CHAPTER-5

SOFT COMPETENCY DEVELOPMENT
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This chapter will mainly discuss the soft competency development system in Indian business environment. In Britain, a well-established system of vocational qualifications (Matlay and Addis, 2002) labeled National Vocational Qualifications (NVQs), underpinned by a system of competence based education and training, informs all educational levels from primary schools to institutes of higher and further education (Hyland, 1994). A similar system labeled the Australian Qualifications Framework (AQF) operates in Australia. Under the AQF, nationally accredited competency-based modules are combined into training packages for particular industries. NVQs in Britain and the AQF in Australia introduced widely acceptable and recognized vocational qualifications to assist with labour market mobility (Keep, 2002). It is widely acknowledged that the acquisition of relevant skills results in more output for a given amount of effort and time, and increases adaptability of workers (Lange et al., 1999) to assist in the maintenance of labour and capital employment, and maintain competitiveness (Booth and Snower, 1996).

This chapter focuses on the delivery, in India, of a nationally accredited competency-based training system in Business Management. This program was instigated to deliver business management training to unemployed adults desirous of self-employment with their own business enterprise. In India, the number of its employees defines a business. A small business is one that employs less than 20 people. This compares with organization for economic co-operation and development distinctions: micro companies – one to four employees, very small companies – 5 to 19 employees, small companies – 20 to 99 employees. In this training package, consistent with all training packages, assessable competency outcomes are defined by industry in terms of particular vocational skills to be achieved by trainees. Despite that fact that training packages describe assessable competency outcomes in terms of particular vocational skills, semi structured focus group discussions by the researcher with unemployed adult trainees
participating in classroom-based vocational training revealed that they described their learning outcomes in quite different terms to those in the training packages. Contrasting with training packages the researcher found that vocational trainees describe their learning in terms of dispositional outcomes; that is, in terms of values, interests and attitudes. Thus, while training packages describe outcomes in competency-referenced terms, trainees describe their learning outcomes in non-competency referenced terms.

A review of the literature associated with the key terms used in this chapter revealed that, for the vocational education of unemployed adults using competency-based training, there were no linked points of referral between the key terms. As well, although vocational trainers report that dispositions affect vocational competency performance, little research is reported in the literature on how dispositions might be developed in learners. This chapter addresses those limitations and reports exploratory, empirical and qualitative research exploring tentative links between the key terms.

In addition, the chapter presents a perspective on vocational learning that proposes that vocational competence is dependent upon dispositional development, which in turn, results in moves towards maturation. To understand the importance of trainees describing their learning outcomes in dispositional terms there follows a brief and selective review of the literature on competency-based training and training packages in India. This leads into a discussion of workplace knowledge and vocational competence that introduces the topics of individual dispositions and maturation.

Related literature

Vocational Education and Training.(VET).

The Indian experience of VET is based on a human capital approach with roots in an underlying tenet of liberal meritocracy. From a micro-perspective human capital theory sees individuals investing in education to increase their personal wealth; while from a macro perspective society itself invests in education to improve the wealth of its citizens to contribute to overall
economic growth (Maglen, 1990; Marginson, 1993; Watkins, 1991). From international and Indian research evidence, some authors concluded that there was a compelling case for change in Indian education and training in the direction of a convergence of general and vocational education and lifelong learning for all. This push towards vocational education and training (VET), and lifelong learning (Scollay, 1999, p. 2) is occurring at a time in history when technology and tastes change rapidly. The term VET is used internationally to describe education and training arrangements designed to prepare people for work, or to improve the knowledge and skills of those already working (Keating, 1995). As a result, a common belief exists that increases deriving from productivity of labour may result from workers acquiring relevant vocational skills. This belief arises from the general acknowledgement that when individuals acquire more skills they produce more output for a given amount of time and effort (Lange et al., 1999).

The identifying characteristic of VET is that “it is directed towards the needs of industry and the workplace” (Keating, 1995, p. 14); and the distinctive features of VET include discrete learning modules and assessment based on demonstration of specific competencies. VET involves three different training orientations:

- First, a vocationalist orientation focuses on practical or industrial skills.
- Second, social psychological orientations broaden the experiences of the learners through work experience as well as off-the-job training; and, incorporate social and life skills.
- Third, a basic functional orientation towards the development of written and spoken language and numeracy skills (White, 1989).

