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

Michele Simons
Roger Harris
Centre for Research in Education, Equity and Work, University of South Australia

Erica Smith
VET Research Group, Charles Sturt University

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Publisher's note

Additional information relating to this research is available in *The Certificate IV in Assessment and Workplace Training: Understanding learners and learning—Support document*. It can be accessed from NCVER's website <http://www.ncver.edu.au>.

Contents

Key messages

This study examines how learners and the processes of learning are understood and presented in a sample of courses leading to the attainment of the Certificate IV in Assessment and Workplace Training (since replaced by the new Certificate IV in Training and Assessment). It considers the implications of these findings for the development of teaching and learning in vocational education and training (VET) in Australia.

✧ The Certificate IV in Assessment and Workplace Training plays a significant role in promoting views about teaching and learning in the VET sector and is highly regarded by the graduates surveyed. The certificate promotes a strong learner-centred understanding of teaching and learning and emphasises the adult status of learners and the place of experience and interaction as central features of the learning process.

✧ Attention to learner needs and characteristics is emphasised in the courses examined leading to a certificate IV. This is largely achieved through the application of models of learning styles and by raising awareness of the diverse nature of learners in VET. Unfortunately, the learning styles frameworks often appear to be used uncritically, leaving open the potential for stereotyping of learners. Other characteristics (for example, ethnicity) that might also impact on preferred ways of learning need to be considered.

✧ Understandings of learning promoted through the new Certificate IV in Training and Assessment need to draw more extensively on ideas which emphasise the importance of learners making sense of their experience and building their knowledge based on these experiences. These approaches also need to emphasise the importance of building knowledge to enhance both individual and corporate performance. This is essential in developing workforce capabilities and meeting the needs of contemporary workplaces. It also helps to promote lifelong learning.

✧ Ongoing debate and critical reflection among VET practitioners are needed to promote the development of workplace-centred, learner-centred and attribute-focused learning in VET.

Executive summary

Context

The Certificate IV in Assessment and Workplace Training has been fundamental to efforts to promote quality learning in the vocational education and training (VET) sector. Despite the central role this qualification has played in shaping ideas about learners and learning, there has been little research undertaken into how they are presented in the programs leading to its attainment. This is the focus of this study. The findings remain relevant even though the certificate has recently been replaced by the new Certificate IV in Training and Assessment. This is because views of training, teaching and learning in VET are slow to change.

Purpose

This study was specifically designed to gather data on the ways in which learners and the process of learning are constructed, understood and embedded in courses that lead to the attainment of the Certificate IV in Assessment and Workplace Training. The research objectives were to:

✧ examine how learning and the characteristics of learners are represented in documentation used in courses leading to the attainment of the Certificate IV Assessment and Workplace Training

✧ analyse how teachers and trainers delivering the Certificate IV in Assessment and Workplace Training understand the process of learning and the characteristics of learners likely to be encountered in VET contexts

✧ analyse how recent graduates from the Certificate IV in Assessment and Workplace Training courses understand learners and learning

✧ examine how the understanding of learners and learning derived from courses leading to the attainment of the Certificate IV in Assessment and Workplace Training affects the VET sector's goals of embracing a wide range of learner needs across diverse contexts and promoting lifelong learning.

Scope

The study involved an analysis of 16 case studies in South Australia, New South Wales, Queensland and Victoria. Seven of these sites were public registered training organisations (four based in capital cities; three in regional areas). The remaining sites comprised nine private registered training organisations—two enterprise-based organisations (both located in capital cities); three community-based organisations (two in capital city locations; one in a regional area); two commercial training organisations (one in a capital city location; the other regional) and two government-funded organisations located in the higher education sector. The case study sites were therefore spread across a number of locations, as well as across a range of different types of registered training organisations. This provides some diversity, while recognising the limits the approach may place on the generalisability of the research findings.

Key themes and findings

Context matters

The research demonstrated considerable diversity in the types of courses leading to the attainment of the certificate IV qualification, as well as a variety of ways in which the qualification was contextualised to meet the requirements of the organisations and individuals involved. In enterprise contexts (not connected to the education industry *per se*), the certificate IV was understood as a business process that contributed to wider organisational and strategic goals, with an immediate focus on developing human capital for the enterprise. Learners and learning were understood in context-specific ways; this stands in contrast to circumstances where the audience for the certificate IV was more non-specific, and topics related to learners and learning were approached in more general terms. Within these contexts, various perspectives were offered on:

✧ the *intended* curriculum (that is, the pathway or course planned by teachers and trainers offering certificate IV courses. These were based on understandings of the nature of learning to be promoted in VET and interpretations of units of competency from the training package)

✧ the *delivered* curriculum (the content and processes used in actual course delivery by teachers and trainers)

✧ the *received* curriculum (what graduates from the courses said they had learned about learners and learning from their courses).

The intended curriculum

Teachers and trainers delivering certificate IV courses and their graduates asserted that nature of learning promoted in VET should be 'workplace focused'. Learning was characterised as 'practical', 'hands on'; it should be learner-centred, interactive and acknowledge learners' prior knowledge and skill. Learning was also largely underpinned by conceptions of a split between thinking and doing and the view that learning is a 'product' (that is, competencies) that people attain through transmission from teacher to learner.

The delivered and received curricula in relation to learners and learning

Theoretical explanations of learning were not central to certificate IV courses. Indeed there was some debate amongst providers and graduates that training rather than learning is the sole focus of courses. Where learning was examined, behaviourist and humanistic[1] understandings were most prevalent, with little attention being paid to constructivist understandings—where learners construct meaning from their learning and make sense of their experiences. Adult learning principles were also used as organising frameworks for understanding learning. In some cases these explanations were accompanied by unhelpful speculation about the nature of adult learners compared with younger, adolescent learners. In addition to content, teachers and trainers offering the certificate IV placed significant emphasis on modelling, thereby enabling graduates to experience learning. These experiences were characterised as adult-like, in which drawing on the experience and prior knowledge and skills of participants, as well as interaction between participants, were key components.

The message that learners in VET are diverse was clearly made to graduates of certificate IV courses. There was less evidence, however, of practical approaches to dealing with this diversity. While there were considerable efforts to model various teaching strategies in courses, there appeared to be little direct instruction provided about the relationship between teaching strategies and their suitability or otherwise for learners who held particular characteristics. The outstanding exception to this was in relation to learning styles. Learning styles appeared to offer an appealing

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[1] Behaviourist understandings are concerned with changes to observable behaviour as the products of learning; humanistic understandings emphasise growth and personal development in learning.

and simple framework for addressing learner differences. Unfortunately, these frameworks often appeared to be used uncritically, leaving open the potential for stereotyping learners without regard for other learner characteristics that might impact on preferred ways of learning. Interviews for the study were also replete with 'shopping lists' of other learner characteristics, some of which would not find support in the literature (for example, wanting value for money) as key factors influencing learning outcomes. In addition, there were fewer references to those characteristics (such as gender, ethnicity, and class) that research has shown impact on learning outcomes.

Graduates were strongly focused on the notion of learner 'needs'. There appeared to be some blurring of the notions of explicit learner needs and inferred learner needs, and a tendency to infer particular needs from the stereotypes; for example, the different needs of adolescent learners compared with those of adults. Graduates tended to view the concept of needs in terms of the knowledge, skills and information required to perform a work role. Needs could also relate to personal characteristics, but these were often labelled as 'special' and most commonly meant language and literacy abilities. Once again, the inherent danger in this thinking is twofold. Firstly, it represents learners as vessels to be filled with whatever teachers and trainers perceive as their needs. Secondly, this perspective places significant pressure on teachers and trainers to 'get it right' in an environment where it is practically impossible to meet the needs of all learners. Furthermore, an inherent contradiction within the structure of the VET system juxtaposes learners' needs with those of industry, as they are presented in training packages.

Conclusions

This study offers some significant empirical evidence about understandings of teaching and learning within the VET sector and how these are enacted in the delivery of the Certificate IV in Workplace Training and Assessment, which is centrally concerned with the preparation of teachers and trainers for the sector.

✧ Ideas about teaching and learning in VET as they are represented in the certificate IV courses that were a part of this study are eclectic in nature, drawing on perspectives from adult education, psychology and, to a lesser extent, sociology. Some of these ideas about adult learning and experiential learning conform to emerging understandings of learning as 'active individual and social construction of knowledge' (Chappell et al. 2003, p.15). What needs to be reworked is the tendency to view action and thought as discrete entities. Cognitive activity is an essential part of developing workforce capabilities appropriate for the needs of contemporary workplaces; understandings of learning need to reflect this perspective.

✧ Notwithstanding the range of sources detailing ideas about teaching and learning, there appeared to be a distinct lack of specific references to the demands of preparing workers for particular industries. The absence of approaches to teaching and learning which take into account specific contexts can leave the way open for simplistic technical approaches (such as the uncritical application of learning styles across all settings) to be applied where there is little existing empirical support to suggest that these interventions will promote quality teaching and learning.

✧ How teachers and trainers understand learners is important. How teachers and trainers understand not only the social context in which learners are embedded, but also the effect of 'positioning' certain groups of learners, will play a significant role in shaping ideas about best practice in teaching and learning for the sector.

✧ In order to promote debate and dialogue in relation to teaching and learning in the VET sector, policy-makers, teachers and trainers need to move beyond technical discussions on the latest version of the Training and Assessment Training Package. Discussions need to examine ideas on how teaching and learning might embrace the learner-centred, work-centred and attribute-focused approaches now acknowledged as important for the future of the VET sector. Discussions also need to consider more seriously the impact of characteristics such as gender, race and ethnicity on learning, and the ways in which learning might best be understood and organised to take account of these learner attributes.

Background to the research

Purpose of the research

The Certificate IV in Assessment and Workplace Training (now being replaced by the Certificate IV in Training and Assessment as part of the Training and Assessment Training Package) is the 'base' qualification for vocational education and training (VET) teachers and trainers (Harris et al. 2001) and indeed, since 2002 has been mandated by the Australian Quality Training Framework which has introduced new standards for delivery of VET (Smith & Keating 2003). Research prior to the review of the earlier training package and development of the new Training and Assessment Training Package indicated some difficulties with acceptance of the qualification (Gillis et al. 1998). Harris, Simons and Bone (2000) analysed the assumptions underpinning the Certificate IV in Assessment and Workplace Training, noting that much of the content presumed that classroom-based practices could be transferred into workplaces. The review underpinning the development of the new Training and Assessment Training Package was also critical of the content and delivery of programs leading to the attainment of the certificate IV, arguing for significant changes to the content and structure of curricula leading to the qualification (National Assessors and Workplace Trainers 2001). The new training package also incorporates a diploma qualification suitable for most areas of VET practice, while the previous package's diploma qualification has a much more limited applicability and was not widely taken up.

However, while questions about the efficacy of the certificate IV qualification are not hard to find, what has remained unexplored and unquestioned has been the thinking related to how learners and learning are presented in the certificate IV and the training programs that lead to its attainment. Arguably, this thinking (and the practices informed by it) is likely to change much more slowly, even though the new qualification is significantly different from the old. In addition, it is not only the content of the qualifications, but also their interpretation and implementation that significantly impact on the understandings that graduates from the various certificate IV courses take with them into their work as VET teachers and trainers.

