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Forum

Educating for competency and reflective practice: fostering a conjoint approach in education and training

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Keywords

Competences, Reflective learning, Training, Adult learners

Abstract

Looks initially at the theoretical foundations of both competency-based training (CBT) and reflective practice, then at current approaches to CBT and reflective practice. The compatibility of these two in educational practice, and the extent to which they might be combined in an educational or training context is discussed. CBT and reflective practice are not regarded as having a mutual equivalence in adult education and training. Rather, it is argued that they constitute two approaches within this educational field which function at different levels of teaching and learning and, as such, there exists at least the potential for them to be designed and developed so as to be complementary.

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Introduction

In an essay published last year, the philosopher Raimond Gaita considered what universities are, or at least in his view, ought to be educating for (Gaita, 2000). He proposes that education, in its best sense, consists of more than just “the relatively shallow idea of the acquisition of skills” (Gaita, 2000, p. 12), and goes on to suggest that it is in the deeper meaning of what is taught and learned, beyond the actual purpose or function of the professions for which students are being educated, that the value of education is to be found. Moreover, he proposes that just as educators should reflect on the meaning of what they are and what they do, so too should students be initiated into “such a life of critical reflection” (Gaita, 2000, p. 11).

Though the scope of Gaita’s essay is university education, and while some might take issue with him as being elitist in his characterisation of particular fields of education as inherently giving rise to serious reflection while others do not, his conviction that education at its best encompasses both practical training and critical reflection nevertheless has validity across a broader educational spectrum. This paper is concerned with the extent to which competency-based training and reflective practice might be combined in an educational or training context. This context may include what is offered in universities, but will also include programs in other institutes of further or higher education, as well as those provided by or through professional and community organisations.

Theoretical foundations of competency-based training

Though a sizeable body of literature about competency-based training has emerged in recent decades, writers in this field acknowledge the difficulty of framing a single and comprehensive definition of CBT (cf Goldhammer and Weitzel, 1981, p. 43). Much of what has been written is directed at refining and developing CBT programs, with less attention given to the philosophical foundations of this approach to adult education (Pithers, 1998, p. 3). Moreover, the practice of CBT ranges widely, affording

any attempt at a definition considerable breadth in some instances and quite restrictive parameters in another (Chappell *et al.*, 2000, pp. 192–4, 195–7). As Goldhammer and Weitzel (1981, p. 45) observe:

Arriving at a theoretical or operational definition of competency-based education is difficult, if not impossible, because of the nature of the movement itself. To a great extent, the definitional confusion can be traced to the variety of concepts that have been incorporated into the expanding movement during the past decade. Performance-based learning, mastery learning, proficiency, accountability, efficiency, equity of outcome, basics, generic skills, criterion-referenced testing, and minimal competency testing have all been subsumed under the guise of competency-based education.

The variety and multiplicity that are evident in the practice of CBT, which will be further discussed in a later section, highlight the difficulty to be found in trying to trace this approach to adult education back to a unified theoretical foundation. For the purpose of this paper, therefore, two theoretical standpoints will be described by way of establishing at least some sense of the philosophical foundations of CBT.

The first of these theoretical standpoints derives from the term, “competency-based training”. It seeks to define this educational approach to teaching and learning by identifying the core implications of the idea of competency. Competency is understood as the outcome of the conjoining of competence and attributes. Pithers (1998, p. 2) states that “Competency is about what attributes underlie successful performance”, and Rylatt and Lohan (1995, p. 47) state that “Competencies are a description of the essential skills, knowledge and attitudes required for effective performance in a work situation”. Here the skills, knowledge and attitudes constitute attributes, and competence resides in the possession of these attributes to a standard, which enables effective or successful performance. Chickering and Claxton (1981, pp. 11–19) propose four basic principles that underlie competence and “together lay the foundation for a general orientation that should probably undergird any efforts at (CBT) program development” (p. 19). These four principles are (p. 11):

- (1) Competence is internal and external, situational and personal.

- (2) Competence is limited by a person’s perceptions, neurological system, and character.
- (3) Achieving competence requires diverse learning styles.
- (4) Competence itself is a motivational force.