A critical view of VET contends that it is a mechanism for controlling the supply of workers entitled to call themselves skilled (MacDermott, 1994). Noble (1989) critically suggests that the new appreciation of education and training represents a desiccation of human intellectual potential at the very moment it appears to be celebrating it. Little et al. (1991) argue similarly to
Noble by advancing the view that a social crisis looms in which power and money have attained a disproportionately high societal value, while other values such as solidarity, reverence, honesty, integrity and charity are significantly displaced. Regardless of the relative strengths and weaknesses of VET, it continues to be the general platform of the Indian training reform agenda. VET has come to be associated with particular delivery mechanisms, sometimes labeled competency-based education (CBE), but more so, labeled competency-based training (CBT).

**Competency-based training**

Competency-based training was instigated by government to bring vocational, technical, and industrial training into the nuclear electronic era (Blank, 1982). Even the trade unions, known previously to be more concerned with wealth distribution than wealth creation, became concerned to introduce constructive reforms to improve the functioning of the Indian economy (Mansfield, 1993). Restructuring the workplace agenda was considered necessary to respond to the repositioning of Indian capitalism to fluctuations and more lasting changes in global manufacturing and economies, the changing face of Indian industry to technological advancements, and changing methods and conditions of employment (Brown, 1994). CBT became part of the process of economic rationalism in which the principles and management techniques of business were applied to the development of educational processes and curriculum as commodities for the marketplace (Angus, 1992). As a result, within the context of education policy, the CBT initiative through VET heavily underscores the connection between education and work (Toms, 1995). The prescriptive technology and production model of vocational education and training through CBT is different in a number of ways to the growth model that preceded it.

With the growth model, an individual’s knowledge proceeds at an individual rate, and ends with variable results. Under CBT the education and training system produces specifiable and identifiable learning outcomes. The CBT system of workplace training in non-educational settings is saturated with “bottom line” results-oriented expectations in which “efficiency and
effectiveness . . . [are] viewed not only as legitimate expectations, but as part of the hegemony assumptions that . . . [are] not to be challenged” (Langenbach, 1994, p. 14). In essence, CBT requires that competence be divorced from the needs of the learner, and be viewed from the stance of the requirements and expectations of the economic and social system (Foyster, 1990). Competence is achieved when an individual learner can demonstrate a criterion-referenced (Foyster, 1990) standard of skill in a particular vocational area. Moreover, CBT is concerned with industry specific standards rather than an individual’s achievement relative to others (Mawer, 1992), such that much of the critical literature on CBT has drawn parallels with Taylorism. However, Gossett et al. (1991) note that there are critical differences between the two views: while Taylorism divides tasks into discrete parts, CBT methodology describes the knowledge and skills required to perform tasks, and how to competently perform the tasks under varying workplace conditions and circumstances. While Collins (1983) concluded that “efforts to define all aspects of competent performance . . . [were] doomed to failure” (Collins, 1983, p. 175), Parker (1984) made the valid observation that CBT never attempted to produce all possible elements of behaviour which were important, just a sample of them. For adult learners CBT clearly defines what particular competencies are to be demonstrated to an assessor, thus removing mystery from the training and assessment processes. CBT provides organized and sequential steps, with the opportunity for immediate feedback in deference to adult learners with diverse interests and skills. It is also somewhat humanistic in its concern for individual learning styles, motives and learning pace. In arguing for CBT, and upholding government policy, Foyster (1990) wrote: Competency based training is spreading, despite the handicap of additional planning, because it usually works much more effectively to bring employees to the required skill levels than do traditional methods (Foyster, 1990, p. 1). Although there is support for CBT, it is not without its critics. Arguing against CBT, Jackson (1994) wrote: . . .there exists nearly two decades of scholarship, including theoretical critique and empirical research originating in philosophy, psychology, linguistics, education and sociology, which argues in various ways that the competency paradigm has not and probably will not “improve Dispositional and maturational development learning” in most of the
educational contexts in which it has been applied (Jackson, 1994, p. 135). Adding to Jackson’s critique above, British critics argue that CBT is a “theoretically and methodologically vacuous strategy” (Hyland, 1994, p. 35). Also, in Collins’ (1983) critical analysis of CBT as a system in adult education, it is argued that CBT is excessively reductionist in attempting to explain complex phenomena through discrete standardized concepts. Further, Cooper (1992) concluded that CBT did not represent true reform for working people since it did not raise the problematic of power relations within the workplace or society. Cooper’s argument is similar in form to that of Magnussen and Osborne (1990): that CBT is a form of power that seeks to render individuals powerless in the quest to alter the process of capital accumulation. Other limitations of CBT noted by Harris et al. (1991) include: over-reliance on pre-packaged activities to the exclusion of reflective interactions in real situations, and the deterministic intent of competency outcomes which threaten to violate adult learning principles. Recently, James (2001) concluded that while CBT appears to effectively meet the requirements of many stakeholders, there are ways in which certain enterprises, workers, worker identities and forms of knowledge are privileged over others. Despite contradictory views on the effectiveness or otherwise of CBT it continues as an approach to learning and a system for VET (Smith, 2000). The VET system and CBT approach rely on training packages for delivery. A brief explication of training packages follows.