This study, therefore, was specifically designed to gather data on the ways in which learners and the processes of learning are constructed, understood and embedded in courses that lead to the attainment of the Certificate IV in Assessment and Workplace Training. As such, the study was not concerned with passing judgement on practices leading to the attainment of this qualification, nor on the nature of the competency standards framing the qualifications attained from courses leading to the certificate. Rather, it took as a starting point the aspirations that the VET sector holds for embracing a wide range of learners, the promotion of learning across a variety of contexts and the valuing of lifelong learning. The key objectives of the study were to:

✧ examine the understandings of learning and characteristics of learners represented in documentation used in courses leading to the attainment of the Certificate IV in Assessment and Workplace Training

✧ analyse specific instances of the ways in which teachers and trainers delivering the Certificate IV in Assessment and Workplace Training understand the process of learning and the characteristics of learners likely to be encountered in VET contexts

✧ analyse understandings of learners and learning held by a sample of recent graduates from the Certificate IV in Assessment and Workplace Training

♦ examine the implications of the understanding of learners and learning derived from courses leading to the attainment of the Certificate IV in Assessment and Workplace Training in relation to VET sector goals which emphasise inclusion of a wide range of learner needs across diverse contexts and to promote lifelong learning.

Issues in the literature

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 highly contested (see for example, Stevenson 1996). Within the sector, learning is largely undertaken by people who see themselves as adult. Further, the learning being considered 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, technical and further education [TAFE] institute) and, as such, is located within a specific culture.

The concept of learning can be understood in a variety of ways. Most 'common sense' understandings contain some blending of the idea that learning is something that a person does—it is a *process*—and that 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, most educational policy adopts the 'learning-as-product view' (Hager 2004, p.5). Illustrative of this notion is discussion about 'achieving' or 'getting' competencies. Such ideas suggest that discrete entities such as competencies can be accumulated and unproblematically transferred from site to site as needed (Hager 2004, p.4). Knowledge is viewed as lying outside 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 captured and described fully in order for it then to be 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) whose understandings of learning and work intimately involve learning occurring in the company of others as part of 'communities of practice'. Beyond these 'common sense' understandings of learning, there are a wide range of explanations (theories) of learning which can be classified in a number of ways.

♦ *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 shape the outcomes from learning. Behaviourist notions of learning are widely acknowledged in VET because 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, they '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 play 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.

✧ *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 environment.

✧ *Constructivist* understandings of learning 'maintain 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. 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 resonate well with understandings of learning particularly associated with adult learning—namely andragogy, self-directed learning, lifelong learning and experiential learning.

One of the distinguishing features of learning in adult education 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 with children have received widespread attention. Perhaps the most dominant of these views are those associated with the work of Malcolm Knowles (1990) who articulated the notion of andragogy. In his writing, Knowles does not explicitly define learning, although Pratt 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 of more recent interpretations of learning which acknowledge its situated nature. Andragogy has also been critiqued as providing a uniquely adult-focused explanation of learning (Merriam 1993; Tight 2002) and for its overly individualistic focus (Pratt 1993). Questions have also been raised about the lack of empirical evidence to justify the notion that self-direction and a problem-based orientation to learning are particularly 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 (a particularly salient issue in an industry-led VET system). While 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).

A related field of thinking in adult learning is that of self-directed learning. Self-directed learning can be understood as: 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; and a way of organising instruction in formal settings that allows greater learner control (Caffarella 1993, pp.25–6).

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).

Lifelong learning has become a key catch phrase in VET and is used to promote several important ideas. Firstly, it aims to promote the ideal that learning should be a continuous process across the lifecycle as it is essential for organisations to continue to develop and expand, and thus a necessary component of human resource development strategies (Coffield cited in Tight 2002, p.41). Secondly, lifelong learning is also linked to concepts such as 'learning to learn' and ongoing

personal development where emphasis is placed on individuals developing the knowledge and skills to be able to manage themselves as learners and be able to act in ways that enable them to learn effectively in a variety of environments. As such, this concept has links with self-directed learning.

One other key concept also central to adult learning is the concept of experiential learning. The act of reflection on experience is seen as fundamental to understanding how experience is transformed into knowledge. This is perhaps best exemplified by the work of Kolb (1984) and his experiential learning cycle 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 (which will always be present in any group of adult learners), by way of adopting a wide range of teaching activities, albeit that such a practice may not be feasible or desirable. The concept of experiential learning is also closely linked to the notion of recognition of prior learning which acknowledges that many adults have prior knowledge, understandings and skills which should be recognised in a formal sense (Tight 2002, p.107).

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 which are relatively stable themselves, but are likely to impact on the process of learning. Characteristics such as personality type, culture, philosophy 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 likely to affect the learning process are more likely to be the focus of efforts by 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 (Cranton 1992, p.56) 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. This collection of characteristics, nonetheless, does 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).

Other characteristics such as personality type, developmental phases and stages, learning styles and self-directedness have been subject to systematic study and are often highlighted as playing a significant role in influencing learning.

Personality type

Personality type has been shown to have a 'clear and powerful influence on learning preference' (Cranton 1992, p.28). 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 orientations—judging and perception, focusing on an individual's behaviour towards the outside world—were further developed in the work of Myers and Briggs (Myers & McCaulley 1993, p.13). 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 resulted in a growing literature on how teachers might respond to different personality preferences in order to better facilitate learning (see for example, Lawrence 1983).

Developmental phases and stages

There is a vast literature examining adult development. Merriam and Caffarella (1999) categorise this literature as 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 and Caffarella 1999, p.90). Secondly, there is the 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, Levinson 1996; Erikson 1982; Kolberg 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 childlike 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 and Loevinger (1976) who examined ego development.

Thirdly, there is more recent literature which, rather than taking an individual focus on adult development, focuses on sociocultural 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 to the 'multiple explanations of what adulthood is all about' (Merriam & Caffarella 1999, p.136) which necessarily impact on 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 et al. 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).

Most writers on adult education readily acknowledge the value of learning styles (see, for example, Cranton 1992, p.45; Merriam & Caffarella 1999, p.210) in assisting teachers, trainers and learners to 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 that the concept of learning style is culturally based (see for example, Brookfield 1990) which can sometimes imply 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'.

This latter claim has been given more substance by the publication of the findings of a systematic review of the usefulness of learning styles and their application in the further education sector in the United Kingdom (Coffield et al. 2004). Arguing that the research on models of learning styles is highly contested, this review found that, of the over 70 different models of learning styles identified in the literature, only 13 fitted the minimal criteria for inclusion in the review. Of these 13, only two

were thought to be sufficiently sound to be recommended for application in the further education sector as valid and reliable assessments of learning styles and worthy for use as part of interventions to enhance learning.

Arguably, of more importance than discussions related to the quality of models and instruments to assess learning styles was a range of practical issues raised by these researchers. Firstly, while the use of learning styles offers the potential to increase learners' and teachers' understanding and self-awareness of learning, this can only be done where people are well versed in the application and interpretation of instruments. Secondly, in situations where classes are large and sufficient time might not be available to cover the required curriculum, teachers may be hard-pressed to apply learning style models in a way that avoids practices which can stereotype learners. This is particularly salient when there is no empirical evidence to back the assertion that adapting to (or deliberately mismatching) the identified learning styles of students will result in improved learning for students (Coffield et al. 2004, pp.40–1). Further, the temptation to adopt learning styles as a 'simple solution to complex problems' (Coffield et al. 2004, pp.44–5) can create a situation where more pressing issues such as students' learning difficulties (including those related to language, numeracy and literacy, for example) might be conveniently overlooked or not paid the required attention.

Self-directedness

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 relation to promoting self-direction as an *outcome* of education, not solely as a characteristic of adult learners. This latter idea is often misunderstood by educators (Cranton 1992, p.50). 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 adults move towards self-directedness in a variety of ways (see for example, Brockett & 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.54–5).

Summary

Adult learners bring with them to any learning situation a complex array of characteristics which have the potential to influence and be influenced by the learning process. While it 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, 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.

Learners and learning in the VET context

The training reforms which have unfolded over the past 15 years in Australia have been predicated on the assumption that system-wide change was required to meet the goals of increasing both the adequacy and standard of vocational education and training. Initial reforms 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 development 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 training in Australia takes a particular form. Competency standards are developed and revised by industry skills councils in consultative processes and are gathered into industry or occupational training packages, numbering 80 at present, which contain a number of qualifications that build upon one another. The training packages, which are publicly listed on the National Training Information Service (<www.ntis.gov.au>), include assessment guidelines and also have associated with them purchasable support materials, including learning materials, e-resources and assessment tasks. The first training packages were developed in 1997 and their format has been considerably refined and improved since the early versions (Smith & Keating 2003). Thus for example, the units of competency in later training packages, but not early ones, contain a great deal of information about underpinning knowledge and skills, suggestions about holistic delivery and assessment, and guidelines for incorporating key competencies in delivery. It needs to be remembered that the Training Package for Assessment and Workplace Training, published in 1998, was one of the earliest training packages and thus suffered two significant disadvantages relevant to this project; in itself it could not be expected to be of high quality since it was, in a sense, a 'pioneering effort' developed at a time when the format and the various components that comprise training packages were still under development. Furthermore, it did not have the benefit of including reference to working with training packages in its depictions of VET learning. Any explanations of working with training packages have been inserted by those delivering certificate IV rather than being included in the training package itself. While training packages attracted a great deal of criticism in their earlier years (for example, Smith 2001), there now seems to be a general acceptance among the VET sector.

Competency-based education and training, it is argued, can embrace understandings of learning drawn from behaviourist and cognitive perspectives (Harris et al. 1995, p.135). Further, since competency-based training is predominately 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 (1995, p.136).

Other reforms, such as a national regulatory framework for providers of VET and the development of the open training market, have resulted in VET being undertaken in a wide range of settings, including workplaces, adult and community education providers and schools, using a range of delivery modes, including distance and online technologies. VET now covers a wide range of discipline areas, forms of knowledge and levels of learning. 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 with whom they work (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, Young & Guile 1999). This emergent environment has also had a concomitant impact on the understandings attached to learning—central to 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 a 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.

The notion of 'curriculum' is highly contested in the field of education generally and, more specifically, in the VET sector. This has increasingly become the case as subsequent waves of training reforms have unfolded. The well-known assertion by the former Chief Executive Officer of the Australian National Training Authority (ANTA) that curricula no longer exist under a training regime where training packages are the central organising framework (Smith 2001, p.238) is only true if one conceptualises curricula as standardised documents that teachers are expected to implement. More recent understandings of curricula, while still emphasising the notion of planned learning experiences, expand the concept to include all those experiences that arise from its implementation (Print 1993, p.9). In other words, the curriculum arises out of the interactions between learners, teachers and curriculum documents in a context where a range of factors shape what eventually emerges as the 'curriculum' at a particular point in time. Within the context of VET where training packages are used, curricula arise out of the interactions between the training package, learners and the teachers/trainers. This can occur in a variety of contexts, including workplaces, training rooms and educational institutions.

Training packages are important as they provide 'information that informs the content of vocational education and training programs' (Chappell et al. 2003, pp.19–20). In this way they play a central role in shaping the curriculum as it might be intended, particularly in relation to the content of programs. Recent critiques of the implicit pedagogical assumptions contained in training packages 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.20–1). However, decisions relating to teaching and learning are largely left in the hands of teachers and trainers (with input from employers and learners). The realised (or delivered) and received curricula arise out of the interactions between learners, teachers and trainers in a specific context.

Increasingly, learning is being 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 et al. 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 facilitated by attention to the ways in which the structure and process of work is managed, and the ways in which workplace relationships and culture are attended to (Harris, Simons & Bone 2000). The facilitation of learning is no longer the sole providence of designated trainers or teachers. Learners are also often 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. While key competencies have been incorporated into training packages, employers are increasingly stating a preference for the attainment of generic or employability skills as well as occupation-specific skills (see for example, Australian Chamber of Commerce and Industry & Business Council of Australia 2002). Teaching and learning that fosters the development of these attributes necessarily takes on a different character to those approaches, for example, focusing only on the development of technical skills.