These principles imply that competency is, in a sense, more than the sum of its discrete parts, and involves “complex interactions among these” (Chickering and Claxton, 1981, p. 19), which can occasion both objective and subjective learning and practice outcomes. As well, it is noted here that the third of these basic principles, regarding diverse learning styles, sees learning as a four-stage learning cycle, one ability of which is “reflective observation”. While the emphasis here is on observing, the descriptor of this ability states that: “The learner observes and reflects on the experience from different perspectives” (Chickering and Claxton, 1981, p. 17).

The second theoretical standpoint derives from two contrasting views of competency-based education and training. Chappell *et al.* (2000, pp. 192–7) name these views “narrow” and “broad”. By the “narrow view” they refer to the conviction that:

... standardised training outcomes can be achieved by all learners if a thorough analysis of the behaviours demonstrated by any competent performer is undertaken and then transposed onto a set of standardised learning sequences (p. 192).

This view gives rise to CBT practices which are primarily or solely concerned with achieving prespecified training goals and meeting minimum skills standards. This narrow view of competence is often criticised as not taking adequate account of the social, intellectual, emotional and process facets of the various educational settings and circumstances in which CBT is practised. In contrast, the “broader view” of competency-based learning:

... does not confuse performance with competence, and argues that a large variety of attributes that underpin performance must be considered in any competency analysis. It rejects single acceptable outcomes as being indicative of competent performance, proposing that in most situations multivariable contexts inevitably lead to multivariable outcomes. ... It emphasises human agency and social interrelations in competency descriptions. It regards competence as developmental and elaborative rather than static and minimalist. (Chappell *et al.*, 2000, pp. 196–7).

This view can lead to CBT practices which enable an integrated learning experience, and which tend to be open-ended in terms of potential competency outcomes. By steering the emphasis away from single competency outcomes, this broader view of what CBT is about provides opportunity for the development of descriptors and assessment of competence that are both objective and subjective, and thereby have some degree of flexibility rather than being set as absolutes.

While it is evident from these two different theories that CBT “revolves around no true theoretical core” (Goldhammer and Weitzel 1981, p. 60), these philosophical standpoints nevertheless can be recognised as foundational in the diverse practice of this approach to educating adults. As will become clear, however, the emphasis given to CBT programs at the expense of formulating the theoretical underpinnings of these programs, gives rise to criticism and questioning of the CBT approach and to its validity as a means of education and training (Pithers, 1998, p. 3).

Theoretical foundations of reflective practice

The advent of reflective practice is more recent than competency-based training. This concept has its origins in the conviction that in the context of professional practice, problems and other complex matters “are best dealt with by people who can flexibly and intuitively draw on their knowledge of practice (or their informal theory) rather than apply rules drawn from formal theory” (Foley, 2000b, p. 51).

Reflective practice also finds expression in such concepts as “reflection-in-action” and “critical thinking”. The foundations of reflective practice can be identified in differing but complementary theories.

Perhaps foremost among these theories is the concept of “reflection-in-action” proposed by Schon. His theory seeks to move from what he identifies as the dominant epistemology of professional practice, namely “technical rationality”, to a more reflective and intuitive approach to dealing with complex and problematic matters. Schon states that: “According to the model of technical rationality . . . professional activity consists in instrumental problem solving made rigorous by the application of scientific theory and technique” (Schon, 1983, p. 21),

whereas reflection-in-action involves “the idea that a kind of knowing is inherent in intelligent action” (p. 50). The term “reflection-in-action” is carefully chosen by Schon to communicate precisely his concept, most particularly to differentiate what he is proposing from what might be described as “reflection-on-action”. This latter concept is essentially a retrospective process, “in which practitioners return to the experience, attend to their own and others’ feelings about the experience, and re-evaluate the experience” (Foley, 2000b, p. 52; cf. Schon 1983, pp. 61–62). By contrast, reflection-in-action involves reflecting during practice and is an art which exercises a practitioners’ knowing-in-practice. The key to this form of reflective practice is that it occurs in the “action-present”, “the zone of time in which action can still make a difference to the situation” (Schon, 1983, p. 62), that is, during the practitioner’s responding or choosing to respond in a given situation. As a process, reflection-in-action tends to be informal, in that it does not involve the application of set procedures or techniques in resolving an issue.