Training packages

Training packages are considerably different to all previous forms of vocational education in India since there are no curricula within the national training framework. Instead of curricula, training packages consist of endorsed and non-endorsed components.

The endorsed components of training packages contain the competency standards to be achieved by trainees, assessment guidelines, and the qualifications to be awarded.

The non-endorsed components contain the learning strategies, assessment materials and professional development materials.
The actual training or learning materials used by apprentices and trainees – more often than not labeled learner guides – do not form part of either the endorsed or non-endorsed components (Smith, 2000). Training materials are developed directly from competencies by enterprises, providers and consultants of training and particular industries. Some training packages are supported by more than one set of training materials, with providers or users making decisions on which particular training packages to use. Competency outcome standards detailed in training packages are assessed according to four criteria:

· validity,
· reliability,
· fairness and
· flexibility (Tovey, 1997).

To be awarded a qualification an apprentice or trainee must be assessed as having demonstrated competence against the referenced competency outcomes detailed in a particular training package. Training packages cover all forms of vocational training from traditional apprenticeships in boiler making and cabinet making to office administration and retail operations. In late 1998 there were 18 endorsed industry training packages covering 35 per cent of the workforce. By 1999, 50 packages covering up to 65 per cent of the Indian workforce were in operation. Now, in 2008 more than 90 per cent of occupations, excepting recognized professions and more esoteric occupations such as the arts (Lewis, 1998) are covered by training packages. Despite widespread use of training packages they are not without detractors. For example, Harris et al. (1991) pointed to the danger inherent in training packages of excessive reductionism; that is, reducing competencies to minute pieces and restrictive behaviorism making only observable competencies assessable. Cooper (1992) criticized the design of training package learning materials after observing that in the assessment process no question could be asked of a participant for which the answer was not provided in the modules; and, that no materials were presented as problems to be engaged
with, or situations to be investigated. Cooper’s overstated criticism, however, seems to be based on only a selective review of training packages. In research using only female CBT participants, James (2000) concluded that while students received certain aspects of CBT warmly, other aspects were unsuitable for many students, leading to unproductive coping strategies and potential social disadvantage. Despite detractors, training packages, together with various types of learning materials, continue to be utilized in combination to deliver workplace knowledge (Smith, 2000). However, precisely what comprises workplace knowledge or vocational competence is much debated by researchers. Some views follow in order to introduce two concepts central to this chapter: dispositions and maturation. Workplace knowledge and vocational competence an important feature of a successful business enterprise is to have employees who can effectively perform relevant vocational tasks.

In every workplace, it can be observed that some employees are more effective than others. Hence, employers are interested in identifying the source of individual high levels of performance (Billett, 2001). Cognitive theorists propose that individual knowledge, the basis for competence, resides in memory. In addition, that vocational knowledge exists in different forms described as cognitive structures. Billett (2001) argued that three forms of cognitive structures could be identified:

- First, conceptual forms of knowledge;
- Second, procedural forms of knowledge; and
- Third, underpinning individual dispositional forms of knowledge.

Each of these forms of workplace knowledge is described in more detail below.