These shifts in thinking about teaching and learning in VET have been emphasised in other recent research. A scoping study examining the practices associated with the implementation of training packages (Centre for Undertaking Research in Vocational Education & University of Ballarat 2003) found that quality VET teaching and learning practices exhibit particular characteristics. Firstly, they display a learner-centred approach with the teacher/trainer acting as a facilitator. Secondly, they 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, they have an emphasis on flexibility and innovation which enables the development of learning strategies characterised by customisation and a holistic understanding of the learning and assessment processes (Centre for Undertaking Research in Vocational Education & University of Ballarat 2003, p.50). Arguably, these ideas point to the emergence of distinct ideas about what is required if VET is to deliver its promised outcomes in terms of a high-quality workforce. Implications for how we understand the role and function of VET teachers and trainers flow from this development.

It is the choices made by people engaged in the delivery and assessment of the Certificate IV in Assessment and Workplace Training that more fully reveal understandings related to learners and learning and are subsequently promulgated through the sector by graduates holding this qualification. The issue of relevance particularly to this research study is the extent to which the curricula (the delivery and assessment strategies) devised from the Training and Assessment Training Package are able to convey the emerging understandings of what is required of people engaged in supporting learning within the VET sector and hence to promote high-quality teaching and learning in VET to those most intimately concerned with this outcome; namely, the teachers and trainers.

A full literature review is presented in the support document that accompanies this report.

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.

Data were collected using a case study approach across 16 sites. The sites included public and private training providers as well as 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 in higher education institutions (one in each of New South Wales, Victoria and an Australian Territory). A total of 18 interviews were conducted with teachers and trainers who deliver the certificate IV course and 27 interviews were conducted with graduates.

People delivering the certificate IV (teachers and trainers)

The people 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 postgraduate qualifications in education. Over half of the group held secondary teaching qualifications and/or specific qualifications in adult and vocational education. Three participants were currently undertaking studies at master's level and another person was undertaking certificate-level studies in online 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 had 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 relevance. Just under one-quarter of graduates (six in total) were currently employed in public VET 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, various roles in the health sector and as business owners. Just over 40% of the certificate IV graduates held graduate and postgraduate-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 are not able to be generalised to all registered training organisations offering the certificate IV qualification. However, generalisability can be gauged with respect to the use of a sample of registered training organisations diverse enough to allow assertions of broader applicability. While every effort was taken to ensure that respondents were encouraged to express their views openly and frankly about the certificate IV programs in which they were participants, the absence of observation of the actual programs necessarily limited verification of the findings.

A full description of the research design and method can be found in the support document that accompanies this report.

Competency standards and qualifications for VET teachers and trainers—the intended curriculum

In this chapter a discussion of the intended curriculum, as it has evolved and has been represented in the competency standards contained in the training package (BSZ98) is presented.

Competency standards and qualifications for VET teachers and trainers

As part of training reforms, policy-makers were keen to ensure that learners within workplaces would have access to support from suitably qualified trainers. One of the first set of competency standards to be developed was for workplace trainers. These initial standards were designed to address the work functions of two different groups of workplace trainers—people providing training as part of their broader work role and people for whom training is the major or sole focus of their work role (Workplace Trainers Ltd 1992 cited in National Assessors and Workplace Trainers 2001, p.23; CSB Endorsement submission to the National Training Board 1992 cited in National Assessors and Workplace Trainers 2001, p.23). Standards for the first group were designated 'Category 1' standards and 'Category 2' standards for the second group. The standards included seven units of competency and encompassed: identifying needs for training; designing and developing training; organising training resources; delivering and evaluating training; assessing training; promoting and managing training (National Assessors and Workplace Trainers 2001, p.23). Units of competency for the 'Category 2' trainers were distinguished by more elements of competency and different performance criteria across the 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' (National Assessors and Workplace Trainers Body 1993, cited in National Assessors and Workplace Trainers 2001, p.24). They consisted of three units of competency: 'plan assessment, carry out assessment and record assessment results and review the procedure' (National Assessors and Workplace Trainers 2001, p.24).

The workplace trainer and assessor standards were revised in 1994 and 1995 respectively with the outcome such that two 'categories' of trainer were maintained, but greater distinction between the two roles was provided. 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 'learn' or 'learning' only appears four times in these standards—once in the unit focusing on reviewing training and three times in the unit on delivering training (Competency Standards Board-Assessors and Workplace Trainers 1994, p.4). The overwhelming emphasis was on training. Trainee characteristics are acknowledged as a key factor for consideration when selecting training methods (Competency Standards Board-Assessors and Workplace Trainers 1994, p.2–4). The absence of any range of variables statements and evidence guides (usual for these early competency standards) 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' (Competency Standards Board-Assessors and Workplace Trainers 1994, p.4). Emphasis is placed on learning by doing with a focus 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' (Competency Standards Board-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, those in this group place greater attention (by using frequent references) to the importance of paying attention to barriers to learning and characteristics of learners (Competency Standards Board-Assessors and Workplace Trainers 1994, p.10). The use of learning outcomes (in keeping with the national framework where national curricula were in use at that time) and emphasis on a variety of learning processes (teacher-directed, individual and group-based) are singled out for particular attention (Competency Standards Board-Assessors and Workplace Trainers 1994, pp.14–15). This suggests that these units of competency recognised that learning could 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. The two categories of workplace trainer were replaced with two designated qualifications—a certificate IV and a diploma (National Assessors and Workplace Trainers 2001, p.26).

The certificate IV (from the BSZ98 Training Package) was the product of combining and significant revision to the units of competency that previously comprised the Category 1 and Category 2 qualifications. These units of competency (in keeping with the then current ANTA requirements relating to the format of industry standards) included range of variable statements, expanded evidence guides and the Mayer key competencies. The certificate comprised eight units of competency. The content of the unit *Train small groups (BSZ404A)* was drawn from the Category 1 units of competency and continued to reflect a strong preoccupation with training as opposed to learning, with the term 'learning' still 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' (National Assessors and Workplace Trainers 1999, pp.53–4). The characteristics of 'training participants' were noted as a significant variable. 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' (National Assessors and Workplace Trainers 1999, p.55).

Other units related to planning and delivery of training, namely, *Plan and promote a training program* (BSZ405A)*, Plan a series of training sessions* (BSZ 406A) and *Deliver training sessions* (BSZ 407A) 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 (National Assessors and Workplace Trainers 2001, p.27), few direct references to the process of learning are evident in these units. A strong emphasis on training remained, along with a strong teacher/trainer-led focus on these activities. The various contexts in which training might take place and the importance of acknowledging various characteristics of participants (noted above) were also features of these units. However, the units of competency still appeared to reflect a 'skills deficit notion' of training which is more properly aligned with institutional training arrangements than any that might be found in a workplace. Harris, Simons and Bone (2000) noted in their review of the Training Package for Assessment and Workplace Training (BSZ 98) that the conceptualisation of the workplace trainer's role underpinning the unit *Train small groups (BSZ404A)* is one that places the trainer 'in control' of training. It is assumed that the learning that will result from the training is predictable, explicit and has outcomes that can be determined in advance. Learning is viewed as separated from the work environment, and competence is marked as an individual attribute which the individual 'acquires'.

The review of the training package (National Assessors and Workplace Trainers 2001) undertaken to develop the recently released Training and Assessment Training Package (TAA04) took up a number of issues relating to how learners and learning were depicted. 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); 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 the assessment and workplace training units of competency contained gaps in relation to adult learning principles/theory and reflective practice, amongst other issues (National Assessors and Workplace Trainers 2001, p.86). The resultant units of competency in the new training package represent a significant shift in thinking with the inclusion of a number of new units of competency, encompassing a wider range of work functions associated with the roles of workplace trainer and assessor.

The intended curriculum then for programs leading to the attainment of the Certificate IV in Assessment and Workplace Training were interpreted by teachers and trainers offering learning pathways to attain the certificate IV. How this occurred in the providers that were part of this study is examined in the next section of this report.

The certificate IV courses

The training providers had established their delivery of the certificate IV to meet the needs of a number of defined client groups. The enterprise-based private training organisations delivered the certificate IV only to their employees, while other private training providers delivered largely to clients outside their organisation, including individuals and a range of corporate clients. The public training providers offered the certificate IV to both internal (usually their teaching staff) and external clients (both individual and corporate clients).

Arrangements for the delivery of the certificate IV were varied across providers in the study. Most offered some form of face-to-face delivery, usually combined with workplace-based projects and assessment. Five providers (both public and private training organisations) used online approaches, either as the sole means of delivery or as an adjunct to their face-to-face provision. However, the amount of time devoted to face-to-face delivery varied widely in terms of the number of hours and the ways in which they were configured. Delivery arrangements used across a variety of registered training organisations (registered training organisations) included:

✧ five consecutive days of training delivery, followed by workplace-based projects (private, community-based registered training organisation)

✧ division of the eight units of competency into three 'groups' (plan and promote training, design training sessions, and review training; train small groups, deliver training; and the three assessment units) delivered over one semester using classroom-based delivery, workplace-based projects and reports (public registered training organisation)

✧ delivery of five 'learning and assessment programs' over a total of 12 days of off-job training (train small groups, three days; deliver training sessions, two days; plan and promote training and plan a series of training sessions, three days; plan, conduct and review assessment, three days; review training, one day (private, government registered training organisation)

✧ delivery of the program in three 'parts' (the assessment units, two days; train small groups, three days; with the remainder being offered through a combination of 'home study' and recognition of prior learning (public registered training organisation)

✧ a three-part program over ten days of: face-to-face delivery group learning, four days; workplace assessor, four days; and training administration, two days (private, community-based registered training organisation)

✧ ten days of face-to-face training over a period of five weeks (public registered training organisation)

◇ three hours per week for one year or seven hours per week for one semester (private, government registered training organisation)

◇ six, three-hour sessions over a five-month period with a project to be completed after each session (private, community-based registered training organisation)

◇ one week in classroom plus completion of a 30-hour workplace project (public registered training organisation)

◇ three months full-time or part-time equivalent using face-to-face and self-paced strategies (public registered training organisation)

◇ delivery and assessment of competency spread over 12 months as part of an integrated training strategy within an enterprise (private, enterprise-based registered training organisation).

All providers emphasised that, while the program content might be configured in a variety of ways, assessment of competency was always made against the eight units of competency in the training package. Assessment was conducted in either the workplace or simulated environments with learners submitting a range of evidence to demonstrate competency against the units of competency. Where the program was available online, assessment included requirements for students to submit videos of their performances and complete workplace-based projects.

Assessment-only pathways (that is, processes to recognise prior learning combined with some course work to meet identified gaps in knowledge and skills where needed) to obtain the certificate IV were only noted by five providers as an additional way in which the certificate IV qualification might be attained. In one instance a provider had developed an assessment-only pathway that included a compulsory two-and-and-a-half day 'assessment event' as face-to-face assessment was considered 'essential'. This event was either held at the provider's premises or assessors travelled to workplaces. The assessment process required each candidate to present a one-hour training session to others (there were no more than five participants) as well as a one-to-one interview with the assessor, where their portfolio was assessed along with their written answers to a series of questions relating to planning and promoting a training program and planning training sessions. One provider noted that approximately 20–30% of their students applied for recognition of prior learning as part of their enrolment in the certificate IV and that, while this was perhaps low, the relatively undemanding nature of the attendance requirements for the course (six three-hour sessions over a five-month period) may have contributed to this outcome. Two providers noted that recognition of prior learning for the assessment units was uncommon and, in one instance, only given if a candidate had completed a workplace assessor course. Another trainer noted that staff in their organisation often encouraged students to complete the assessment units rather than seek recognition of prior learning because they felt assessment was very specific to the sector and students needed to 'know the language that's required'. Conversely, it appeared that recognition of prior learning for the training units is perhaps more common.