Schon’s concept of reflection-in-action can be related to Polanyi’s earlier theory of “tacit knowledge”. According to Foley (2000a, p. 12): “Polanyi argues that some things ‘we just know’: we have knowledge, which we use, but we do not know it as knowledge; it is buried, unarticulated, implicit.” Reflection enables practitioners to access this tacit knowledge.

Another concept of reflective practice is “critical thinking”. It has emerged in the school of thought known as “transformational learning”, which produces changes which “have a significant impact on the learner’s subsequent experience” (Clark, 1993, p. 47). That is to say, transformational learning is intended to have the sort of impact on people that shapes their lives and influences their practice or actions. Critical thinking (Foley 2000b, p. 52, citing, 1995) is concerned with encouraging people to:

- analyse the assumptions underlying their “traditional beliefs, values, behaviours and social structures”;
- be aware that these assumptions are “historically and culturally specific”;
- explore “alternatives to the current ways of thinking and living”; and
- be sceptical of claims to universality.

Foley (2000b, p. 52) further observes that “critical thinking goes part way in the direction of critical reflection”, which “has as its aim the identification and challenging of people’s assumptions, and radical social change ...”.

These theories of reflective practice provide for practitioners to assume at least two educative roles: “that of participant in the experience and that of observer-commentator” (Newman, 1999, p. 19). While the various aptitudes, skills and facets of reflective practice, which together give form to these theories, may receive discrete treatment in the preceding description, in practice they become “interactive and are reciprocally inter-dependent” (Bright, 1996, p. 169).

Current practices in competency-based training

As has already been noted, the practice of competency-based training has varied greatly since it was first introduced. Typically, earlier CBT programs adopted a “narrow instrumental conception of competence” (Chappell *et al.*, 2000, p. 196). This reflected the general tendency of CBT to “elevate the technical over the interpersonal and the individual over the group” (Chappell *et al.*, 2000, p. 194) so as to develop the specific, performance-based competencies which are the desired outcome of this approach to education (Rylatt and Lohan, 1995, p. 51). A significant limitation of this earlier approach to CBT was that it ignored the relationship between tasks, and overlooked the links between skills, knowledge, theory, attitudes, and the context in which a competence is taught and learned and then later practiced (Chappell *et al.*, 2000, p. 195; Newman, 1999, p. 42).

As the practice of CBT has evolved, greater emphasis has been given to the process of learning, and the relationships between different facets of attaining competency are acknowledged. In this style of CBT, for example, “complex combinations of attributes in performance criteria are brought together and are written at a reasonable level of generality, taking into account generic competencies” (Chappell *et al.*, 2000,

p. 199). This enables the CBT process to take account of a person’s prior learning and of competencies already attained (Nicholson and Bridgland, 1999, p. 114). It allows for some flexibility and self-directed learning, and trains people according to best-practice benchmarks rather than minimum standards of performance (Rylatt and Lohan, 1995, pp. 52-3). It engages people throughout the training process by communicating “the why, what, how and when” of the process, and by involving individuals in determining “what their ... competencies are at present, identifying what they need to learn”, and making self-assessments throughout the process to the extent that “they should know they can demonstrate competence *before* they are formally assessed” (Nicholson and Bridgland, 1999, p. 114).

When competency-based approaches to adult learning are applied more generally, the resulting processes of teaching and learning can take on the best attributes of other approaches to learning. Chappell *et al.* (2000, p. 200) identify the characteristics of this application of CBT:

The content and processes of learning are integrated. Independent learning becomes a feature of the curriculum. Peer and group learning activities are included, as are collaborative learning and learning contracts; self-assessment becomes a central feature of the learning process.

This application of CBT through processes such as problem-based learning (cf Chappell *et al.*, 2000, pp. 200-1), functional analysis, and critical incident technique (cf Rylatt and Lohan, 1995, p. 65) enables learners to identify and develop both general and specific competencies. These may include competency in collaborative practice in both the learning context and the professional situation, in the use of creative and critical reasoning, and in adapting to changed or changing circumstances.

