

Chapter 13

A Framework for the Evaluation of Competency-Based Curriculum

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ABSTRACT

Competency-based education is still at its early stages considering the lack of commonly accepted best practices to develop, implement and most importantly evaluate competency-based curriculum. This chapter proposes an evaluation framework for the competency-based curriculum as a result of authors' experience with a fully developed and implemented competency-based curriculum in a Master of Healthcare Administration program. In this chapter, authors will revisit the important concepts about competency-based education and curriculum evaluation. Authors will provide operational definitions and a framework for the evaluation of competency-based curriculum. The goal of this chapter is to provide guidance to the competency-based degree programs during the evaluation of competency-based curriculum for continuous quality improvement.

INTRODUCTION

As an introduction to the chapter, this section briefly reviews the current literature on the concepts of competency, competency models, and the structure of competency-based education programs; the development of competency-based curriculum; and the use of curriculum evaluation models regardless of the program structure (competency-based or credit-based). It is important to understand these main concepts before implementing an evaluation framework. Without this understanding, it will be difficult for practitioners to develop a meaningful evaluation framework of their own or to incorporate this one into a competency-based curriculum or corresponding degree programs.

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The actual concept of competence goes to the “Code of Hammurabi” written between 1792 and 1750 B.C. (Mulder, Weigel, & Collins, 2007). Since then, as is true for many social constructs, the language and practice around the concept of “competency” (i.e. the definitions and the interpretations of the concept) have been the subject of ongoing discussion in the literature. Perhaps most of the confusion is rooted in the fact that the concepts of “competence” and “competency” have often been used interchangeably, although they occasionally had different meaning and implications. For this reason, Le Deist and Winterton (2005) described “competency” as a “fuzzy” concept. They explained that the changing definitions of this “fuzzy” concept indicated the ideology and the emphasis behind it was also fuzzy. Depending on the dominant age (industrial vs. information), the dominant learning theories (behaviorism vs. cognitivism vs. social learning), and the domain (education vs. human resource development), the definitions and the terms (competency vs. competence) changed (Le Deist & Winterton, 2005). Woodruffe (1993) also distinguishes between them, describing ‘competency’ as a capacity, meaning what an incumbent needs to bring to the job environment to be successful in a particular job and ‘competence’ as a specific, current ability or set of skills that are necessary to perform the job successfully. Woodruffe (1993) further posited that, therefore, competency models should be less prescriptive and more future oriented highlighting the future capacity of an individual. Similar distinctions (i.e., capacity versus ability) were also made between actual and virtual competence (e.g., Jonnaert, Masciotra, Barrette, Morel, & Mane, 2007); curricular expectations vs. life-role expectations (e.g., Spady & Mitchell, 1977); and, manpower-centered vs. unique individual competencies (e.g., Moon, 2007).

Despite the confusion regarding the definitions of ‘competence’ and ‘competency’, there is an abundance of competency models that support a myriad of professions. According to CareerOneStop, a web-based career exploration resource developed by the US Department of Labor and Industry’s Employment and Training Administration (ETA) as part of its industry competency initiative, there are around 30 organizations providing competency models in the field of information technology alone (<http://www.careeronestop.org>). Close examination of these models reveals how the model developers approach the concept of competency as a current ability versus a future capacity. In many cases, competency refers to both the ability and capacity that the incumbent should demonstrate to be successful in a professional area. In addition to higher education, competency models are also used in employment and training administration (Ennis, 2008).

Competency-based education (CBE) has been a topic of conversation for more than four decades. It is possible to find articles discussing the organizational issues and implications of the competency-based education beginning in the 1970s (e.g., McCleary & McIntyre, 1972; Palardy & Eisele, 1972). Spady (1977) describes CBE as “a data-based, adaptive, performance-oriented set of integrated processes that facilitate, measure, record and certify within the context of flexible time parameters the demonstration of known, explicitly stated, and agreed upon learning outcomes that reflect successful functioning in life roles” (p. 10). CBE has been implemented into many specific education fields such as vocational, education, medicine, and business. Moreover, it is possible to see the applications of CBE in many countries: US, UK, Australia, Germany, France, and the Netherlands (Mulder et al., 2007). Despite the long history of CBE, all around the world, many issues and challenges still exist regarding the definition of competency, the development of a competency model, and the lack of evidence of the effectiveness of existing competency based models (Markus, Thomas, & Allpress, 2005).

Regarding the definition of competency, Mulcahy (2000) demonstrates how notions of competency and the use of competencies or competency standards may change as a result of the changes in the contexts of vocational education and training (VET). Hyland (1992) also repeats the same concerns about CBE in

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