Teachers and trainers listed a wide range of resources used to support learning in their courses including ANTA resources (the training package and its associated support materials) and customised workbooks developed by organisations for their learners. These workbooks included outlines of the units/modules, assessment plans and learning materials (readings, handouts). Three providers specifically mentioned the use of online resources including the company intranet. These resources were also supplemented by reference to particular texts (for example, *The adult learner* by Malcolm Knowles; *Training in Australia* by Michael Tovey) and a range of other journals on adult learning and training, ANTA newsletters and websites. Teachers and trainers also drew on their extensive experience across a range of contexts, including completed and continuing tertiary studies, their work facilitating learning in both institutional and workplace settings, prior and current work experience in industry and their experiences in facilitating and completing their own certificate IV courses.

The nature of learning to be promoted in VET

Teachers' and trainers' comments on the nature of learning to be promoted in the sector could be divided into two main categories: one group of comments related to the 'object' of vocational education and training; that is, what learning in the sector should be directed towards. The other group of comments related to the qualities that learning in the VET sector should display.

With few exceptions, trainers believed that the object of learning in the VET sector was the workplace. The workplace provided the rationale for what should be learnt and the organising framework around which learning events should be constructed (rather than 'traditional' discipline-based subject areas). The workplace was seen by a majority of teachers and trainers as providing the basis for assessing 'relevancy' of the learning promoted in the sector and that there needed to be a strong link between learning and people's work and the needs of the organisation.

Closely aligned with the proposition of the workplace as the principle organising framework for activity in the sector was the notion that training, rather than education, should be the primary concern of VET. In some instances, this was extended to assert that training, rather than learning, was the *sole* focus of activity in the sector. Several respondents made specific references to this emphasis on training and lamented this perceived 'limited' focus, with one trainer referring to this as 'minimalist and trivialised'; another suggested that this focus was a 'little bit narrow' and one other noted rather pragmatically, that the object of learning in VET is circumscribed by training packages. Only one trainer argued that the focus of learning in VET should be an 'educative process' and should be emancipatory in nature; that is, 'shifting people' and 'allowing the person to be the centre of the [learning] process'. Another teacher/trainer argued that, while the learning in VET was 'skills-based', it *should* also focus on generic skills and all the dimensions of competency, suggesting a broader remit than narrow skills training.

Positioning teachers and trainers in relation to the education versus training debate influenced their ideas on the place of theory in VET. One trainer suggested that learning in VET had a 'limited focus on theory', while several others suggested that, within VET, there were roughly two 'camps', divided roughly along public–enterprise-based provider lines, where the former group focused more (but not solely) on 'academic types of learning' which emphasised the 'underpinning knowledge, and then relating this back to the workplace'. The latter group, however, was more focused on 'what the organisation needs' and 'work-based' and 'work application' of learning. Arguably, these positions reflect a justification of established cultures within different types of training organisations, but nonetheless, have concomitant impacts on how learning is understood and supported.

The overwhelming descriptions of the learning process were related to the 'practical' and 'hands on' nature of learning in the sector. 'Learning by doing', the application of new information through participation where learners are 'active' was emphasised. There was a strong focus on a person-centred orientation to learning and the belief that this orientation acted to distinguish learning in this sector from other education sectors. Validating and formalising learners' existing knowledge and skills and drawing on and sharing personal experiences were central to learning. There were only a few references to the learning acting as a 'tailoring process', whereby individual learners' needs might be met. Two teachers/trainers lamented the lack of focus on literacy at the expense of learning processes more concerned with training and short-term 'project-type' learning.

With these perspectives in mind, we now turn attention to the delivered curriculum—that is, descriptions of the content and processes used by the teachers and trainers responsible for the delivery of certificate IV courses.

Teachers and trainers— the delivered curriculum

Perspectives on learning

Most teachers and trainers responsible for delivering certificate IV courses believed that their courses did not require any deeply detailed or theoretical explanations of learning, and most approached the topic of learning from a practical standpoint by focusing on how learning might be facilitated. Approximately one-third of teachers and trainers reported they did not overtly offer any explanations or definitions of learning to participants in their delivery of the certificate IV program. Rather the emphasis was on examining how people (and specifically adults) learn, the differences between adult and adolescent learners and, in some cases, related issues such as how long- and short-term memory works, how people process information, and topics such as multiple intelligences. Specific references were made by some teachers/trainers to theorists such as Malcolm Knowles, Carl Rogers and Abraham Maslow, but it appears that, in the majority of instances, these theorists have influenced the thinking and actions of the teachers and trainers rather than forming a part of the content of the certificate IV courses. Only a few reported that they actually spoke about these theorists with their certificate IV participants.

Those teachers and trainers who did offer some theoretical perspectives on learning did so in a number of different ways. In one instance (where the certificate IV was being delivered in a community-based setting), participants were required to read extracts from several learning theorists (including Malcolm Knowles), select one theory and then relate it to their own experiences of learning and training. This approach was justified by reference to the importance of getting 'this underpinning knowledge through to them …'. In a subsequent session participants then discussed the findings of their readings and it was hoped that, by listening to someone who was enthusiastic about a different theory, they would learn more. Another trainer (also a community-based setting) described how, throughout the course, he constantly challenges participants to define the learning process. The book *The adult learner* by Malcolm Knowles was used to provide 'theoretical understandings of adult learning principles'. This trainer emphasised the notion that learning is a process and it is important for participants to be able to articulate how *they* best learn.

A small number of teachers and trainers claimed that the nature of the certificate IV qualification, with its foundations in a competency-based framework for vocational education and training and its emphasis on contributing to building human capital, necessarily precluded expansive notions of learning. One teacher/trainer believed that the focus of the certificate IV was the delivery of effective training rather than examining specific theories of learning. For this teacher/trainer, activities focused predominately on using demonstrations to teach specific skills and encouraging certificate IV participants to be able to 'offer a training program that will inspire learners'. This teacher/trainer likened learning in the certificate IV to 'tradesman-like training' that enables people to 'get out there and show people how to do it' rather 'teaching them … learning theories'. Two other teachers/trainers echoed these sentiments, emphasising the role that the certificate IV plays in focusing on the skill requirements of organisations, and its contribution to enabling organisations to successfully and effectively 'do their business' and develop the skills and talents of their workforce. Learning in this instance was focused on 'increasing skills and knowledge in a specific task'. This latter understanding of learning, although not totally absent from all training providers, was more prevalent in organisations that were primarily focused on training employees internally for their own organisation.

Where definitions of learning were offered, they fell into roughly into three groups. One group reported a range of ways they used to describe key features of learning. Learning was described as a 'supported process', adult-centred, interactive and based on the experience of learners. These notions carried with them strongly humanistic orientations to learning. A second group reflected a strong behaviourist understanding of learning, with a significant emphasis on 'change in behaviour', meeting defined needs and being able to ascertain some measure of the behavioural change as a result of learning. This focus was justified by trainers who pointed to the competency-based nature of the training system and the link between learning in vocational education and training and the focus on meeting workplace skill needs. Finally, a few teachers/trainers chose to emphasise cognitive/constructivist notions of learning in their certificate IV courses but these were clearly in the minority. Several teachers/trainers alluded to the 'basic' or 'simplistic' notions of learning conveyed in their programs but often in tandem with further comments, suggesting that the certificate IV was not an appropriate vehicle for in-depth exploration of theoretical perspectives on learning.

Teachers and trainers reported that, in addition to explaining and discussing ideas about learning, the most prevalent illustrations of the nature of learning were embedded in the ways in which they actually delivered their courses. This demonstration or modelling of the learning *process* was particularly reinforced in content that addressed issues such as the nature of adult learners and their various characteristics. While observation of the teachers and trainers delivering the certificate IV was not possible for this study, a strong emphasis on teacher-*led* learning was evident in the interviews. Teachers/trainers spoke about the responsibility they carried for modelling the ways in which their interaction typified the learning process and its key features. In the interviews there was almost unanimous agreement that the nature of learning was explored through discussion and sharing of experiences with, in the words of one teacher, 'liberal' input from himself.

Another explanation frequently offered related to the interactive and experiential nature of learning and the adult status of learners found in VET. Here emphasis was placed on learners interacting with one another as well as with the trainer. Learning was described as active and oriented towards participants 'tapping' into their experiences and sharing these with the group in order to develop new insights and perspectives. The interactive nature of learning was considered by one teacher/ trainer to be an essential part of ensuring that the learning was retained. The interactive and experiential nature of learning was also considered to be a hallmark of adult learning which was clearly quite distinguishable from other forms of learning—most specifically, in one instance, to the learning undertaken by adolescents. These ideas were also actively modelled by teachers and trainers in their interactions with the certificate IV participants. One teacher described the class (that is, the certificate IV course) as a 'living case study' where the participants are constantly urged to look at the process as well as the content of the course in order to gain insights into the nature of learning. The use of group work, discussions, stories from their own practice, analyses of examples of workplace-based training, and participant presentations were some of the strategies used to promote this particular view of learning. Reflecting on past experiences, the use of questioning and modelling different training techniques were also used to drive home key messages relating to the adult-focused, hands-on nature of learning. Descriptions were also sprinkled with constant references to the classroom-based learning, which seemed to conflate lecture-based delivery with the classroom and its limited applicability in VET settings. This observation was perhaps a little ironic, since all certificate IV programs appeared to be delivered in classroom settings where teacher-centred input was clearly apparent alongside a wide range of other teaching strategies.

It was also ironic in the sense that, while a number of certificate IV participants were likely to facilitate learning in classroom environments, some clearly were not. While participants were urged to contextualise general principles about learning to their own workplaces, this appeared problematic in the absence of any specific ideas on how to think about learning that is embedded in work might differ from understandings of learning that are largely drawn from experiences in classroom settings. This situation may have been mediated for some participants, particularly those who were required to undertake workplace-based projects as part of their learning. However, the

apparently uncritical absorption of ideas about learning which have their basis in classroom settings would appear at face value to be problematic. It is perhaps further troubling when considered alongside the very strong focus on learner needs and characteristics (see later sections on perceptions of learners) and the relationship between the trainer and the learners which is assumed to be of greater influence on learning than any particular type of learning environment.

However, in some instances this was not an issue, since the graduates of the certificate IV course were expected to work largely within the enterprise environment, and the experience offered in the certificate IV program strongly reflected this outcome. One trainer noted that, while aware of adult learning theory, he believed that for training to be effective, it must be relevant. In his context then, the certificate IV represented the 'means to an end' and was not particularly concerned with notions of learning (which 'occurs every day in all situations'), but rather as part of a business development approach to embed learning and development into the functions of all workers. In this context, learning took on a very different connotation. The approach to delivering the certificate IV appears to have been contextualised to deliver the outcomes desired by the enterprise. This focus was apparent, to varying extents, within other enterprise-based providers of the certificate IV course.

For some other teachers and trainers the process of contextualisation focused more exclusively on formalised settings where concepts such as understanding learning through the application of learning styles was arguably more relevant (for example, where they were preparing teachers and trainers employed in a TAFE institute). Forty per cent (seven teachers/trainers) made specific reference to both the workplace and the classroom in their responses. However, they then went on to deal with the issue of learning in general terms of managing the requirements of the learning environment rather than making references to explanations of learning that might be specific to one context or the other.

