CNE Major Content Area # 4: Participate in Curriculum Design and Evaluation of Program Outcomes

Margaret Reilly DNS, CNE, APRN, Academic Director for Nursing, CUNY School of Professional Studies

The Organization for Associate Degree Nursing (OADN) values the role of the nurse educator and promotes certification as an academic nurse educator. Effective educators can impact students and potentially their patients for decades. Obtaining the National League for Nursing (NLN) certification as a Certified Nurse Educator (CNE®) denotes one's dedication to practice in the full role of an academic nurse educator. Over the course of several months, the OADN Education and Research Committee will post a synopsis of the eight competencies as identified on the NLN website under Professional Development Programs (NLN, n.d.). These posts will be brief essays geared toward directing a focus for study and preparation for the CNE exam or renewal process, along with some tips for practical application in the role of academic nurse educator.

This essay will focus on the fourth competency, "*Participate in Curriculum Design and Evaluation of Program Outcomes*"

The CNE Candidate Handbook provides an in-depth explanation of certification and the test blueprint. The handbook can be viewed [here](#)

Through the CNE Candidate handbook, faculty can learn about the 150-item exam, the purpose of the exam and how to qualify to take the CNE exam for academic nurse educators.

Participate in Curriculum Design and Evaluation of Program Outcomes

The fourth major content area, "*Participate in Curriculum Design and Evaluation of Program Outcomes*", accounts for 17% of the exam. It includes a focus on curriculum design reflective of current nursing and health care trends, societal needs, nursing standards and research, as well as educational theory. Knowledge and skill in development of relevant program outcomes, objectives or competencies, learning strategies, clinical experiences and appropriate evaluation strategies is also required.

The term curriculum first used in Scotland in 1820 was derived from the Latin word "currere" or "to run" and evolved to mean "course of study" (Wiles & Bondi, 1989). Basic principles of curriculum design include identification of key concepts, sequencing, and dynamic integration. Curriculum for a professional practice, such as nursing, must also consider global and national trends, technological and scientific advancements, determinants of health, as well as evolving paradigms of care delivery and professional priorities. The institution's philosophy and mission should be considered, as well as the stakeholders served, guided by appropriate educational theories of learning. The ultimate goal is to prepare graduates that can function effectively and responsively to the healthcare environment. Therefore curriculum change is not simply a choice but a requirement for any dynamic organization (Veltri & Barber, 2016).

Major factors to be considered in curricular development include the Institute of Medicine's (IOM, 2000, 2001, 2003a, 2004) Reports on Quality and Safety, the importance of Inter-Professional Education and Collaboration (IPEC) (2016), and implications of implicit biases in healthcare professionals. The IOM report highlighted the need for major reforms in the education of healthcare professionals to ensure

competencies in quality and safety practices in healthcare. IPEC is an initiative that emerged from the quality and safety movement, recognizing that modern healthcare requires collaborative practice to improve patient outcomes. Emerging literature supports the reality that implicit biases are more significantly related to patient outcomes than the treatments (Hall et al 2015; Joint Commission, 2016).

Faculty have customarily overseen curricula development. In fact, curricula design and formulation of program outcomes are under the Scope of Practice for Academic Nurse Educators as described by the National League for Nursing (2012). Traditional curriculum development has been teacher centered or one with a focus on the teaching process with its emphasis on "content coverage", learning objectives and designated learning activities. There is growing realization that curricular development must be more learner centered, focus on the outcomes of learning and how students can use and apply knowledge, skills and attitudes in unpredictable and unanticipated situations (Veltri & Barber, 2016).

This shift toward identifying the learner outcomes to be demonstrated at completion of the program can foster a process of "working backwards" to then determine the essential competencies needed at various stages of learner development. Using an organizing framework as a guide, faculty determine relevant program outcomes, then define the competencies to illustrate them. Competency statements define the knowledge, skills and attitudes students need to demonstrate in order to achieve the course and ultimately the program outcomes. The competencies can be "leveled" for the appropriate stage of the learner. Course work is defined by specific objectives written in measureable terms with clinical learning experiences designed to promote this development. In this type of outcomes focused curriculum, particular content is no longer the key but rather the knowledge, skills and attitudes students need to demonstrate achievement. When designing learning activities, it is important to also design the evaluation strategies to be used to be able to demonstrate achievement of the learning competencies and course work.

There are several main approaches to curricular design including Blocked Content, Concept-Based (Giddens, Wright & Gray, 2012), and Competency Based Gruppen, Mangrulkar, & Kolars, 2012). As a practice profession, all nursing programs attempt to integrate the didactic content and the clinical experience – not always with good results. Benner calls for nurse educators to teach with a "sense of salience" and find strategies to better integrate the classroom and the clinical so as to model clinical reasoning and guide students to "think like a nurse" (Benner, Sutphen, Leonard & Day, 2010) Blocked content is typically structured around clinical specialty areas, or systems. It is often highly structured and can limit students' ability to transfer concepts as it is often siloed. Concept based curricula is thought to capture more of the complexity of nursing and healthcare and provide students with the perspective to make connections across population groups and clinical settings. Concepts are threaded across the curriculum often using exemplars to illustrate the underlying principles. Competency based learning in contrast, focuses on specific performance measures to be demonstrated in order to deem the learner competent. In both approaches, competency based learning with its emphasis on observable behaviors and measurement, is often used to some degree, as accreditation requirements demand evidence of learning achievement.

