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ABSTRACT

Proponents of competency-based education and training (CBET) promote it as a way to improve the correspondence between education/training and workplace requirements. CBET's opponents consider it excessively reductionist, narrow, and rigid, as well as theoretically, empirically, and pedagogically unsound. The following are among the issues surrounding CBET: (1) the relative merits of the behaviorist and holistic approaches to CBET; (2) the question of whether CBET gives employers what they want (alternatively, the question of whether CBET's focus on qualifications related to required performance in the workplace outweighs its costs, uncertain suitability for their work force, and confusing language/jargon); and (3) the question of whether CBET's curriculum is being driven by government, employers, or educational institutions). Some have suggested that the economic basis of CBET neglects the wider cultural and social purposes of learning and the rights of all stakeholders to determine those purposes. Others have asserted that, with more emphasis on a holistic conception of competence and education for citizenship and cultural understanding, well-done CBET can find a realistic middle ground between the humanist and behaviorist perspectives, thereby taking another step toward breaking down the divisions between general and vocational education. (Contains 18 references) (MN)

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## Competency-Based Education and Training Myths and Realities

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## Competency-Based Education and Training

Competency-based education is perceived by some as *the* answer, by others as the *wrong* answer, to the improvement of education and training for the complex contemporary world (Harris et al. 1995). Popular in the United States in the 1970s in the performance-based vocational teacher education movement, competency approaches are riding a new wave in the 1990s with the National Vocational Qualifications (NVQs) system in England and Wales (begun in 1986), New Zealand's National Qualifications Framework, the competency standards endorsed by Australia's National Training Board (NTB), and the Secretary's Commission on Achieving Necessary Skills (SCANS) and the National Skills Standards initiative in the United States. Competency standards are propelled by a strong political impetus as the way to prepare the work force for the competitive global economy. At the same time, a growing chorus of critics argues that the approach is conceptually confused, empirically flawed, and inadequate for the needs of a learning society (Chappell 1996; Ecclestone 1997; Hyland 1994). Much of the debate is taking place in Britain and Australia, where there has been more time to examine the impact of the competency approach, and this publication therefore focuses on literature from those countries. However, the issues are relevant to vocational education anywhere. This publication looks at the claims of both sides in an attempt to locate the reality of competency-based education and training (CBET).

### Competence: In the Eye of the Beholder?

Competence is a contested concept, the meaning of which is shaped by those who use it (Chappell 1996). Proponents of CBET promote it as a way to improve the correspondence between education/training and workplace requirements (Harris et al. 1995). It is individualized, emphasizes outcomes (what individuals know and can do), and allows flexible pathways for achieving the outcomes. It makes as clear as possible what is to be achieved and the standards for measuring achievement. In theory, it overcomes the divide between hands and mind, theory and practice, general and vocational education.

For its opponents, CBET is excessively reductionist, narrow, rigid, atomized, and theoretically, empirically, and pedagogically unsound (Chappell 1996; Hyland 1994). Both sides seem to agree that these criticisms are valid when competence is conceptualized in behavioral terms. The behaviorist framework breaks down competence into the performance of discrete tasks, identified by functional analysis of work roles. This analysis is the basis for competency statements or standards upon which competence is assessed and toward achievement of which CBET is directed.

Behaviorism is criticized for ignoring the connections between tasks; the attributes that underlie performance; the meaning, intention, or disposition to act; the context of performance; and the effect of interpersonal and ethical aspects (Gonczi 1997; Hyland 1994). Because of the complexity and indeterminate nature of real-world situations, "behavioral objectives can never be achieved in practice with the precision they offer in theory" (Jackson 1994, p. 139). Instead, studies of the development of expertise as well as the constructivist view of learning suggest that people make judgments and review, reflect on, and change behavior, continually reconstructing relevant and useful knowledge as they interact with a situation (Hodkinson and Issitt 1995; Hyland 1994).

Another major objection is that "100 years of educational, psychological, organizational, and cultural research has largely been ig-

nored" (Collins 1993, p. 89). In particular, the behaviorist conception of "skill" and "competence" as individual and value free is contradicted by recent research suggesting that skills are social constructions or cultural practices (Collins 1993; Harris et al. 1995). In addition, "the validity of measurement techniques associated with the behavioral model of learning are problematic as indicators of significant learning" (Barrie and Pace 1997, p. 340). In particular, the "checklist" approach, in which a competency is achieved/not achieved or a person can/cannot perform a particular task is considered simplistic and demotivating, suggesting a "minimum" level of acceptable performance rather than a standard of excellence.