Perspectives on learners

Trainers and teachers delivering the certificate IV courses predominantly used two frameworks for presenting discussions about learners to their course participants. Learning styles were the most frequently adopted framework and were used by almost all teachers and trainers in the study. There was evidence of strong calls for the need for these different learning preferences to be accommodated in training. The terms 'learning styles' and 'preferences' were often used interchangeably in describing this characteristic of learners; only one respondent made reference to cognitive styles rather than learning styles.

The second organising framework for understanding learners centred on the notion that learners in VET were 'adult' and this status carried with it a range of assumptions about their motivations, needs and expectations in relation to learning and how it might be best organised. Adults were presented as learners who like to learn in different ways; wanted to have a choice of delivery modes; liked to know why they need to learn; wanted to apply what they have learned; allocated time and wanted to be productive; wanted value for money; are usually self-motivated and able to take responsibility for their own learning and want to be active in the learning process. In many respects these attributes present an idealised perspective of adult learners which borders on the stereotypical. There were some caveats to these descriptions acknowledging the complex and diverse nature of learners that might be expected to participate in VET. There were only two explicit references to learner characteristics such as gender, race, religion, sexuality and cultural heritage. It is possible that a wider range of learner characteristics might have been addressed under a descriptor of learners as coming from 'different backgrounds' or bringing 'baggage' with them into the learning environment, but in the absence of any direct observation of courses, this cannot be stated with any certainty. Alongside this strong emphasis on the adult nature of learners was the subtext that learners were not adolescents or children, although there were largely no significant and substantiated explanations of these differences, beyond references to 'adult learning principles'.

Two other themes emerged from the analyses of teachers' and trainers' descriptions of the ways in which learners are presented in certificate IV courses. These were not as widespread amongst the group, but nonetheless represent significant sub-themes to those discussed above. The first of these themes focused on learners as people with 'needs' which must be addressed in the learning process. While these needs were not normally defined with any precision, there were some references to the fact that these needs could relate to personal or workplace imperatives, or to those arising from particular characteristics of the learning environment.

The second theme related to the importance of the knowledge, skills and experiences that learners might bring with them to the learning process. These were acknowledged to be important, assumed mostly to have a positive influence on the learning process and to provide the basis and reference point for any subsequent learning. In circumstances where particular background characteristics might 'get in the way' of learning, the directive remained that these characteristics needed to be 'discussed' or 'accommodated'. In all discussions of learners in VET there was a strong implicit (and sometimes explicit) assumption that it is the sole responsibility of the teacher or trainer (in this case, the graduates from the certificate IV courses) to accommodate learner differences.

Perspectives on the types of environments that support learning

Discussion about learning environments emphasised the diversity of environments in which the certificate IV graduates might be expected to work. Some of the discussion was non-specific and generally geared towards raising awareness of a range of factors that might impact on learning. Factors were generally of two types—those related to managing the physical environment and those related to providing support for learners. Features and barriers to learning in the physical environment appeared to be addressed in most courses. Biographical, psychological and attitudinal barriers to learning appeared to be addressed with much less frequency. While most trainers and teachers raised the importance of providing support for learners as part of creating conducive learning environments, a reference to discussing the provision of support for learners with particular literacy needs and disabilities was only made by one teacher/trainer in the sample.

A significant number of teachers/trainers made reference to both classroom and workplace learning environments. The limitations of both environments were addressed, but particular attention was paid to the workplace. Teachers/trainers working in enterprise contexts placed emphasis on situations where training and work were likely be to occurring simultaneously, situations which called for flexibility and the involvement of management in negotiating time and resources for training. One trainer particularly noted the importance of acknowledging the limitations of the workplace, where opportunities for practice are limited as there is a 'need to produce product quickly'.

Perspectives on how to support learning

Teachers and trainers offered a range of information about strategies to support learning. There was mention of the use of a wide range of teaching strategies, the facilitating of a range of activities which focused on illustrating key points about learning, learners and assessment (for example, asking certificate IV participants to assess their own learning styles and then applying this information to simulated activities and discussions), and modelling good practice in supporting learning.

Across all teachers and trainers there was widespread use of information on learning styles, coupled with activities to reinforce the message that the certificate IV graduates would need to have the capacity to address a variety of individual learning styles/needs in their teaching and training. There was a strong emphasis across all the case study sites on the need for the certificate IV graduates to be flexible and adaptable, but this requirement seemed to be expressed in largely normative terms,

with little consideration given to any instances where learning styles may not be the most useful basis for decisions relating to the ways in which teaching and training might be organised (for example, in cross-cultural settings). The content on learning styles was usually linked to information and activities which reinforced the relationship between learning styles and the wide range of teaching/training strategies that would be needed if the certificate IV graduates were to successfully engage with diverse groups of learners.

Beyond this universal focus on learning styles, most teachers and trainers provided information about the value of activity in the learning process, using demonstrations as well as their own modelling of various teaching/training techniques and strategies to reinforce this message. Surprisingly, there were very few direct references to providing instruction on specific teaching techniques, such as small group activities, discussions and enhancing the involvement of learners. Rather, the case studies seem to convey a significant focus on 'talking about' and 'discussing' strategies.

The use of modelling was reported as a strong feature in many certificate IV programs, including the use of 'negative' role modelling where what *not* to do was displayed for participants to witness and experience. This modelling was particularly important in carrying the message that the learning process needed to be active, and that interaction between the teacher/trainer and learners was an important feature of a supportive learning environment. Consideration of the question 'what is it like to be a learner?' was also a strong theme across courses, carrying with it the underlying assumption that building empathy with learners' experiences is a key part of strategies to successfully support learning. This was sometimes coupled with activities where participants in the certificate IV courses considered how people might learn in their own contexts.

A small number of teachers and trainers offered the view that personal interaction, the ability to give clear instructions, modelling how to give feedback to reinforce learning and the use of appropriate and clear language played important roles in supporting learning. Attention to planning and the provision of clear information were also mentioned by a small minority of teachers/trainers.

Along with the strong learner-focused and activity-based approaches to learning, a small number of teachers and trainers offered some alternative perspectives they believed were crucial if learning were to be supported effectively. One trainer (in a community-based organisation which delivered the certificate IV to a very large internal training program) placed strong emphasis on promoting the notion of learning from one another, largely drawing his ideas from discourses associated with communities of practice. Within these communities of practice, support for learning was given through attention to effective communication and 'showing people how to perform and tasks' and 'allowing learners to physically do it'.

A number of references to the vagaries of supporting learning in the workplace were also scattered throughout some teachers' and trainers' reports. One trainer, from an enterprise-based provider best sums up the wisdom of experience that was passed on about this issue to certificate IV participants:

> A learner is everyone … it is important to teach that each person in the [enterprise] has a role to play in the success of the business … There are going to be different characteristics of learners depending on individual motivations, skill levels … most of the training is on the job so [trainers] would have to use some of their own guidance and intuition and respond to the way that someone is learning … what we are doing is building … awareness of different learning styles and then they are to sort of try some of those strategies and gauge the response of the learner as to how they will proceed …

Perspectives on links between learning and assessment

A range of views about the ways in which learning and assessment are linked was offered by teachers and trainers. There was almost unanimous affirmation of the inextricable link between learning and assessment and the value of formative assessment to the learning process. A number of teachers and trainers highlighted the role that assessment plays in providing opportunities for

feedback to learners. Several stressed the details they provide about assessment in their programs and how they linked assessment 'right through the course' where learning outcomes/competencies were stated at the beginning of sessions/courses, with assessment talking place at the end of each session/course. Assessment was labelled by one respondent as 'show time'. Several respondents highlighted the importance of assessment as the means by which learners can 'demonstrate what they can do' and 'what they can understand'. One respondent did stress the need to ensure that people were *competent* (that is, they could apply knowledge, skills and attributes), rather than having merely 'learned' what was required.

Two teachers/trainers made specific reference to the importance of respecting the wishes of learners who did not want to be assessed, the value of informal and formative assessment, and the importance of carefully explaining why learning in groups was promoted, but that assessment was always individually focused. They also emphasised linking assessment to standard operating procedures in workplaces (contextualising assessment) and the application of various strategies with learners to assess their understanding of concepts and underpinning knowledge. This perspective was confirmed by other enterprise-based teachers/trainers who noted the cost to the enterprise if mistakes were made in assessment, the importance of underpinning knowledge as a key to transferring learning to worksites, and the importance of timely and effective feedback as part of this process.

Key ideas on learners and learning that teachers and trainers hope will be taken from their courses

Teachers and trainers delivering the certificate IV courses held high aspirations for the graduates from their courses. These hoped-for outcomes largely focused on two key themes. The first of these related to the quality of their work as teachers and trainers. Not surprisingly, the outcome most hoped for was related to graduates' ability to consciously consider, analyse and provide for the different learning styles of the people they encountered. Allied to this outcome was the hope that graduates would be able to 'cater for learners' needs'; 'value and incorporate learners' experience into training'; be able to 'create interactive learning environments' and to generally be supportive of learners. The importance of being flexible was also mentioned. There were several instances where teachers and trainers expressed the hope that graduates would embrace broader notions of learning beyond a 'narrow, mechanistic level' and accept 'teaching not just training'. Put another way, there was the hope that graduates would view themselves as 'information providers', but not to the point of overloading their learners. As one teacher/trainer stated '[graduates] don't need to tell learners everything—[they need to] train learners to find out for themselves'. A small minority of teachers and trainers made reference to specific technical outcomes they hoped their graduates would achieve, including:

✧ the ability to promote 'hands on learning' (believed to be important because of the competency-based nature of the training system and its alignment with the workplace)

✧ the attainment of a good understanding of competencies and the contexts in which the graduates will offer training

✧ the ability to use adult learning principles, plan sessions and use strategies to effectively organise content for their training

✧ the ability to teach skills 'correctly'.

The second group of desired outcomes that certificate IV graduates might achieve related to their ability to support the broader goals of VET policy by promoting understandings of learning and its benefits in their workplaces. At a basic level, it was hoped that the certificate IV graduates would see themselves as learners and understand what it is like to be a learner (based on their experience of completing their certificate IV qualification). It was hoped they might learn from the people they train and thereby encourage a culture of learning in their workplaces. It was also suggested by one

respondent that certificate IV graduates had a role to play in promoting learning to industry, while another suggested that they should play a role in mentoring and supporting others who complete the certificate IV qualification.

Perspectives on the efficacy of the certificate IV—addressing issues related to learners and learning and wider concerns

The general perspective offered by teachers and trainers responsible for the delivery of the Certificate IV in Assessment and Workplace Training is that the current certificate represents an uneasy compromise on a range of issues including:

✧ reconciling the needs of those responsible for training in workplace with those not in workplace settings

✧ addressing the tension between different perspectives on learning (narrow, behaviouristic notions versus more expansive, humanistic and liberal views)

✧ considering the breadth and depth of knowledge needed in order to effectively perform the role of workplace trainer and assessor.