Finally, in this consideration of current practices in competency-based training, mention needs to be made of the key issues and criticisms regarding this approach to teaching and learning. Though CBT has been adopted by many sectors and endorsed as the preferred means of education, there are nevertheless a number of questions about the extent to which it achieves its intended educational ends. Probably the most frequently made criticism of CBT is its

tendency “to overemphasise the routine, visible aspects of work and to neglect ‘under-the-surface’ skills like problem solving and information handling” (Field, 2000, p. 168). This resonates with the caution expressed by Pickett (1996, p. 3, cited in Nicholson and Bridgland 1999, p. 108) that CBT may leave people with “inadequate underlying attributes for adaptability, innovation and teamwork in new learning situations ... It (CBT) is concerned with the observable and the measurable. Higher order skills are dismissed ...”. Field (2000, p. 168) goes on to observe:

Moreover, the process of identifying and then assessing competence can get bogged down in excessively wordy detail. In some industries, the literacy demands of the competency standards far exceed the literacy skills of the people doing the work. When converted into the jargon of competence, it can be hard to recognise what one does amid all the abstractions.

When such eventualities arise from the use of CBT, not only does this impact on individual learners, but on the learning aspect of the organisation as well.

The effectiveness of CBT as an educational approach is also questioned by some. Smith and Keating (1997, p. 150) note that: “Very little information is available about whether CBT improves students’ competence, although if CBT was designed to do anything, it was designed to do this”. They further note, with some caution, that on the basis of educators’ observations, there is a sizeable body of opinion that CBT has to varying degrees hindered rather than enhanced students’ competency in effective skill performance, though it remains difficult to ascertain the veracity of this claim.

By way of a final remark about the effectiveness of the practice of CBT, there exists considerable criticism of this approach to teaching and learning, but this criticism is based less on empirical research than on experience, observation, and perceived flaws in CBT theory (Field, 2000, pp. 168–9; Newman 1999, pp. 42, 156; Smith and Keating, 1997, pp. 150–1). Newman (1999, pp. 75–6) holds that: “in the interests of everyone the principles behind competency-based training should have been subjected to critical scrutiny”, yet given the range of CBT practices deriving from these principles, it would seem difficult if not impossible to undertake a comprehensive

appraisal of this approach to teaching and learning. Moreover, as the CBT process has become less prescriptive and more accommodating of what might be described as its subjective dimension, it has become more difficult to identify the criteria by which an objective evaluation of CBT effectiveness might be made.

Current practices in reflective practice

Since the inception of reflective practice, it has, like competency-based training, widened in its scope. Brookfield (1995, p. 7) observes that: “One of the consequences of a concept’s popularity is an increased malleability in its meaning. As interest in reflective practice has widened, so have the interpretations given to it.” A central concern for reflective practitioners has been identifying what constitutes reflection, especially the sort of reflection which is necessary for reflective practice. Reflection is not inherently critical, and nor is non-critical reflection without value in the teaching and learning process. Such reflection can lead, for example, to an awareness of the connections, influences and contradictions which exist between the learning context and the wider world, without necessarily moving to recognition and understanding of the prevailing underlying assumptions in these connections, influences and contradictions (Brookfield, 1995, p. 8). Reflection becomes critical when it has two distinctive purposes:

The first is to understand how considerations of power undergird, frame, and distort educational processes and interactions. The second is to question the assumptions and practices that seem to make our ... lives easier but actually work against our own best long-term interests (Brookfield 1995, p. 8).

Critical reflection begins to occur when “people question information, ideas, or behaviour” (Merriam and Brockett, 1997, p. 284). It leads to recognition of the range of subtleties that influence an educational situation – the physical, psychological, social, relational, and personal characteristics of those who are involved in the teaching and learning process (Merriam and Brockett, 1997, p. 285).

Critical reflection derives its value from the service it renders to its practitioners. Merriam

and Brockett (1997, p. 285) identify this service principally as:

... the potential to broaden the view of what it means to professionalize – primarily because it reframes the issue in a way that extends beyond the boundaries of technical rationality found in most traditional models of professionalization.

In similar vein, Gobbi (1995, p. 71) identifies this service as:

Through the empowerment and development of individuals, reflection may be perceived as a vehicle for enhancing altruistic notions of service, whilst furthering an occupational goal of professional status, in which an *oro-practical* [sic] tradition seeks legitimacy for its discourse and knowing.