Although behaviorism is only one competency-based approach, it has been the most promoted and influential (Jones and Moore 1995), in part because it is easier to specify task-based behaviors than identify and describe underlying attributes (Harris et al. 1995). However, Hager (1995) suggests that many critics are arguing against this old, discredited model when in reality CBET has accommodated different conceptions of competence. One of these involves the inclusion of generic attributes underlying competent performance (such as knowledge and understanding). In Britain, the original NVQ framework was supplemented in 1991 with the General NVQs, which include "core skills" such as communication, numeracy, information technology, interpersonal competence, and problem solving (Hyland 1994). Similarly, Australia's NTB endorsed a broader view of "key competencies," New Zealand identified "essential skills," and the SCANS report included "foundation skills" (Harris et al. 1995). However, there are still disagreements over the existence of such context-free attributes, the transferability of these attributes, and the attempt to describe knowledge, understanding, cognition, and attitudes as behavioral objectives when they are not behaviors (Gonczi 1997; Hyland 1994).

An even broader approach to competence is variously termed integrated, holistic, or relational. An integrated view sees competence as a complex combination of knowledge, attitudes, skills, and values displayed in the context of task performance (Gonczi 1997; Hager 1995). This approach recognizes levels of competence—entry/novice, experienced, specialist—rather than a once for all attainment. Interpreted broadly, competence is not trained behavior but thoughtful capabilities and a developmental process (Barrie and Pace 1997; Chappell 1996). Rather than a single acceptable outcome, performance may be demonstrable and/or defensible in variable contexts (Chappell 1996). A relational view is similarly holistic, acknowledging the cultural context and social practices involved in competent performance, reflecting how personal attributes are used to achieve outcomes in jobs located within organizational relationships located within broader relationships with the labor market and society (Jones and Moore 1995; Toohey et al. 1995).

CBET interpreted broadly could thus be compatible with a cognitive view of learning, unlike its behaviorist form, which Hyland (1994) declares "largely unsuitable for the teaching and learning which goes on in higher education institutions, whether this occurs in general/academic or professional/vocational contexts" (p. 336). However, in practice, competencies are being specified and assessed too narrowly (Toohey et al. 1995) and can work to hinder education and training, especially if used as a curriculum document to teach discrete tasks or used to assess superficial aspects (the checklist approach) (Hager 1995). Although competency certificates such as NVQs are awarded independently of the mode of attaining the competency, in practice, Hyland (1994) charges, competency standards drive the curriculum, narrowing content. Even

the broader competencies, some say, still emphasize performance and outcomes over knowledge and cognition (Jackson 1994; Hyland 1994).

### Does CBET Give Employers What They Want?

One of the major arguments for CBET is that it gives individuals opportunities to "achieve qualifications that relate to required performance in the workplace" (Erridge and Perry 1994, p. 140) and consequently satisfies employers' needs for a skilled work force. However, is it actually better than other methods at meeting industry needs? A great deal of research has been conducted on the NVQ approach. Toye and Vigor (1994) found that employers are aware of its potential benefits but cited major costs in delivery, uncertain suitability for their work force, and confusing language/jargon as barriers. Fuller and John (1995) identified some issues surrounding the use of NVQs in the offshore industry. First, the credibility of competency standards depend on how they reflect industry standards, but company-specific norms were more likely to take precedence: employers were "loath to replace existing standards that are based on context-specific criteria with a much less context-dependent generic model" (p. 47). Second, although trainers were enthusiastic about implementing competency-based approaches, they relied more on "established customs and practices and existing craft qualifications" (p. 47). Mulcahy (1996) found that vocational educators using formal competency standards manage to "subvert" them by working in alternative measures based on the traditions and practices of assembling knowledge through craft.

Jackson (1994) maintains that NVQs are more bureaucratic, cumbersome, time consuming, and costly for employers to implement. Hyland's (1996) survey of numerous NVQ studies found employers "largely indifferent to or ignorant about the nature and purpose of NVQs" (p. 35) and reluctant to participate in work-based assessment; there were many concerns about who was represented on the industry standards-setting boards and whether they were truly employer led.

### Who's Driving the Curriculum?

The notion that CBET is a teaching-learning process is, to some, a myth or at least a polite fiction. Jackson (1994) asserts that debate should not be about the merits of CBET as an educational method because it is actually a policy approach. In the 1990s, "economic factors are increasingly becoming the rationale for educational policy decisions and the means of measuring their success" (Harris et al. 1995, p. 11). The competency standards movement in Britain, Australia, New Zealand, and the United States is closely tied to political initiatives for global competitiveness and accountability (Chappell 1996; Jackson 1994). The fundamental issue is whether and to what extent vocationalism should drive education.