Comments on these issues suggested that those teachers and trainers offering the certificate IV in enterprises do not believe that the current configuration of units of competency meets their needs. One teacher/trainer believed that the certificate IV is about 'ideal material in an ideal world' which is far removed from the sort of training that takes place in enterprises where it is usually 'grabbed between quiet times'. Another trainer, operating in a large national enterprise, suggested that the current certificate IV had been significantly customised to meet the needs of the enterprise so that it had become integrated into the business systems and processes of the company and able to meet needs particularly related to the 'practical aspects of learning on the job'. This trainer argued that training needs to be seen in the context of 'job requirements and demands' and that there is a legislative imperative to ensure that people are competent. In the opinion of this trainer this is best achieved by graduates from the certificate IV being able to train and mentor on a one-to-one basis in the workplace. For this enterprise:

> We don't view a certificate IV as being a training qualification; it's much more around a business development approach to training and assistance. So getting a certificate IV in Assessment and Workplace Training is much more that simply meeting the national competencies … it's about how we do business, how we do training, how things happen here and how if you want your certificate IV you need to line up against *those* national standards [emphasis added].

Some respondents were quite adamant that the certificate IV was only useful for preparing workplace trainers and assessors for workplace settings and that they could not work in other settings; others did not make this distinction at all. While only one teacher/trainer couched these debates in terms of the traditional 'education versus training' dichotomy, it is clear that these tensions have not disappeared, and there still remains some misunderstanding and arguably snobbery, attached to the status of the certificate IV when examined alongside other tertiary qualifications that might be held by teachers and trainers. These tensions appear to lead to debates about the perceived increased 'academic' nature of the new certificate IV qualifications and the implications this might hold for those, particularly in industry, wishing to initially undertake the qualification or seek an upgrade from the existing certificate IV.

A related issue raised by one trainer emphasised problems with current delivery options which enabled learners to gain the certificate IV in as little as five days. He argued that the certificate IV 'is supposed to be at least trade-equivalent people'—which he equated to three or four years of training. He attributed this problem to a number of factors, including the interpretation of the units of competency and the quality of these units, believing they are 'quite ordinary'.

The current configuration of the certificate IV was generally considered to place limitations on the amount of time that could be devoted to *any* issues relating to assessment and workplace training. While some teachers and trainers argued that more time was warranted, others adopted a more pragmatic stance, suggesting that more 'theoretical' perspectives on learning were not needed and the course needed to conform with various constraints relating to delivery times, the time required to 'get qualified people', and what the learners in the courses themselves might be able to bear. One respondent very practically suggested that the issue of time was not likely to be resolved satisfactorily and it was perhaps best to 'cover the major concepts' and then 'rely on them [the participants] as adult learners to do their own research, reading and practice'. Other suggestions revolved around the need to support certificate IV graduates after the completion of their studies in order to ensure that they maintained their efforts to provide quality training rather than 'revert back to the old ways of training'. Concern was also raised about the efficacy of online delivery of the certificate IV qualification and the usefulness of this approach (particularly where there was little opportunity for interaction between learners).

The former observation relating to timeframes was a source of considerable concern for a number of teachers and trainers in the light of the considerably expanded certificate IV qualification being developed and approved during the course of this study. Strong views were expressed by a number of people that the new certificate IV, consisting of 14 units would be 'too much for industry people (those on 'the shop floor'), and that it was not going to meet the needs of a range of client groups other than those whose primary role is to provide training and assessment. One trainer voiced her concerns in this manner:

> I voiced my concerns at the very start … I went to a meeting about it and I was basically laughed at. A couple of people came up to me from the […] sector and said, 'I agree with you. It's going too academic'. I don't think the […] community will wear it.

Graduates from certificate IV courses—the received curriculum

The nature of learning to be promoted in VET

Graduates from the certificate IV courses found it difficult to articulate their ideas on the nature of the learning valued and promoted in the VET sector. They tended to emphasise the outcomes or products that are expected to accrue to learners. Most placed at least some emphasis on learning in the VET sector being valued for its association with preparation for work, equipping people to be 'work ready' and providing 'useful' information. Only two graduates alluded to an alternative agenda related to learning 'skills for life' and training in 'real life skills'. While the language of 'skills' was somewhat less predominant in graduates' ideas about learning, the 'practical focus' of learning was evident. The link between learning in the VET sector and 'practical training', 'achieving competency in a practical way' and recognition by awarding qualifications were mentioned by three graduates. Learning that was valued in the VET sector was also viewed as 'hands on', placing greater value on the 'manual role rather than a mind role' and 'not about theory, but being about 'something that can be used in the workplace'.

Learner-centredness was a strong theme in graduates' responses. Learning was described in terms of valuing the prior experience of the learner. Learning was viewed as an 'an interactive' process where people bring their experience and history and learn through discussion and sharing ideas rather than their 'com[ing] in and giv[ing] it to them'. A significant number of graduates echoed this strong experiential focus, couching this view in terms of providing opportunities for people to 'improve their skills' and to building on prior learning in order to 'achieve competency'. One graduate offered the opinion that learning in the VET sector is non-threatening' and 'does not have very high expectations of the individual'—largely because of the competency-based nature of assessment.

Another group of graduates offered a range of views on learning in the VET sector that emphasised learning as a transmission process that focused on 'readiness for the workplace'. This form of learning was 'not about theory', describing the process as 'show how and you follow'. Another graduate echoed these sentiments by describing learning as 'follow, look, see and listen', while others described learning in the VET sector as 'learning from others [who] are more experienced' and 'imparting knowledge'.

Perspectives on learning

One-quarter of all certificate IV graduates reported that they did not remember any specific discussions about learning during their courses; this was particularly the case in relation to recalling definitions of learning. Approximately one-quarter of graduates suggested that learning was not really the focus of the course they had completed. Rather, they thought the course examined what people should do when training someone, provided opportunities to elaborate on techniques for training and how to support learning, and knowing what to do about this in the context of their organisation. This emphasis on 'what to do in the organisation' was particularly prevalent with graduates from enterprise-based certificate IV courses, where graduates were expected to train staff within the enterprise and often in on-job situations.

Other graduates suggested that the course focused more exclusively on providing opportunities to learn about adult learning principles and how 'you have to adjust methods … [which] is dependent on individuals and how they learn' or that learning was about 'discussion and sharing experiences', as this interaction was the means by which existing knowledge and skills might be revealed and 'incorporated into new knowledge and skills'. Another graduate suggested that learning was about 'developing an awareness of what is involved in helping people to learn—as it was modelled in the activities of the trainer [who led the certificate IV course]'. From this experience, the graduate believed there was no single idea of learning promoted in the course; rather, learning is about 'coming to understand why you are doing something … so it could be transferred to new situations'.

Just under one-third of certificate IV graduates suggested that, in their course, learning was defined in ways that reflected learning as the gaining of knowledge, understanding and skills. Terms such as 'absorbing', 'gathering', 'taking' and 'remembering' were used to describe this product orientation to learning. There were strong overtones of learning as 'stacking up' and that this outcome could be achieved from others or through interaction with others. 'Reorganising' what people already knew and 'giving them credit' further reflected this orientation to learning.

Allied to this perspective on the outcomes of learning was a focus on learning as 'useful' knowledge and/or skills and the link between usefulness and what might be applied in the workplace. For example, one graduate referred to learning as a way of being able to 'use' knowledge or skills that were previously 'foreign', while another emphasised the application of something that was 'useful to the workplace'. A third graduate emphasised the importance of being able to draw on 'own [that is the learner's] knowledge, skills and experience, bring them together and apply that to the workplace'.

Approximately ten per cent of graduates offered perspectives on learning that reflected more of a process orientation to learning. One respondent, for example, described learning as a two-way process where people are exposed to new concepts and then they take these and apply them concepts in the workplace by 'pulling them together'. This perspective, however, was offered only in a small number of cases.

Understandings of learning were often embellished with references to particular qualities or attributes of the learners; for example, references to the importance of learning styles, the adult nature of learners and the importance of using and acknowledging life experience in learning. Only one graduate made reference to broader issues, such as a preference for promoting education rather than training and learning, therefore being more focused on 'empowering people to get more out of their lives'.

Perspectives on learners

The word that was most often used by graduates in speaking about learners was that they were 'different'. In fact, one could be excused for thinking that there was little capacity for identifying any shared characteristics amongst the learners they might potentially work with. Dealing with difference appeared to be promoted as one of the key defining features of their work as teachers and trainers. Two overarching themes emerged from a detailed analysis of graduates' responses to questions examining what they had learned about learners from their certificate IV courses.

The first of these themes related to the notion that learners come to courses as people with some form of 'need' or deficit in terms of the knowledge, skills or information required to enable them to perform their work role. There was a strong notion that learning played a role in filling these identified gaps or needs. Needs could also relate to particular personal attributes to be taken into account if the learning process were to be successful; for example, motivation, 'special needs' such as language and literacy, and a range of background characteristics. It is interesting to note that issues related to language and literacy abilities were raised more frequently by graduates than by teachers and trainers delivering the certificate IV courses.

The second major theme in graduates' responses was an overwhelming emphasis on different 'types' of learners, and the different learning styles that could be attributed to learners. This theme reflected the strong emphasis noted in the content of certificate IV courses. A number of graduates spoke enthusiastically about the impact of learning about their *own* learning styles and then extrapolating from this experience to consider the groups of learners with whom they might work. A related theme examined the notion that learners will bring a wide range or differing levels of knowledge and skills with them and the implications these might have for learning.

A third less prevalent theme was the notion that learners were 'adult' or 'mature'. This stands in contrast to teachers' and trainers' perceptions of the delivered curricula which appeared to emphasise this learner characteristic to a much greater extent. A range of learner characteristics, such as learner motivation, gender, culture, ethnicity and religion was mentioned by only a minority of graduates.

Perspectives on the types of environments that support learning

Graduates were able to identify a number of physical and psychological features of effective learning environments. Physical features included references to good lighting, the availability of facilities, correct temperature and comfort. The psychological features of supportive learning environments were emphasised more by graduates and included features such as an environment that 'feels comfortable' and where learners are respected and feel able to give their opinions without being criticised. The ability to ask questions, where learners feel relaxed and at ease were notable features.

A small number of graduates referred to supportive environments as being realistic and fit for purpose; that is, able to accommodate both the theory and the practical aspects of learning. Graduates based in one enterprise noted some quite unique features that were important, if a supportive learning environment were to be achieved. The learning environment needed to be 'cost effective' and one that was consistent with the overall strategic directions of the enterprise—in this instance, this means a learning environment where one-to-one support in the form of mentoring is available. Supportive learning environments allowed learners to work on 'real life projects' that were of benefit to the organisation and supported learning from mistakes.

Perspectives on the links between learning and assessment

Few graduates provided responses to prompts relating to questions about the links between learning and assessment. Two graduates acknowledged that learning and assessment were processes that could be linked—where learning can occur *from* assessment and where learning can occur in parallel with processes which are focused on assessing competence.

Learning and assessment were most often linked in a 'means–ends' view of learning and assessment. Assessment provided a way of showing that learning (the product) had occurred because competence could be demonstrated. An alternative view was put by another graduate who described the way in which assessment is linked to the competencies in the training package and that the content of the training package therefore directed what needed to be learned and ultimately how the assessment should be conducted.

'Take home' messages about learners and learning

A diversity of responses was received from questions exploring the main outcomes for graduates in relation to their understandings of learners and learning as a result of their certificate IV courses.

Five graduates believed that there were no significant *new* outcomes for them. Rather the course served to reinforce what they already knew.

For a majority of graduates, the key messages about learners and learning taken from their certificate IV courses clustered around four themes:

✧ the importance of acknowledging and dealing with student/learner diversity and learner 'needs'

✧ awareness of a variety of strategies that could be used to cater for different learner needs, characteristics and the importance of 'teaching to' learner needs

✧ the importance of planning and structuring training (for example, following the 'introduction-content-conclusion' formula, 'chunking' learning, being clear and concise, gaining feedback, giving instructions etc.)

