAWT 2001, Review of the Training Package for Assessment and Workplace Training. Stage 1 report, NAWT, Melbourne.
- Poell, R, Van der Krogt, F & Wildereersch, D 1998, 'Solving work-related problems through learning projects', *International Journal of Lifelong Education*, vol.17, no. 5, pp.341-351.
- Pratt, D 1993, 'Andragogy after twenty-five years', in *New directions for adult and continuing education. An update on adult learning theory*, no.57, Spring, Jossey-Bass, San Francisco, pp.15-23.
- Print, M 1993, Curriculum Development and Design, Allen and Unwin, St Leonards, Australia.
- Riding, RJ, Glass, A, & Douglas, G 1993, 'Individual differences in thinking: cognitive and neurophysiological perspectives', *Educational Psychology*, vol. 13, no. 3/4, pp. 267-278.
- Rogers, C 1969, Freedom to Learn, Charles E Merrill, Columbus, Ohio.
- Rogers, A 2002, 'Learning and adult education', in R Harrison, F Reeve, A Hanson & J Clarke (eds.) Supporting Lifelong learning, Volume 1, Perspectives on Learning, Routledge/Falmer, London, pp.8-24.
- Schön, D 1983 The Reflective Practitioner: How Professionals Think in Action, Basic Books, New York.
- Simons M 2001, 'Behind Closed Doors': TAFE Teachers and the Implementation of Competency-based Training in South Australia, unpublished PhD thesis, University of South Australia.
- Tight, M 2002, Key concepts in adult education and training, Routledge, London.
- Tough A 1971, The Adult's Learning Project: a fresh approach to theory and practice in adult learning, Ontario Institute for Studies in Education, Toronto.
- Van der Krogt, F 1998, 'Learning network theory: The tension between learning systems and work systems in organisations', *Human Resource Development Quarterly*, vol.9, no.2, pp.157-177.
- Vermunt, JD 1994, Inventory of Learning Styles in Higher Education, Tilburg University, Maastricht, The Netherlands.
- Western Australia Department of Training/David Rumsey and Associations, 2002, *Shaping the VET practitioner of the future*, viewed 5 October 2005,
  - http://www.training.wa.gov.au/resources/docs/VET%20discussion%20paper.pdf
- Witkin, HA, Ottman, PK, Raskin E & Karp, S 1971, A manual for the embedded figures test, Consulting Psychologists Press, Palo Alto.
- Włodkowski, R 1999, Enhancing Adult Motivation to Learn, Jossey Bass, San Francisco.