Brookfield (1995, pp. 22–6) offers six reasons why critical reflection is important. These are: it helps practitioners to take informed actions, to develop a rationale for practice, to avoid self-blaming, it grounds practitioners emotionally, it enlivens the learning environment, and it increases democratic trust. In so doing, critical reflection urges the creation of conditions in which each person is respected, valued, and heard.

Despite the enthusiasm with which critical reflection has been adopted by many, it nevertheless has its critics. Some take issue with the limitations that have emerged in the gap between Schon's theory of reflection-in-action and the professional practice of this concept. Others express concerns about the efficiency of reflective practice, especially given the diversity of learners' abilities and thinking styles. Of the former, significant differences have been found between Schon's sample group in his educational setting and other groups and educators in their educational setting (Gobbi, 1995, p. 72). Assumptions which Schon could make about reflective practice, given his sample groups, cannot necessarily be made by others. With regard to the reflective practitioner, reflection, and learning, Gobbi (1995, p. 72) observes that such "assumptions concern not only an individual's capacity and consent to accept change or challenge, but also the educator or supervisor's right to initiate these processes". She also notes that a limitation of Schon's theory which has been pointed out by others, "namely that he neglected the importance of reflection before action" (Gobbi, 1995, p. 71), was evident in the nurse education, practice and research which is the context of her paper. Other concerns about Schon's

theory of reflective practice are identified by Bright (1996, pp. 162–3):

At the "micro" level of detailed theoretical and practical application, "reflective practice" has proved problematic. Although it does possess a "closed" set of explicit skills, at both theoretical and practical levels it is a complex and ambiguous concept, which refers to situational uncertainty, unpredictability, indeterminate knowledge, regressive casual mechanisms, and high levels of professional discretion and choice. ... At the implementation, practical level there are problems in developing or inculcating features and skills of "reflective practice" within professional initial and post-initial training.

The concern here is that if reflective practice cannot be taught, which Schon himself holds, then "the trainers of teachers simply do not know how to develop these features in student teachers within teaching practice" (Bright, 1996, p. 163). Similar problems also have emerged within professional groups which have adopted reflective practice. In both of these cases, it is possible that problems in implementing reflective practice "may be due in part to a misunderstanding of the concept of 'reflective practice' and its necessary skills and features" (Bright, 1996, p. 164). Indeed, such misunderstanding may be at the root of much of the criticism of and confusion about reflective practice. As Bright states, the acceptance and implementation of reflective practice "must be predicated on an accurate and full understanding of 'reflective practice' and its implications" (1996, p. 183). Essential for this accurate and full understanding is knowing precisely and clearly what constitutes reflection, and what does not. Cornford (1997, p. 132) holds that reflective practice is possible only when reflection is "predicated upon something to think about and the ability to engage in critical thinking".

From a different standpoint, an inquiry undertaken by Ferry and Ross-Gordon (1998) into Schon's epistemology of reflective practice, which sought "to document the different ways novice and experienced adult educators use reflection-in-action in resolving practice problems as well as to provide validation for aspects of Schon's theory" (Ferry and Ross-Gordon, 1998, p. 107), selectively endorses reflection-in-action. They conclude that:

The study's findings support aspects of Schon's theory proposing that reflection-in-action goes beyond "statable rules" by devising new methods of reasoning ... The study's results provide modest support for the crux of Schon's

reflection-in-action model in which generated alternative solutions are tested-in-action (Ferry and Ross-Gordon 1998, pp. 107–8).

These conclusions are, however, the result of one of the relatively few critical studies of the effectiveness of reflective practice that have been undertaken. Where the effectiveness of reflective practice has been measured by empirical methods, other studies have arrived at different conclusions to Ferry and Gordon. Cornford (1997, p. 129) reports that:

Results from the few published empirical studies attempting to quantify the effects [of] reflective thinking programs upon beginning teacher thought and classroom performance are disappointing... Other studies have also found that programs specifically directed at increasing reflective thinking did not necessarily achieve this goal... Even the relatively closely structured, laboratory based, reflective teaching programs... have not produced results generally favouring the reflective approach.

