

# Demystifying Concept-Based and Competency-Based Approaches

In the past decade, there has been a steady growth in the adoption of concept-based and competency-based approaches within higher education. In health sciences education, these approaches have largely emerged in response to criticisms of the traditional education model and a call for greater accountability of graduates to possess a consistent set of core knowledge and skills (Lucey, 2018). Added to the mix are “core competencies” from a number of professional organizations that detail expectations of graduates within a specified area or specialty of practice.

Not surprisingly, there are variations in the approaches and terms used, which has contributed a rising number of questions from nurse educators. Are concepts and competencies the same? If not, how are they different? Which are better, concepts or competencies? Should concepts, competencies, or both be incorporated into a curriculum redesign? Can a concept-based curriculum work with competencies? How should the competencies developed by various organizations be incorporated into a curriculum? In this editorial, I hope to reduce some of the confusion by providing clarification to such questions. Because analogies can be useful to simplify complex or confusing ideas, I’ll use a fun and unexpected topic to help illustrate the relationship of concepts and competencies.

Having spent most of my adult life living in New Mexico, I developed a deep appreciation and love for the single unifier of New Mexicans—the chile pepper! The chile pepper is used extensively as an ingredient in New Mexican cuisine in the form of red or green chiles. In fact, a

common question in any New Mexican restaurant when ordering is “Red, green, or both?” Those who are unfamiliar with New Mexican cuisine may ask, “What is the difference between red chile and green chile? Which is better, red chile or green chile?”

Many people assume red and green chilies are two different types of chile peppers. In actuality, they share the same origin. The difference between red and green chili is the ripening time (chilies turn from green to red as they ripen). In other words, it is the same chile—the difference lies in the application and outcome related to time and use. Which is better? There is not really a right or wrong answer to that question because it depends on the dish being prepared and personal preferences.

So, you may be wondering, “What does red and green chile have to do with concepts and competencies?” The short answer is concepts and competencies have a complementary relationship; concepts are a reflection of the disciplinary knowledge, and competencies are the expression of expectations related to concepts and within the context of a defined practice. Like red and green chile, concepts and competencies share the same origin—the differences lie in application and the outcome. Let’s explore this a bit further.

A concept is the cognitive representation of an idea that is grounded in research and reflects a core area of disciplinary knowledge. Concepts are developed through a scientific concept analysis and clarification process. Concept-based education represents an approach whereby concepts provide the structure for teach-

ing, learning, and curricular design. A concept-based curriculum uses concepts that represent nursing practice for curriculum structure and to guide teaching and learning.

In a conceptual approach paradigm, concepts represent the cognitive structures for students to organize their thinking learning. Conceptual teaching strategies intentionally facilitate conceptual learning. New information is linked to past learning through cognitive connections, thus deepening and expanding conceptual understanding. This process results in an increasingly sophisticated ability for the learner to apply that information in a number of contexts. The rapid and continuous advances in health care require that graduates are skilled in in conceptual thinking and clinical reasoning to adapt to these changes. How is conceptual learning assessed and evaluated? This is where competencies come in.

A competency refers to defined knowledge, skill, and qualities expected to competently carry out a function. In the context of health care, the term competency is defined as “an observable ability of a health professional, integrating multiple components such as knowledge, skills and attitudes” (Englander et al., 2013, p. 1089).

Competencies associated with a concept provide a clear expectation for what learners should know and what they should be able to do with their knowledge of those concepts. Competencies are observable and measurable; it is an intentional approach to validating the achievement of competence through demonstrated performance that requires the integration of knowledge, skills, val-

ues, and beliefs. The assessment of competence does not occur at a single point in time with a single action; rather, it occurs over time with multiple assessments and multiple contexts, and using many measures to ensure acquisition.

Therefore, whereas concepts represent the structural organization of knowledge to be learned, competencies provide the structure and process for performance and assessment. Competencies describe the intended outcome, not the learning process. Conceptual teaching strategies require the application of concepts in the learning experience in a “real world” context; conceptual learning is assessed using competency assessment against a specified standard. A common misunderstanding is that competencies refer to a series of skills checkoffs. In fact, many nursing programs have used the term “competencies” in fundamental courses as designated nursing skills that must be demonstrated prior to entering clinical care experiences. Skills checkoffs may represent a component of competency assessment, but again, competency assessment is much broader than a single point of reference.

Competencies have been developed by a number of organizations; examples include the American Nurses Association’s *Nursing Scope and Standards of Practice*, Interprofessional Education Collaborative (IPEC), and Quality and

Safety Education for Nurses (QSEN), to name a few. In all cases, the competencies are represented through concepts (or domains, which mirror concepts). As one example, the concept of collaboration is represented as one of six QSEN competencies (teamwork and collaboration) (QSEN, n.d.), as one of the four IPEC competencies (teams and teamwork) (IPEC, 2016), as one of eight domains (interprofessional collaboration) defined by Englander et al. (2013), and as one of 10 “standards” in the category of professionalism by the American Nurses Association (2015). In this single example, one can see that although the format and terms used vary, the ideas are similar.

The use of concepts and competencies in nursing education is expected to evolve, particularly considering that the American Association of Colleges of Nursing *Essentials* series are currently undergoing revision, and they too will reflect competencies expected of graduates. Faculty will be well served to embrace this trend and become more familiar with concept-based and competency-based approaches. Concepts are used as cognitive building blocks and frameworks to gain a deep understanding around an idea, whereas competencies provide a standard, intentional approach for learner assessment that can validate competence in that area.

In summary, red, green, or both? When it comes to concepts and competencies,

the answer is clearly both! These are not competing methods, but rather approaches that complement and enhance one another. The incorporation of concepts and competencies only makes sense.

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