✧ awareness of different learning styles and the importance of teaching/training in ways that suit and accommodate these different learning styles.

Three graduates referred to learning and the importance of interaction between learners and the teacher/trainer. A further two graduates explained that their key learning revolved around understanding adult learning principles and increasing their knowledge and awareness of the adult status of the learners they will be working with, and all the implications that this characteristic holds for them as teachers/trainers.

Generally, graduates stated that the learning from their courses had reinforced the importance of accommodation, and acknowledgement of and the need for a general awareness of various learner characteristics. The term 'catering' in relation to differences was often used in a non-specific way to capture the intent of these actions, alongside the notion that the courses had 'raised awareness' of the diversity of learners whom graduates might encounter. Graduates had clearly absorbed this message and repeated exhortations to 'respect differences', 'respond and acknowledge differences' and the 'need to [for learners] to feel valued and made to feel part of the group'. A number of graduates recalled that matching teaching styles with learning styles was suggested as a strategy to assist in accommodating the different needs of learners.

Other messages that graduates took away (to varying degrees) included the importance of:

✧ flexibility on the part of the teacher/trainer

✧ good relationships with learners

✧ the difference between the concepts of underpinning knowledge and skills

✧ familiarity with units of competency

✧ interaction between teachers/trainers and learners.

For one graduate, the most significant message of the course was an increase in confidence, and also the realisation that they were equipped with the knowledge and skills to be able to train others.

Perspectives on the efficacy of the certificate IV courses completed

The overall response of graduates to the certificate IV courses they had undertaken was very favourable, with most speaking enthusiastically about the learning as a result of their experiences. Some however, could not attribute their understandings of learners and learning solely to their certificate IV courses and were quite straightforward in declaring this to be so. In addition, between one-quarter and one-third of graduates struggled during the interviews to clearly articulate their learning about learners and learning from their courses. While there could be a number of reasons for this (for example, the length of time between the interviews and when they had completed their courses), it nonetheless does give some basis for concern. This is particularly worrying in the

context of responses from others who were able to provide a good perspective on their understanding of these issues.

For some graduates the certificate IV course had made a significant contribution to expanding their knowledge of training specifically, and vocational education and training more generally. They believed it provided a good grounding for their work. The focus on adult learners offered a contrast to previous experiences where considerations about learning had been confined to school settings and young learners. An enterprise-based graduate noted that the certificate was good at 'developing the individual' and also providing an opportunity to 'value add' to the workplace.

Equally, other graduates were more guarded about the outcomes from their certificate IV courses, stating that the courses gave 'a bit of understanding' and help with their work in enterprises. These graduates noted that, because of their enterprise setting, they felt they knew their learners well and hence were able to take up ideas from the course, such as identifying learner needs. The most important desired outcome from the course was the capacity to transfer their skills and enthusiasm to the people they supervised. Another graduate, and experienced teacher, asserted that the certificate IV did not give participants enough training on how to manage and lead a class. Another graduate noted pragmatically that 'it is only a certificate IV'.

The one graduate who had completed the certificate IV course online found the experience less than satisfactory. While admitting that this mode of delivery 'probably didn't match my learning style', the graduate made some interesting observations about this mode of delivery. The online environment with associated mode of assessment (which can include the student organising their own simulated environments in which to demonstrate competence) may show that they do 'not know how to apply it (their learning) practically' or apply it 'from a teaching perspective'. The graduate further observed that there was scope for assessments to be 'rigged', where demonstrations of competence were done in groups with people who were well known (for example, friends and relatives). These circumstances meant that 'you didn't have to do things that you might have to do if you were with people who were unfamiliar to you'. This graduate also had the opportunity to briefly interact with other learners in a face-to-face environment and was acutely aware of the absence of interaction between learners in the online environment; this absence was significant in terms of the quality of the learning experiences encountered during the course of study. The graduate stated that they had felt 'isolated and alone' as a learner and offered the view that a blended form of delivery might have been a better delivery strategy.

Running through some graduates' comments was some sense of unease about the lack of uniformity in the provision of the certificate IV, particularly in relation to the significant variations in the amount of time allocated to attaining the qualification. While some were happy to 'put in the hard yards', others appeared to feel the inequity of situations where people appeared to be able to attain the qualification with little effort. There were also some traces of resentment observed from highly qualified staff (particularly those with postgraduate higher education qualifications) who were not convinced of the need to attain a certificate IV qualification, given their backgrounds and experience.

Based on their experiences, the graduates offered a number of suggestions for changes to the certificate IV courses. Not surprisingly, there were a variety of perspectives on the need to shorten the duration of the course. Two graduates were particularly concerned about the assessment units, suggesting that they were 'boring, hard and confusing'. More emphasis needed to be placed on the principles behind assessment and the practical details of 'how to do it'. Other suggestions for change included:

✧ the inclusion of more practical rather than generic examples which some graduates found confusing and not helpful

✧ a greater emphasis on the difference between adult learners and school-based learners

✧ more time devoted to 'identifying learners'

✧ an increase in the focus on *how to* teach/train

✧ a reduction in the size of summative assessment tasks so they were smaller and more frequent.

A number of graduates expressed concerns about the proposed changes to the certificate IV with the advent of the new training package. Most of the comments related to the increased costs that would have to be borne by individuals and workplaces in order to complete the significantly expanded qualification and the hope that some 'flexibility' might be applied in order to accommodate these issues.

The experiences and reflections of the group of graduates included in this study emphasise the relationship between their experience in their certificate IV courses and the broader contexts in which they are located both personally and professionally. Their ideas about learners and learning were clearly a result of their participation in the certificate IV courses—or solely from other formal courses. For most of these graduates, their learning continued, although the extent of this learning did vary. Graduates continued to learn from their own experiences, from discussion with colleagues, reading, other professional development programs, being exposed to different learning environments as part of their work, and through feedback from their students/clients.

Implications, conclusions and future directions

The key purpose of this study was to explore perspectives on the ways in which learners and learning are understood and embedded in the course that led to the attainment of the certificate IV in Assessment and Workplace Learning. It has examined ideas about learners and learning from two perspectives—from those responsible for the delivery of certificate IV courses and from the graduates from these courses. In doing so, this study has provided valuable insights into the nature of teaching and learning in VET and how this is enacted by those most intimately concerned with promoting learning within the sector.

A question of contexts

This study has shown that there is considerable diversity in the types of courses leading to the certificate IV qualification. These vary not only in duration and structure, but also in the extent to which they choose to examine issues relating to learners and learning for their specific context. The role of context in these differences cannot be understated.

This work of contextualisation was most evident in the language used by respondents in this study. In enterprise contexts (particularly those not connected to the education industry) where the certificate IV was largely provided as a means of training workers in the enterprise, it was understood as a business process that contributed to organisational goals related to workforce development. The immediate focus was on preparing trainers to assist in the development of human capital for the enterprise. The importance of context was further complicated by circumstances where certificate IV training was not solely confined to participants internal to an organisation, but was also offered to a mixture of internal and external clients, or solely to clients external to the delivering organisation. In these contexts, the language and examples used to illustrate key points in relation to understanding learners and learning were more non-specific, and varied considerably as teachers and trainers tried to reflect the variety of workplaces or educational settings in which graduates from certificate IV courses might work.

The issue that arises from this observed outcome of the study concerns the extent to which there is a 'trade off' between contextualisation and transferability, and from this, the adequacy of the learning pathways for the certificate IV in enabling *all* graduates to be work-ready across a *diverse range* of contexts. Certainly one assumption underpinning the new Training and Assessment Training Package, with its additional units of competency focusing on work-based learning, individual learning and optional units (covering group-based learning, distance-based learning and provision of training through instruction and demonstration of work skills), is that graduates of the certificate IV *should* be able to work across a range of contexts. The extent to which this broadening of contexts is possible or desirable, given some of the feedback from respondents in this study is debatable. These issues will perhaps be best investigated in future research studies which may examine the transition from the BSZ 98 to the TAA 04 Training Package and others examining the skill requirements and movement of teachers and trainers between various contexts within the VET sector.

The intended curriculum

There was considerable unanimity between the deliverers and the graduates of certificate IV courses regarding the nature of learning that should be promoted in the VET sector. Both groups strongly confirmed the 'workplace' focus of learning, with graduates particularly emphasising the preparatory nature of learning by use of the term 'work ready' to describe the desired outcomes of learning. The nature of learning was characterised as 'practical' and 'hands on' by both groups. Both groups were united in their views that learning in VET should be learner-centred and interactive, and acknowledge learners' prior knowledge and skills.

Teachers and trainers delivering certificate IV courses offered expanded descriptions of learning which highlighted a focus on training (rather than education) as the main preoccupation of the sector and gave somewhat divided views on the place of theory in VET. Some comments placed emphasis on the 'application' of underpinning knowledge in the workplace. Discussions like these appeared to be informed by conceptions of 'theory' as codified knowledge as opposed to alternative perspectives which understand theories as contingent explanation which (re)merge out of practice. As Chappell et al. (2003, p.15) and Hager (2004) have noted, conceptions of learning resting on these notions of knowledge have been contested and are largely not helpful, if the broader goals of VET in relation to promotion of a learning culture and lifelong learning are to be achieved. This fits well with teachers'/trainers' and graduates' perceptions of learning as learner-centred and experiential. However, this understanding of knowledge also requires that thinking/reflection and action be viewed as inseparable, rather than, as the views expressed here indicate, an understanding of VET as 'essentially concerned with the performance of particular and discrete technical tasks which, however skilled they may be, involve a minimum of thought' (Hager 1994, cited in Chappell et al. 2003, p.15). The evidence from this study suggests a degree of ambivalence with regard to the relationship between theory and practice.

The delivered and received curriculum

An analysis of the perceptions of what teachers and trainers who deliver certificate IV courses believed they offered learners and what graduates stated as their learning revealed some interesting similarities and differences in relation to understandings about learning and learners.

Understandings of learning

Evidence from this study suggests that current approaches to the delivery of certificate IV pathways do not place a great deal of emphasis on theoretical explorations of learning, particularly those in keeping with emerging research. Learning was largely viewed as a practical activity. Views of learning were also shaped by tensions over whether the focus of the certificate IV was learning or training.

Teachers and trainers responsible for the delivery of the certificate IV reported that, in many instances, definitions of learning were not offered in their courses and, where they were offered, they do not appear to have made any significant impact on most graduates. There was some agreement across both groups of respondents that the focus of the certificate IV course was not on learning but training, and hence discussions about learning were not relevant. Where learning was examined in certificate IV courses, behaviourist and humanistic understandings were most prevalent, with little evidence to suggest that any significant attention was being paid to constructivist understandings of learning, despite emphasis in the literature of its importance. The new certificate IV (TAA 04) makes explicit mention of a number of learning theories as underpinning knowledge in several units of competency (there is however no explicit reference to constructivist theories). This is an improvement, since in the absence of any reference to learning theories in the Certificate IV in Assessment and Workplace Training (BSZ98), those delivering the qualification may have simply selected those with which they were most familiar or about which they could find materials.

Teachers and trainers delivering the certificate IV also offered perspectives on learning which emphasised adult learning principles and andragogy as useful organising frameworks. This perspective was sometimes accompanied by speculative assertions about the differences between adult learners and others which, on the basis of the empirical evidence to date, are largely unsubstantiated (see for example, Pratt 1993). While these ideas were less prevalent in graduates' perspectives of learning, they were nonetheless evident. Given the diversity of students who might participate in VET, particularly adolescents, these findings arguably highlight some issues in relation to frameworks informing discussions about learning in certificate IV courses which need to be addressed.