**Conceptual knowledge** is also referred to as propositional knowledge (Billett, 2001), declarative knowledge (Anderson, 1982), and “knowledge that” (Billett, 2001, p. 51). Conceptual knowledge comprises facts, information, propositions, assertions and concepts (Billett, 2001). Conceptual knowledge
varies in its depth of complexity (Greeno, 1989) and is premised on links and associations between concepts (Prawat, 1989). Billett (2001) argued that depth of understanding within a vocation is probably limitless.

**Procedural knowledge** is the knowledge individuals use to act and is referred to by Anderson (1982) as “know how.” “Know how” comprises the techniques, skills and abilities needed to secure goals (Stevenson, 1994). Stevenson (1994) classified procedural knowledge into three levels.

- First, at the lowest level of cognitive structure, are specific procedures used without recourse to conscious thought. Experienced and knowledgeable operators in every field of Vocational Endeavour tend to effectively perform vocational tasks by deploying automated specific procedures (Simon and Simon, 1978). However, Billett (2001) argues that since procedures are specific to particular tasks, they cannot be used by workers to address new workplace tasks as they arise.

- Second order procedures enable individuals to evaluate which procedures are best when new vocational situations arise. Second order procedures require individuals to work out the steps needed to fulfill a particular vocational task by engaging in means-end analysis (Newell and Simon, 1972).

- The third and highest level of cognitive structural procedural processing, responsible for management of the first and second levels above, strategically monitors and organizes activities (Evans, 1991; Stevenson, 1991). This third level comes into play when novel vocational circumstances present and problem solving and transfer of knowledge to new situations is required (Billett, 2001). In terms of identifying experts in vocational workplaces, this third level has been described by Billett (2001, p. 53) as the “distinguishing quality of experts.”.
To some extent, conceptual and procedural knowledge determines vocational competence. However, conceptual and procedural categories of knowledge do not fully explain vocational behaviours. For example, one can question how the caring and attentive behaviours of a pharmacist towards clients can be explained above the expected conceptual and procedural knowledge needed to fill prescriptions.

1. Billett (2001) argued that these behaviours can be conceptualized as dispositions. Dispositions comprise vocationally related attitudes, values, affect, interests and identity (Prawat, 1989). In motivational theory, it has been suggested by Dweck and Elliott (1983) that dispositions account for the disparity between what individuals are capable of doing and what they actually do. Perkins et al. (1993) regard dispositions as individual tendencies to put capabilities into action. Hence, Billett (2001) argues that dispositions are the foundations upon which conceptual and procedural knowledge and applications are built. Billett also concludes that these three forms of knowledge – conceptual, procedural and dispositional – identify what constitutes vocational expertise. Further, Billett (2001) found tentative demonstration that dispositions, beyond capabilities, influenced how individuals thought and acted. Billett proposes that rather than conceptualizing dispositions as a separate cognitive structure they should be viewed as inherent elements within propositional and procedural structures.

2. Analysis of dispositions by the present researcher reveals that they can also be categorised as dimensions of maturation (Knowles, 1996). Dimensions of maturation are introduced next.

**Dimensions of maturation**

In terms of human development and maturation, most theories focus on physical development throughout childhood and adolescence. In the dominant natural and evolutionary developmental view of psychology, rationality is seen by James and Prout (1997) as the
universal denotation of adulthood and childhood as the period for its development. In this account, children are generally regarded as immature, irrational, incompetent, asocial and a cultural while adults are regarded as mature, rational, competent, social and autonomous (Mackay, 1973). Although, for James and Prout (1997) childhood is distinguished from biological immaturity and is neither a natural or universal feature of human groups, but rather, a specific structural and cultural component of some societies.

Allport (1961) identified six criteria of maturity.

1 First, extension of the sense of self. This includes showing interest in other people, authentically participating in life matters, and autonomously selecting and participating in personal interests.

2 Second, displaying warm relations of self to others, showing compassion based on respect for individuals as individuals, and tolerance.

3 Third, gaining self-acceptance, emotional security and tolerance of frustration.

4 Four, developing mature judgment, objectivity, rationality, and an accurate and realistic problem-centered approach to cognitive operations.

5 Five, the ability to develop and use insight and humour.

6 Six, a clear conception of the purpose of life, development of a system of value orientations, a comprehensive and integrative frame of reference and a directedness of one’s own individual life.