It is evident in the range of opinion and data about reflective practice that its advocates and detractors have had markedly different experiences and degrees of success in using this approach. The diversity of interpretation and implementation of reflective practice – and this is true also of competency-based education – means that it is not possible to speak of these approaches to teaching and learning as if each is represented in a consistent and unified practice.

Are competency-based training and reflective practice compatible in practice?

Are the concepts of competency-based training and reflective practice compatible in practice? The answer is a tentative “yes”. Tentative more because it seems somewhat problematic to combine the theories that underpin these two concepts, than it is to combine them in practice in an educational or training context. In the latter it becomes more a question of the extent to which and the way in which the practice of these two concepts might be combined. Here practitioners are already proposing and implementing approaches to adult education and training which endeavour to take into account the attributes of broader forms of CBT and open interpretations of reflective practice. For example, Mayfield (1985, p. 242) identifies the following characteristics of a profession,

the education and training for which can only be achieved by use of both competency-based and reflective practices:

- Formal training which aims at mastery of a general cultural tradition in a manner emphasizing its intellectual components and the development of skills in some form of its application – a body of theoretical lore and a fixed technique referent [*sic*] to some understanding of the lore.
- A mode of validating the adequacy of training and the competency of trained individuals.
- A means of assuring the socially responsible use of competence.

These characteristics imply the need to include both generic and specific competencies in training programs, together with developing a knowledge base and the analytic tools appropriate to any given field. Mayfield goes on to observe that beyond attaining particular professional competencies, there needs to be an understanding of these in the wider context of the profession, and in turn, a capacity for reflection:

We have come to realize how firmly the practice... is grounded in the understanding of the information process, its internal dynamics, the forces that maintain or change it, and its possibilities for further expansion or development... Creative professionals... think hard about what they are doing... A competency-oriented program must direct itself to the need for a knowledge base and for the conceptual and analytic tools essential for systems diagnosis, planning and evaluation, providing opportunities for practising analysis, diagnosis, creative synthesis and model building. (Mayfield, 1985, pp. 244–5).

The point is clear – competency in professional practice is interdependent with the capacity to go beyond the competent performance of one’s art to reflective practice about one’s art.

A similar view is expressed by Pithers (1998, p. 20), who states that: “Learners must be taught to reflect, think and plan as well as to respond routinely.” He goes on to stress that the ability to respond to problems “should not just be an unplanned peripheral outcome of training” (p. 20), but needs to be learned. Herein lies one of the problems in combining CBT and reflective practice. For while specific and generic competencies can be learned in the CBT process, it is more

difficult, and some would say impossible, to learn reflective practice. Moreover, reflective practice cannot be reduced to just another competency to be learned, however generic in character, as it is an approach to learning which exists at an altogether different level than CBT (Newman, 1999, p. 19). Rather, it would seem that the introduction of reflective practice to learners needs to parallel their competency-based training, such that from the outset they are reflecting on the skills and the application of these skills which they are learning, and on the context of their learning and practice. This would suggest that it is important to look to how adults think and learn.

Contemporary studies of adult learning, while not often dealing specifically with competency-based training and reflective practice, nevertheless offer implicit support for the combining of these concepts in practice. Sternberg (1997, p. 139) observes that:

The reflective person is one who completes less of the task, but is more careful not to make mistakes in what he or she does complete. The individual usually does not make a conscious choice: He or she does what feels natural.

This observation is consistent with the CBT principle that competency is a matter of skilfully completing a task to a given standard, in which process time is of less importance (Smith and Keating, 1997, p. 146). The reference to not making a conscious choice and doing what feels natural is consistent with Schon's description of reflection-in-action as being informal and intuitive and to Polanyi's concept of tacit knowledge. Other research into adult learning has shown the significance of the learners' perspectives in their experience of education and training (Merriam, 1993a, pp. 8–10). In contrast with a perspective which is limited to a particular learning activity, adults will choose perspectives which will enable them to reflect and better help them understand the meaning of what they are doing (Merriam, 1993a, p. 9). This becomes possible when educators engage learners in conversation, promote reflection, ask learners to accept responsibility for their own learning, and encourage their analysis of the learning environment (Hiemstra, 1993, p. 41).