For opponents, the competency movement is based on the assumptions that more education and training results in better economic performance and that serving industry needs best serves individual and societal needs (Goncz 1997). Much of the debate can be seen as a power struggle over who determines educational goals, standards, and curriculum: government and employers or educational institutions (Jackson 1994). Proponents claim that competency standards empower individuals with the choice of what to learn and how to learn it. "There is less control from bureaucratic power-holders and more decision making made by 'consumers' themselves" (Velde and Hopkins 1994, p. 259). The counter argument is that, in CBET, knowledge is defined narrowly in terms of employer needs, and rather than being a framework, competency standards are a prescription to which educational funding is tied, by which teachers are benchmarked and assessed, and through which workers' progression and pay are determined (Hodkinson and Issitt 1995; Mulcahy 1996).

Ecclestone (1997) wonders whose knowledge and values are excluded in this framework. Despite rhetoric about the "learning society," she asserts that the economic basis of CBET neglects the wider cultural and social purposes of learning and the rights of all stakeholders to determine those purposes. CBET may be an empowering tool for economic independence, but it does not promote critical thinking about social and political issues or address structural inequalities (ibid.). Harris et al. (1995) concede that criticism of economic and political rationales is a "valid objection to bad applications of CBET principles" (p. 68). However, they argue that, with more emphasis on a holistic conception of competence and on education for citizenship and cultural understanding, well-done CBET can find a realistic middle ground between the humanist and behaviorist perspectives, taking another step toward breaking down the divisions between general and vocational education.

### References

- Barrie, J., and Pace, R. W. "Competence, Efficiency, and Organizational Learning." *Human Resource Development Quarterly* 8, no. 4 (Winter 1997): 335-342.
- Chappell, C. "Quality & Competency Based Education and Training." In *The Literacy Equation*, pp. 71-79. Red Hill, Australia: Queensland Council for Adult Literacy, 1996.
- Collins, C., ed. *Competencies: The Competencies Debate in Australian Education and Training*. Curtin: Australian College of Education, 1993. (ED 361 833)
- Ecclestone, K. "Energising or Enervating?" *Journal of Vocational Education and Training* 49, no. 1 (1997): 65-79. (EJ 507 496)
- Erridge, A., and Perry, S. "The Validity and Value of National Vocational Qualifications." *Vocational Aspect of Education* 46, no. 2 (1994): 139-154. (EJ 497 192)
- Fuller, A., and John, D. "Adopting National Vocational Qualifications in the Offshore Industry." *British Journal of Education and Work* 7, no. 2 (1994): 39-49. (EJ 498 523)
- Goncz, A. "Future Directions for Vocational Education in Australian Secondary Schools." *Australian and New Zealand Journal of Vocational Education Research* 5, no. 1 (May 1997): 77-108.
- Hager, P. "Competency Standards—A Help or a Hindrance?" *Vocational Aspect of Education* 47, no. 2 (1995): 141-151. (EJ 509 520)
- Harris, R.; Guthrie, H.; Hobart, B.; and Lundberg, D. *Competency-Based Education and Training: Between a Rock and a Whirlpool*. South Melbourne: Macmillan Education Australia, 1995.
- Hodkinson, P., and Issitt, M., eds. *The Challenge of Competence*. New York: Cassell, 1995.
- Hyland, T. *Competence, Education and NVQs: Dissenting Perspectives*. London, Cassell, 1994.
- Hyland, T. "National Vocational Qualifications, Skills Training and Employers' Needs." *Journal of Vocational Education and Training* 48, no. 4 (1996): 349-365. (EJ 538 797)
- Jackson, N. "If Competence Is the Answer, What Is the Question?" In *A Collection of Original Essays on Curriculum for the Workplace*, pp. 135-149. Geelong, Australia: Deakin University, 1994. (ED 384 695)
- Jones, L., and Moore, R. "Appropriating Competence." *British Journal of Education and Work* 8, no. 2 (1995): 78-92. (EJ 512 995)
- Mulcahy, D. "Performing Competencies: Of Training Protocols and Vocational Education Practices." *Australian and New Zealand Journal of Vocational Education Research* 4, no. 1 (May 1996): 35-67. (EJ 525 603)
- Toohy, S.; Ryan, G.; McLean, J.; and Hughes, C. "Assessing Competency-Based Education and Training." *Australian and New Zealand Journal of Vocational Education Research* 3, no. 2 (November 1995): 86-117. (EJ 515 577)
- Toye, J., and Vigor, P. *Implementing NVQs*. Brighton, England: Institute of Manpower Studies, University of Sussex, 1994. (ED 391 033)
- Velde, C., and Hopkins, C. "Reporting Trainee Competence." *Vocational Aspect of Education* 46, no. 3 (1994): 257-271. (EJ 500 802)

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