Knowles (1990, p. 55) refers to maturation as “natural maturation”; and describes a psychological rather than physical development. In a study relating to the competence of Peace Corps volunteers by Harris (1973), the general traits characteristic of maturity were sought in place of narrowly defined task-specific or technical competences. Harris concluded that the
general traits characteristic of maturity are:

- self-reliance,
- autonomy,
- perseverance,
- stability of values,
- realistic goals and
- all centrisms.

Heath’s (1977) study on trans-cultural maturation found a common set of core traits defining maturity across the US. The core traits found were:

- ability to anticipate consequences;
- calm,
- clear thinking;
- fulfilling potential;
- ordered;
- predictable;
- purposeful;
- realistic;
- reflective;
- strong convictions; and
- unshakable” (Heath, 1977, p. 204).

In dissimilar, yet related studies, Smith (1961, 1968) ascribed the following traits as associated with psychological health:

- self-confidence;
- self-esteem;
- assertiveness;
- self-reliance;
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- self-control;
- buoyancy;
- affiliativeness;
- realistic openness to experience;
- tolerant;
- principled responsibility;
- initiative;
- feelings of control over own destiny;
- reality-orientation;
- control over impulses;
- clarity about identity;
- persistence in face of failure;
- determination;
- problem-solving attitude;
- strength of interests; and
- Risks disapproval.

Analysis of these characteristics related to psychological health reveal that those which now follow also appear in Knowles’ (1996) original dimensions of maturation.

- self-confidence;
- self-esteem;
- self-reliance;
- self-control;
- affiliativeness;
- realistic openness to experience;
- tolerant;
. principled responsibility;
. initiative;
. feelings of control over own destiny;
. reality-orientation;
. control over impulses; and
. clarity about identity.

Thus, it is concluded that considerable complementarities exists between psychological health and maturity. Knowles (1990) argued that as individuals matured, their need and capacity to be self directing and their need to organize their learning around life problems steadily increased in the period from infancy to pre-adolescence; and rapidly increased during adolescence: “the need to be increasingly self directing continues to develop organically” (Knowles, 1990, p. 55). Researchers studying healthy adult development now assume maturing continues throughout the life span (Levinson, 1986). The implication of Knowles’ multidimensional theory of maturation is that every educational activity can provide maturation opportunities for each individual in several dimensions since dimensions of maturation are interdependent.

**Dimensions of maturation**

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<th>From:-</th>
<th>Toward Dependence</th>
<th>Autonomy</th>
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<td>Passivity</td>
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<td>Subjectivity</td>
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<td>Ignorance</td>
<td>Enlightenment</td>
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<td>Small abilities</td>
<td>Large abilities</td>
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<td></td>
<td>Few responsibilities</td>
<td>Many responsibilities</td>
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<td></td>
<td>Narrow interests</td>
<td>Broad interests</td>
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<td>Selfishness</td>
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<td>Self-rejection</td>
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Knowles noted that dimensions of maturation described directions of growth, not absolute states to be achieved. In the movement from childhood dependence towards adult autonomy, Knowles (1996) claimed that every experience which moved an individual away from dependence was educational. Thus to be effective, one of the roles of adult educators is to remove student dependence on teachers. The relationship of maturation to the present research designed to enable individuals to learn and develop competence in particular vocational areas comes from Heath (1977, p. 41) who concluded that “to further a person’s competence, one should find ways to enhance his maturity.” Further, Heath concluded that, on the one hand, maturing might enhance a person’s competence, and on the other hand, competence might encourage a person’s maturing. It would seem common sense to recognise that increased competence might lead to enhanced self-efficacy; and, that enhanced self-efficacy might facilitate a shift from dependence towards independence as suggested in Knowles. Research has also found that individuals who perceive themselves as efficacious demonstrate greater cognitive resourcefulness, strategic flexibility and effectiveness in managing their environment (Bandura, 1999; Bouffard-Bouchard et al., 1991; Wood and Bandura, 1989). In White’s (1959) critique of psychoanalytic ego psychology he insisted that a distinction be drawn between competence as a biological fact and as a social ideal. White defined biological competence as an “organism’s capacity to interact effectively with its environment” (White, 1959; p. 297). This biological definition points to the general traits and skills associated with effective functioning in complex environments. When maturity is tested against White’s (1959) definition, the interesting conclusion drawn by Heath (1977) was that “studies of persons

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<th>Amorphous self-identity</th>
<th>Integrated self-identity</th>
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<td>Focus on particulars</td>
<td>Focus on principles</td>
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<td>Superficial concerns</td>
<td>Deep concerns</td>
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<td>Imitation</td>
<td>Originality</td>
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<td>Need for certainty</td>
<td>Tolerance for ambiguity</td>
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<td>Impulsiveness</td>
<td>Rationality</td>
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Source: Knowles (1996, p. 29)
labelled competent only seem to confirm what studies of persons labelled mature, healthy, sound, ideal, and optimally adjusted seem to have already demonstrated” (Heath, 1977; p. 34).