From a different standpoint, Pogson and Tennant (2000, p. 342), noting the long-standing recognition that adults have

differing practical and theoretical capacities and abilities, assert that: "Now studies of everyday skills and everyday thought have opened up the ordinary aspects of life and disclosed complexity and creativity in the execution of even simple tasks". Reflective practice brings learners to awareness and understanding of the meanings disclosed by and in such activity.

However, CBT and reflective practice are to be combined, and to whatever extent, it seems clear that there are benefits for educators and learners in the complementary practice of these two concepts. One schema which presents the combination of a learning activity – which could be a CBT component – and reflective practice is described by Andresen *et al.* (2000, pp. 232–3) in the context of experienced-based learning. This model posits three stages of reflection:

- (1) preparation for experiential events, where it is important to focus on the learner, the learning milieu and the skills and strategies employed in reflection;
- (2) reflection during an experiential activity, with its phases of noticing and intervening; and
- (3) reflection after the event, involving the individual in returning to experience, attending to feelings, and re-evaluating the experience (p. 232).

In this schema, reflection occurs prior to, during and after the learning activity. Learning thus becomes a continuous process, so that the specific skills which would be attained as discrete competencies in the CBT mode of such an approach to education or training would be connected by reflective practice with each other, with the contexts of learning and practice, and with the learner's personal foundation of experience (Andresen *et al.*, 2000, pp. 232–3). Significantly in this process, reflection-in-action is a key means of learning during the learner's experience of a given educational or training activity. Wilson (1993, p. 75) concurs with this in his view of Schon, whose "research and theories about reflection-in-action fundamentally situate the most powerful knowledgeability of humans in the doing of activities ...". What may prove problematic in implementing this schema is not the combining of these concepts of reflective practice and CBT, but the uncertainty regarding how reflective practice

can be learned and developed by educators and learners alike.

Conclusion

Competency-based training has as its purpose to ensure that individuals attain accepted specific and generic skills in the practice of their professions, by establishing standards which “are constructed as being generally applicable across the different contexts and situations in which learners and workers exist” (Chappell *et al.* 2000, p. 204).

Reflective practice endeavours, ideally, to enable individuals to reach the point in the practice of their professions where “reflection in action becomes almost automatic” and they thereby ‘just know’ what to do” (Merriam and Brockett, 1997, p. 285). This paper has been concerned with these two educational concepts and the practice of them, and the extent to which they might be combined in an educational or training context. It is evident that while the two concepts stem from distinct theoretical foundations, there nevertheless exists between them a compatibility or complementarity that makes it possible for them to be combined in the practice of education or training. Merriam (1993b, pp. 109–10) writes of the emergence of “a more comprehensive understanding of adult learning, an understanding that is dynamic ...”. The combining of CBT and reflective practice establishes for educators and learners just such a comprehensive and dynamic process, in which connections between apparently disparate activities, skills and contexts can become clear, in which reflection is grounded in real experience rather than remaining conceptual, and in which the meanings attributed to all facets of education, training and work are brought to awareness, thereby enhancing professional practice.