Course design emphasizes sequencing and considers the prerequisite knowledge that must be developed in order for students to progress in competency development. Design approaches to teaching and learning include such strategies as Constructivism, Problem –based learning and the "Flipped Classroom" (Sullivan,2016). All emphasize the learner centered approach inclusive of active learning and constructing meaning. As a practice profession, the experiential learning derived from clinical learning is

an integral and integrated part of the course design. Faculty must identify relevant clinical sites but often have little control over selection of sites due to competing programs, inconsistent alignment of clinical and didactic learning, and use of clinical instructors who may not be familiar with the overall curriculum. The use of simulation is growing as a deliberate strategy in course design, allowing opportunities for faculty to provide specific learning situations that may not be encountered in the clinical site. Simulation can foster students' use of clinical reasoning in a safe environment and allow the faculty to meet the learners' educational needs (Jeffries, 2012). The emergence of technology and online learning provides additional opportunities for faculty to capitalize on active learning engagement.

In curricular design and development faculty must be cognizant of evaluation. Nursing programs respond to standards put forth through regulation (State Education Departments, State Boards of Nursing) and accrediting bodies (ACEN, CCNE, CNEA).There are several layers of evaluation including program, course and teacher effectiveness. Program evaluation provides a strategy for determining effectiveness. A critical determination of program effectiveness is curriculum design, which provides direction for the content as well as the learning strategies employed to implement the program (Ellis, 2016). A systematic process of program outcome assessment promotes an ongoing review of program effectiveness and allows for integration of new insights, trends as well as feedback from stakeholders and evaluators (i.e. regulators, accrediting bodies). Course evaluation examines consistency of content and learner activities to achieve the objectives of the course. Teacher effectiveness considers teaching strategies, assessment of student learning as well as evaluation of means of student assessment. Change should be guided by the outcomes and facilitated with evidence and theoretical tenets.

This is a brief overview of Curriculum Design and Program Outcome Evaluation. As you prepare for the exam you should familiarize yourself with resources for curriculum design strategies, program outcome assessment, as well as educational and change theories.

Giddens, J.F., Wright, M. & Gray, I. (2012). Selecting concepts for a concept-based curriculum: Application of a benchmark approach, *The Journal of Nursing Education*, 51(9), 511-515.

Gruppen, L.D., Mangrulkar, R.S., Kolars, J.C. (2012). The promise of competency-based education in the health professions for improving global health. *Human Resources for Health*, 2012(10), 43.

Hall, W. J., Chapman, M.V., Lee, K.M., Merino, Y.M., Thomas, T.W., Payne, B.K., Eng, E., Day, S.H. and Coyne-Beasley, T. (30215). Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: A systematic review. *American Journal of Public Health, 105(*12), e60-e76. doi: 10.2105/AJPH.2015.302903

Institute of Medicine (IOM). 2000. *To Err Is Human: Building a Safer Health System*. L. T. Kohn, J. M. Corrigan, and M. S. Donaldson, eds. Washington, D.C: National Academy Press. Retrieved from https://doi.org/10.17226/9728.

Institute of Medicine (IOM). 2001. *Crossing the Quality Chasm: A New Health System for the 21st Century*. Washington, D.C: National Academy Press. Retrieved from https://doi.org/10.17226/10027

Institute of Medicine. 2003a. *Priority Areas for National Action: Transforming Health Care Quality*. Washington, DC: The National Academies Press. Retrieved from https://doi.org/10.17226/10593.

Institute of Medicine. 2003b. *Health Professions Education: A Bridge to Quality*. Washington, DC: The National Academies Press. Retrieved from https://doi.org/10.17226/10681.

Institute of Medicine. 2004. *Patient Safety: Achieving a New Standard for Care*. Washington, DC: The National Academies Press. Retrieved from https://doi.org/10.17226/10863 .

Institute of Medicine. 2004. *Keeping Patients Safe: Transforming the Work Environment of Nurses*. Washington, DC: The National Academies Press. Retrieved from https://doi.org/10.17226/10851.

Interprofessional Education Collaborative (2016). *Core Competencies for Interprofessional Collaborative Practice: Report of an Expert Panel.* Washington, DC. Retrieved from https://ipecollaborative.org/uploads/IPEC-Core-Competencies.pdf

Jeffries, P. (2012). *Simulation in nursing education: From conceptualization to evaluation*, 2nd Ed. Philadelphia: Lippincott, Williams and Wilkins.

Joint Commission (2016, April). Implicit bias in health care. *Quick Safety*, 23, 1-4. Retrieved from https://www.jointcommission.org/assets/1/23/Quick_Safety_Issue_23_Apr_2016.pdf

National League for Nursing (NLN), (n.d.) Competencies for nursing education. Retrieved from http://www.nln.org/professional-development-programs/competencies-for-nursing-education

Veltri, L.M. & & Barber, H. (2016) Forces and Issues influencing curriculum development. In D. M. Billings & J. Halstead (Eds). *Teaching in nursing: A guide for faculty*, 5th Ed. (pp 73-88). Wiles, J. W. & Bondi, J. C. (1989). *Curriculum development: A guide to practice*, 3rd ed. Columbus, OH: Merrill.