The research

The research reports on three streams of inquiry.

· First, on qualitative research which used semi-structured focus group sessions to identify the terms by which trainees described their competency learning outcomes?

· Second, on the classification of trainee terms into a dispositional framework and the linking of the framework to a dimension of maturation scale formulated by Knowles (1970).

· Third, on the quantitative outcomes resulting from trainee pre- and post-course dimensions of maturation scale (DOMS) self-reports are prepared and analysed.

The research had two primary purposes:

1 First, to investigate the terminology used by trainees to describe their non-competency referenced outcomes.

2 Second, to quantitatively investigate trainee reports of dispositional outcomes associated with moves towards maturation.

Research participants

Research participants were 60 unemployed adults (20 females, 40 males) enrolled in business management classroom delivered courses. A total of 55 trainees (17 females, 39 males) were long-term unemployed adults; that is, unemployed for longer than 18 months. The remaining four respondents (three females, one male) were recently graduated. All trainees were aged between 18 and 54 years of age (female mean age 30.3 years, male mean age 31.5 years).
Qualitative research methodology and findings.

The qualitative approach that sought to recognise the individuality, personality and attributes of the trainees is ontologically constructivist in orientation. It is an approach that embraces the notion of multiple realities and accepts that each individual constructs their own reality as they interpret and perceive their world. To represent this world, therefore, means that the researcher must represent or reconstruct the world as seen by others (Hill and McGowan, 1999, p. 10).

The approach argues for a minimization of distance between the researcher and trainees. Thus, in the present research, closeness was sought in order to develop a deep understanding of competency outcomes as described by trainees from their unique perspective. To accomplish this, two semi-structured focus groups were conducted over the research period during which the focus of discussion was on competency learning outcomes.

At the beginning of the course they were each given a list of the competency outcomes they were to achieve over the six week period of the course. They have been asked to tell whether they will tell the researcher what outcomes they feel that they have achieved as an individual? What have been the most important gains for them? In response, most trainees were keen to express their competency outcomes. As individual trainees spoke, the researcher noted their key words or sentences describing outcomes onto paper and asked the group how many of them in the group had achieved similar outcomes. Trainee competency outcomes, expressed in their own terms, were totaled for analysis. Analysis of the transcribed recordings and researcher’ notes from semi-structured one-to-one interviews and focus group discussions revealed that trainee competency outcomes could be classified under three general dispositional headings suggested by Billett (1997) based on work by Nunnally (1976):

**values, interests and attitudes.** Nunnally categorised

- values as life goals and ways of life;
- interests as preferences for particular activities; and,
- attitudes as positive or negative feelings about things.
A list has been prepared listing trainee responses, and the numbers of times a particular response was voiced by trainees. It can be observed that the terminology used by trainees to describe their competency outcomes is, in fact, described in non-competency referenced terms. That is, while competency outcomes attached to a training package might read: can operate a cash register, or, can use a computer software package to word-process business documents, trainees typically describe their competency outcomes on a more personal level, using phrases such as: “I feel much more independent now I know how to use a computer to type letters and my mother says I seem happier and more positive in everything I do.” This style of describing competency outcomes contrasts with the skill-related competency referenced terms used in the training packages. Although, on some occasions, trainees do link the two. For example, a female trainee said: “I feel much more confident now that I have been introduced to the principles of marketing and the role that my marketing will play in bringing customers to the door of my business.” Thus, while classroom delivered vocational training typically delivers technical skills, knowledge and concepts, with an emphasis on the development of cognitive skills and provides the basic building blocks of competence for intending workers (Dymock and Gerber, 2002), trainees in this research described the outcomes of their training in quite different terms. Trainees described the outcomes of their vocational training in non-competency referenced terms that were dispositional in nature. The importance of dispositional skills to the actual performance of vocational skills should not be underestimated, since Billett (1997, p. 5) argued that “both the conscious and unconscious deployment of concepts and procedures have dispositional underpinnings”. As a result of further reflection on the qualitative results it was determined that the dispositional outcomes described by trainees could also be categorized in relation to Knowles’ (1970) dimensions of maturation. The information indicates that not only did trainees develop dispositional; they also made moves towards maturation. Because of the findings, research was conducted to quantitatively investigate the change in trainee maturation as a non-competency referenced outcome of CBT methodology over the six week duration of the course in the delivery of business management. Quantitative research and results To explore the extent of moves for maturation as a non-competency referenced outcome of CBT methodology over the six week
duration of classroom-delivered vocational education, Knowles’ (1970) dimensions of maturation were adapted by the researcher to better suit the business-oriented perspective of the trainees. Each dimension of maturation was worded in first-person to enable it to be understood by a broad range of trainees. The adapted dimensions of maturation scale (DOMS) appear as follows.