References

- Andresen, L., Boud, D. and Cohen, R. (2000), “Experienced-based learning”, in Foley, G. (Ed.), *Understanding Adult Education and Training*, 2nd ed., Allen & Unwin, Sydney, pp. 225–39.
- Bright, B. (1996), “Reflecting on ‘reflective practice’”, *Studies in the Education of Adults*, Vol. 28 No. 2, pp. 162–84.
- Brookfield, S.D. (1995), *Becoming a Critically Reflective Teacher*, Jossey-Bass, San Francisco, CA.
- Chappell, C., Gonczi, A. and Hager, P. (2000), “Competency-based education”, in Foley, G. (Ed.), *Understanding Adult Education and Training*, 2nd ed., Allen & Unwin, Sydney, pp. 191–205.
- Chickering, A. and Claxton, C. (1981), “What is competence”, in Nickse, R. (Ed.), *Competency-Based Education: Beyond Minimum Competency Testing*, Teachers College Press, New York, NY, pp. 5–41.
- Clark, M.C. (1993), “Transformational learning”, in *An Update on Adult Learning Theory*, Jossey-Bass, San Francisco, CA, pp. 47–56.
- Cornford, I. (1997), “Reflective practices and vocational teacher education: where to from here?”, in *Good Thinking, Good Practice*, Conference papers, Griffith University, Brisbane, pp. 127–37.
- Ferry, N. and Ross-Gordon, J. (1998), “An inquiry into Schon’s epistemology of practice: exploring links between experience and reflective practice”, *Adult Education Quarterly*, Vol. 48 No. 2, pp. 98–112.
- Field, L. (2000), “Organisational learning: basic concepts”, in Foley, G. (Ed.), *Understanding Adult Education and Training*, 2nd ed., Allen & Unwin, Sydney, pp. 159–73.
- Foley, G. (2000a), “A framework for understanding adult learning and education”, in Foley, G. (Ed.), *Understanding Adult Education and Training*, 2nd ed., Allen & Unwin, Sydney, pp. 7–22.
- Foley, G. (2000b), “Teaching adults”, in Foley, G. (Ed.), *Understanding Adult Education and Training*, 2nd ed., Allen & Unwin, Sydney, pp. 34–58.
- Gaita, R. (2000), “Re-enchantment of learning”, *The Australian’s Review of Books*, March, pp. 11–13.
- Gobbi, M. (1995), “Where has Schon led us? The impact of ‘The reflective practitioner’ upon nurse education, practice and research”, in Bryant, I. (Ed.), *Celebrating Adult Education*, Conference papers, University of Southampton, Southampton, pp. 69–74.
- Goldhammer, K. and Weitzel, B. (1981), “What is competency-based education?”, in Nickse, R. (Ed.) *Competency-Based Education: Beyond Minimum Competency Testing*, Teachers College Press, New York, NY, pp. 42–61.
- Hiemstra, R. (1993), “Three underdeveloped models for adult learning”, in *An Update on Adult Learning Theory*, Jossey-Bass, San Francisco, CA, pp. 37–46.
- Mayfield, M.K. (1985), “Competence: a context for professional development”, in Horne, E.E. (Ed.), *Continuing Education: Issues and Challenges*, World Conference on Continuing Education for the Library and Information Science Professions, August 1985, K.G. Saur, New York, NY, pp. 241–51.
- Merriam, S.B. (1993a), “Adult learning: Where have we come from? Where are we headed?”, in *An Update on Adult Learning Theory*, Jossey-Bass, San Francisco, CA, pp. 5–14.
- Merriam, S.B. (1993b), “Taking stock”, in *An Update on Adult Learning Theory*, Jossey-Bass, San Francisco, CA, pp. 105–10.
- Merriam, S.B. and Brockett, R.G. (1997), *The Profession and Practice of Adult Education: An Introduction*, Jossey-Bass, San Francisco, CA.

- Newman, M. (1999), *Maeler's Regard: Images of Adult Learning*, Stewart Victor Publishing, Sydney.
- Nicholson, J. and Bridgland, A. (1999), "Library industry national training package: Friend or foe for CPE?", in Brennan, B. (Ed.), *Professionals at Work: CPE and Practitioners' Workplaces*, University of New England, Armidale, pp. 106-17.
- Pickett, C. (1996), "CBT – Are we missing something?", *Australian Training Review*, January/February, p. 3.
- Pithers, R.T. (1998), *Improving Learning through Effective Training*, Social Science Press, Katoomba.
- Pogson, P. and Tennant, M. (2000), "Understanding adult learners", in Foley, G. (Ed.), *Understanding Adult Education and Training*, 2nd ed., Allen & Unwin, Sydney, pp. 23-33.
- Rylatt, A. and Lohan, K. (1995), *Creating Training Miracles*, Prentice-Hall, Sydney.
- Schon, D. (1983), *The Reflective Practitioner*, Basic Books, New York, NY.
- Smith, E. and Keating, J. (1997), *Making Sense of Training Reform and Competency-based Education*, Social Science Press, Blue Mountains.
- Sternberg, R.J. (1997), *Thinking Styles*, Cambridge University Press, Cambridge.
- Wilson, A.L. (1993), "The promise of situated cognition", in *An Update on Adult Learning Theory*, Jossey-Bass, San Francisco, CA, pp. 71-9.