In addition to the content of certificate IV courses, teachers and trainers offering the certificate IV placed significant emphasis on modelling actions to enable graduates to experience learning of a particular type. These experiences were characterised as adult-like, where drawing on the experience and prior knowledge and skills of participants, as well as interaction between participants, were key components. While it was not possible to assess the full impact of these processes from interviews, it is clear that this modelling had a significant impact on graduates. These features of learning as experiential and interactive may provide a sound basis from which notions of teaching and learning in VET might be expanded. A significant issue, which to a large extent remains unanswered from this study, is the degree to which teachers and trainers in certificate IV pathways are able to clearly articulate alternative understandings of learning more in keeping with the demands faced by workers in contemporary workplaces.

Understandings of learners

The message that learners in VET are a diverse group of individuals was clearly made to graduates of certificate IV courses. Teachers and trainers were able to convey a clear understanding of the 'differences' in the types of learners that graduates might encounter in their work. Remarkably, there was little emphasis on the *similarities* between learners, except for some emphasis on the adult nature of learners which appeared less often in graduates' ideas of learners than it did with the teachers and trainers delivering the certificate IV courses. There was less evidence, however, of practical approaches to dealing with this diversity. Evidence from this study suggests that, while considerable efforts were made by teachers and trainers to model various teaching strategies, there appeared to be little direct instruction about these methods beyond reminders of the need for flexibility when selecting strategies. While instruction on how to structure training sessions appears to be offered, there appeared to be little overt direction provided to graduates on the relationship between various teaching strategies and their suitability or otherwise for learners who held particular characteristics. The outstanding exception to this was in relation to learning styles.

Learning styles clearly offered a relatively simple and intuitively appealing way of addressing the characteristics of different learners. In time-pressed certificate IV courses, where sometimes only a few hours could be dedicated to any one particular topic, exploration of graduates' learning styles afforded a simple and often powerful way to emphasise messages relating to learner differences. Unfortunately, however, these frameworks often appear to have been used uncritically, leaving open the potential for stereotyping learners without due regard to a range of other learner characteristics which may also impact on preferred ways of learning. There is also a sense of unreality in this approach. The notion of learning styles resonates within the VET sector to calls for flexibility and responsiveness. Teachers and trainers demonstrate their flexibility and responsiveness by being learner-centred—and learning styles appears, from this study, to be one of the main vehicles by which this goal can be realised. As Coffield et al. (2004) note, concepts of learning styles can entrench teacher-led practices where teachers and trainers are placed in the role of diagnosticians and experts. They are required to categorise and sort learners, supplying what they need according to their diagnosis. This positions learners as objects and places a significant responsibility on teachers and trainers at the expense of the need to address systemic issues relating to social and economic barriers to learning that might exist for specific groups of people.

In addition to issues relating to the teacher/trainer relationship, Coffield et al. (2004) have raised some concerns about the application of learning styles as a means of promoting quality teaching

and learning. This is largely raised on the basis of little empirical evidence to suggest that learning styles can be measured in any valid and reliable manner using the range of models most commonly available. (There are three exceptions to this which Coffield and his colleagues note, none of which appear to have any currency within VET in Australia at this time.) There is also little evidence to suggest that the application of strategies, such as matching (or deliberately mismatching) teaching and learning styles, produces any measurable benefits to learners.

However, these observations are not to be taken as a signal that learning styles should be totally dismissed as worthy of attention. Despite these shortcomings, Coffield and his colleagues (2004) do see a place for learning styles as a means of increasing learners' self-knowledge of their attributes as learners, and as a means of opening up dialogue between teachers/trainers and learners about ways to support learning. This, however, does not appear to be the context in which discussions about learning styles are taking place within certificate IV courses, and it is debatable whether, in a VET context where time pressures and other issues can seriously impact on the space available for learning, conversations might flourish. The relevance and application of concepts, which have largely only been explored in institutional settings in a sector where work-centred learning is considered to be central, also raises questions about the efficacy of such an organising framework for understanding learners—particularly where the certificate IV is delivered in enterprise settings.

Despite their frequent appearance in the discourse of teachers/trainers and graduates in this study, learning styles were by no means the only frameworks used to promote understandings of learners. Interviews for this study were replete with 'shopping lists' of learner characteristics, some of which bordered on the stereotypical and which (for example, wanting value for money) would not find support in the literature as key factors influencing learning outcomes for individuals. In addition, there were fewer references to those characteristics which have been subject to considerable research in relation to their impact on learning (for example, gender, ethnicity and race). These findings perhaps raise issues about the extent to which teachers and trainers might be supported to keep up to date with emerging research relating to teaching and learning.

There was also ample evidence to suggest that graduates had taken up the notion of learner 'needs', which again raised the spectre of the value of responsive teaching and training on the one hand, and diagnosis and a deficit understanding of learners, on the other. There appeared to be some conflation between the notion of explicit learner needs and inferred learner needs. Teachers and trainers leading certificate IV courses did encourage graduates to seek out learner needs and respond to them; there was also a tendency to infer that learners in VET had particular needs, but these were often not specific, or were sometimes the product of stereotyping; for example, the different needs of adolescent learners compared with those of adults. Graduates tended to view the concept of needs in terms of the knowledge, skills and information deficits needed to perform a work role. Needs could also relate to personal characteristics, but these were often labelled as 'special' and most commonly meant language and literacy abilities. Once again, the inherent danger in this approach is twofold. Firstly, it represents learners as vessels to be filled with whatever teachers and trainers perceive as their needs. Secondly, it places significant pressure on teachers and trainers to 'get it right' in an environment where it is practically impossible to be able to meet the needs of all learners, and where time and resources are often at a premium (particularly in the workplace). There is also the inherent contradiction within the structure of the VET system, whereby learners' needs are juxtaposed with those of industry, as codified in training packages.

Implications of the study

Teachers and trainers who delivered the certificate IV held no doubts about the important role that their graduates were to play in the VET system. They promoted a view of teaching and learning that has as its central tenet the ability of their graduates to consider, analyse and provide for different learning styles and to cater for different learner needs. A learning environment that is supportive, oriented to the adult nature of learners, interactive and experiential was promoted.

More broadly, teachers and trainers hoped their graduates would become advocates for learning, and be willing and able to promote the value of learning within workplaces. There is little doubt that enormous enthusiasm for this task exists among those charged with the responsibility of facilitating the certificate IV courses examined in this study. It is also clear that graduates from these courses were clear about the central components of their roles—catering for learner needs and responding to the diversity of learners they might encounter in their work—particularly by way of implementing ideas related to learning styles and the importance of planning and structuring the training they offered.

Upon reflection, however, this study reveals some interesting perspectives on teaching and learning in the VET sector and the role of the certificate IV in promoting particular views about these issues. The certificate IV has long been the source of much criticism; it has also undergone significant development since it first appeared. Learning pathways leading to the attainment of the qualification are diverse; this study has only been able to provide a small snapshot of some of the approaches used by training providers and some of the outcomes achieved by these approaches. Evidence from this study suggests that there is no uniform agreement over the purpose of the qualification. Some providers argue that it is useful for the development of specific practical training outcomes in workplaces. Others suggest broader purposes; for example, related to building learning cultures. In the absence of any agreed purposes for the certificate IV, its usefulness as a basis for information about teaching and learning in the VET sector may be limited.

Secondly, the study reveals some interesting and perhaps troubling signs in relation to understandings of teaching and learning being promulgated in some certificate IV courses. Notions of teaching and learning are drawn from a wide range of perspectives, derived from adult education, psychology and to a lesser extent, sociology. Courses draw on ideas about adult learning and experiential learning which Chappell et al. (2003, p.15) note as being amenable to emerging ideas of learning as the 'active individual and social construction of knowledge', albeit that these ideas tend to be grounded in ideas about divisions between thinking and action. However, despite this eclectic approach to ideas on teaching and learning, there is little or no specific reference to the unique demands associated with preparing particular groups of workers for particular industries. Regrettably also, some of the understandings about learners and learning appear to rest on knowledge which has been challenged elsewhere or which lacks a sound empirical basis. These understandings serve to limit the potential for VET to deliver the goal of promoting lifelong learning and enabling participation in VET by diverse groups of learners.

Thirdly, there appear to be significantly different perspectives on learners and learning being offered by those directly concerned with preparing teachers and trainers to train in enterprises compared with those more immersed in institutional settings. For example, in enterprise contexts (where education was not the primary focus), ideas about learners and learning were directly connected to wider organisational and strategic goals, with a strong emphasis on developing human capital for the enterprise. In contrast, in settings where the goal was the development of teachers and trainers for educational settings, ideas about teaching and learning were addressed in more general terms. As Coffield et al. (2004, p.47) note, there appears to be little interaction between these perspectives. Further, Coffield and his colleagues argue, in the absence of a coherent understanding about teaching and learning in VET, there is the temptation to promote the use of simple, apparently neutral technical tools, such as learning styles, across all contexts and enshrine these as markers of good practice and hence worthy of emulation.

Fourthly, this study alerts us to views of learners which are held as a basis for the decisions made by teachers and trainers in their work. Some of these views, particularly those which focus on learners' deficits and which emphasise only certain learner characteristics, are unlikely to contribute to the professional and personal development of individuals taking their place in the emerging workplace. How teachers and trainers *see* learners does matters. But how they understand the social context in which learners are embedded, the role that structures of power and control play in positioning certain groups of learners, and the impact this might have for teaching and learning in the VET sector are also extremely important.

The way forward then appears to rest with ongoing dialogue between practitioners, especially those delivering certificate IV courses. This dialogue, however, needs to extend beyond discussion related to the implementation of the Training Package for Trainers and Assessors (TAA04). Rather, it needs to embrace a critical analysis of what teaching and learning that promotes learner-centred, work-centred and attribute-focused learning might look like. It also needs to address the broader implications these characteristics raise for the work of teachers and trainers in the VET sector (Chappell et al. 2003). Issues such as gender, class, race and ethnicity and the impact that they have on learning should be part of this discussion. As Coffield and his colleagues note:

> … learners are not suspended in cyberspace … Instead they live out their lives in particular socio-economic settings where age, gender, race and class all interact to influence attitudes to learning. (Coffield et al. 2004, p.59)

Further, such dialogue needs to take into account the fact that teaching and learning might well be specific for different areas of work—a one size fits all approach may not necessarily be helpful.

Additional research examining teaching and learning as they evolve through the implementation of successive iterations of certificate IV is also warranted. This study represents the first attempt to examine the implementation of courses leading to the attainment of the Certificate IV in Assessment and Workplace Training in any systematic manner apart from research accompanying the revision of the training package. The TAA04 Training Package represents a significant departure in thinking about the work of teachers and trainers in the VET sector compared with its predecessor. Its considerably expanded coverage of work functions attached to the role of workplace trainers and teachers, the clear delineation of work functions associated with facilitating learning in a number of contexts, and its expanded underpinning knowledge and skill base all have the potential to impact on understandings of teaching and learning in VET. This emerging knowledge is worthy of documentation and analysis for its potential contribution to efforts to enhance the quality of learning promoted in the VET sector. However, it is already becoming apparent that many people will gain the new qualification wholly or primarily through recognition of prior learning processes or short 'upgrade courses' from the current to the new qualification. It is to be hoped that the rush to gain the new qualification in the shortest possible time and the concerns of registered training organisations to qualify their own staff will not preclude VET practitioners from benefiting from the careful thought and wide consultation that has gone into the construction of the new training package.

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