Classification of trainees’ dispositional responses (bracketed figure indicates number of times this individual response was given by a trainee)

**Values Interests Attitudes**

1. Increased capacity for planning and goal-setting (35)
2. An increased interest in customer-service orientations (27)
3. Increased confidence (37)
4. A more determined stance (23)
5. Increased interest in health and education (24)
6. Feeling more positive (32)
7. A increased focus towards ethics and the environment (17)
8. More interest in state and federal government issues and initiatives (19)
9. More considered approach to decisions and actions (32)
10. Fairness in dealing with others (11)
11. Less interest in watching television and more interest in reading about business (11)
12. Improved concept of self (28)
13. More willing to take on additional responsibilities and accept personal responsibility for actions (11)
14. A more balanced view towards family, business and further education (13)
15. Feeling more enthusiastic (23)
16. Honesty in dealing with others (9)
17. More interest in stock market activities (8)
18. Increased independence (21)
19. A willingness to more positively consider empirical evidence rather than anecdotal data (5)
20. Increased activity (18)
21. Being a better listener (17)
22. Developing more reliability (16)
23. More disciplined (16)
24. Being less critical of others (13)
25. Capable of being organised (11)
26. Better idea of who I am and my place in the world (9)
27. More tolerance of situations that are not clear cut (7)
28. Being more considerate (6)

Classifications of trainees’ dispositional responses are as follows;

**Values, Interests, Attitudes**

1. Increased capacity for planning and goal-setting
2. An increased interest in customer-service orientations
3. Increased confidence.
4. Self-rejection towards self acceptance
5. A more determined stance
6. Increased interest in health and education.
7. Narrow interests towards broad interests
8. Feeling more positive.
9. Self-rejection towards self acceptance
10. An increased focus towards ethics and the environment.
11. Narrow interests towards broad interests
12. More interest in state and federal government issues and initiatives.
13. Narrow interests towards broad interests
14. More considered approach to decisions and actions.
15. Impulsiveness towards rationality
16. Fairness in dealing with others
17. Less interest in watching television and more interest in reading about business.
18. Narrow interests towards broad interests improved concept of self.
19. Self-rejection towards self-acceptance
20. More willing to take on additional responsibilities and accept personal responsibility for actions.
21. Few responsibilities towards many responsibilities
22. A more balanced view towards family, business and further education
23. Feeling more enthusiastic.
24. Self-rejection towards self-acceptance
25. Honesty in dealing with others
26. More interest in stock market activities.
27. Narrow interests towards broad interests
28. Increased independence.
29. Dependence towards autonomy
30. A willingness to more positively consider empirical evidence rather than anecdotal data.
31. Subjectivity towards Objectivity.
32. Focus on particulars towards focus on principles
33. Increased activity.
34. Passivity towards activity
35. Being a better listener
36. Developing more reliability
37. More disciplined
38. Being less critical of others
39. Capable of being organized
40. Better idea of who I am and my place in the world.
41. Amorphous self-identity towards integrated self identity
42. More tolerance of situations that are not clear cut.
43. Need for certainty towards tolerance of ambiguity
44. Being more considerate.
45. Selfishness towards altruism

This result included one female who recorded a five-point decrease. A repeated measures analysis of variance revealed a significant move towards maturation in female trainees over the six-week period of the course.

Because of these findings, it was concluded that the trainees in this study made moves towards maturation over the six week course period.

Discussion

Several theoretical approaches seem to be capable of explaining the findings in relation to the trainees’ status as unemployed adults. For instance, Mezirow’s (1981) formulation of perspective transformation adequately describes the process through which the trainees engaged with CBT. From trainees’ initial disorienting dilemmas as long-term unemployed adults, to the final integrative step in the process: The processing of the material gained from the current experience and from pre-existing knowledge in order to explore its meaningfulness and usefulness (Boud and Walker, 1997, p. 21).

It was interesting to note that the dramatic perspective transformation, that is, the trainees’ new role in the capitalistic economic system – from
unemployed person to business owner, potential employer and accumulator of capital – was not only an opportunity for learning and growth, but waged an attack on the personal world of some trainees, to which they strongly reacted (Boud and Walker, 1997). The traumatic severity of the disorienting dilemmas: “involving difficult negotiations and compromise, stalling, backsliding, self-deception and failure” (Mezirow, 1981, cited in Boud and Walker, 1997, p. 66) were observable and very real factors influencing transformation. As a result, while most of the trainees adapted to their new roles as capitalists, some trainees did not attune themselves to the new philosophy or ideology and as a result dropped out of the course or failed to successfully compile their business plan. There was evidence of this in the research described above, with 60 trainees commencing, but only 55 completing the course.

Jahoda (1981) argued that there were five latent functions of employment which were psychologically beneficial: .

- the time structure work imposed on a waking day; .
- the regular social contacts work provided outside of the nuclear family; .
- the goals and purposes that work imposed and which transcended the individual; .
- the defined status and identity associated with work; and .
- the enforced activity of work

All five latent functions of work identified by Jahoda (1981) occurred for each of these trainees because of their participation in the course. For instance, for the trainees’ course attendance:

- imposed time structure on the days and weeks; .
- increased their social contact and participation; .
- engendered goals and purposes to be pursued; .
- gave each unemployed adult trainee a new status, that of course trainee; and
involved the individual with the enforced activities associated with successful course completion.

While the results of the research demonstrated that the training is capable of delivering both competency-referenced and non-competency referenced outcomes to trainees participating, there remains a lingering concern that the results might have occurred as a result of variables not addressed in the research. For instance, goal-setting procedures conducted prior to commencement of the training might have been influential for the results.

The reported research had several limitations.

- First, the research used only a small sample of trainees and focused on trainees in only one vocational area: business management.

- Second, the research did not establish whether or not all CBT unemployed adult learners in other vocational areas describe their learning in dispositional terms or make moves towards maturation.

- Third, the research did not determine through which mechanisms of learning or CBT the moves towards maturation were generated.

As well, the researcher could have asked many more questions. For example:

1. as a result of negative unemployment experiences, do all unemployed adult learners start with low levels of maturation?

2. Is it possible that all unemployed adult learners make moves towards maturation because of CBT?

3. Are there links between the perceived self-efficacy of unemployed adults and their dispositional reports and moves towards maturation?

Another aspect of the research findings not explored in the present paper was the link between moves towards maturation for trainees and individual
paradigm shift (Hill and McGowan, 1999).
These limitations and questions represent kindling fuel for future research.

Conclusions
The research resulted in four main findings.

1. First, that while training packages describe assessable outcomes in competency referenced terms, trainees describe learning outcomes in non-competency referenced terms.

2. Second, and further to the finding above, qualitative data revealed that vocational trainees describe their learning in terms of dispositional outcomes; that is, in terms of values, interests and attitudes.

3. Third, that for analytical purposes, dispositions can be categorised in terms of maturational concepts.

4. Fourth, that quantitative data revealed that trainees made moves towards maturation because of the training over the six-week period of the course.

This last finding suggests that CBT is effective. The findings have important ramifications for all future CBT trainees.

Worldwide, organisations are increasingly focussing on providing their employees with soft skills. These skills are often the determinants of how successful or effective a person will be. “This is especially true of the booming software industry, where quality of the people becomes the single-most important factor in determining the success or demise of the organisation. As employees become increasingly self-aware or emotionally mature they learn to work together in a synchronistic way and contribute more effectively both as individuals and as team-members,”
References


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