ati NURSING EDUCATION

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Introduction to Conceptual Learning

Navigating the move to a concept-based curriculum (CBC) is more than designing a curriculum based on concepts and exemplars: it involves a complete transformation in how teaching and learning occur (Erickson & Lanning, 2014). In a traditional curricular model, instructors use lecture to deliver extensive amounts of content, expecting students to know everything about everything (Giddens, Caputi, & Rogers, 2015). Courses and clinical experiences tend to be independent of each other, leaving students confused as to how to process classroom content and relate it to the clinical experience and eventual nursing practice. In a CBC, students learn conceptually by connecting knowledge and experience in a way that promotes critical thinking and clinical reasoning (Giddens, 2016; Giddens et al., 2015). One educational theory that supports conceptual learning is constructivism, which proposes that learning takes place by building upon previous knowledge in a participatory environment (Kantar, 2014; Oermann, 2015). Educators engage the students through active learning to create deeper understanding of concepts and facilitate critical thinking and clinical reasoning (Billings & Halstead, 2016). In a previous white paper, Johnston (2017) explained that designing a CBC includes identifying essential concepts and exemplars and completing a concept analysis for each one selected. This white paper focuses on overcoming faculty and student resistance and creating a conceptual learning environment for the classroom and clinical settings.

KEY MESSAGES

Building a CBC is a multifaceted process that involves a shift from a focus on imparting basic knowledge to facilitating learning, allowing students to think and reason at a deeper level. Faculty provide the most important information using concepts, exemplars, and active learning strategies to build those bridges to deeper understanding (Benner, Sutphen, Leonard, & Day, 2010; Erickson & Lanning, 2014; Giddens et al., 2015).

Garnering Faculty Support

Many faculty are underprepared for the move to a CBC and the steep learning curve they face when implementing one (Benner et al., 2010; Giddens, 2016; Giddens et al., 2015). Faculty resistance to this change is a common response and can manifest itself through a myriad of emotions and reactions (Erickson & Lanning, 2014). Leaders in this change process must carefully assess the level of readiness of their faculty in making the move to implement a CBC. Listening to concerns is an initial step that provides valuable information for developing an action plan to make this change. Including input from each faculty member enhances their support for the change (Venance, LaDonna, & Watling, 2014). Deane and Asselin (2015) introduced Bridges' three-phase model for transitioning

as a framework for developing an expected timeline to be used as faculty adjust to using a CBC. The phases are *Letting Go, Neutral Zone,* and *New Beginnings* (see Figure 1). Through active listening, leaders can place each faculty member on this timeline and anticipate the pace of their movement through the transitioning process. Faculty will move through this process at varying rates, requiring open discussion throughout the process. Faculty might fear what they don't understand: it is important to present the positive aspects of this change and emphasize that their knowledge and expertise are essential in successful development and implementation of the CBC (Deane & Asselin, 2015). The optimal goal is for all faculty to support the change within the established timeframe. Although this goal is attainable, leaders need to be clear with their expectations and communicate possible consequences for those who fail to support the common goal (Deane & Asselin, 2015). Consequences, consistent with institutional policies and union contracts, can range from a verbal or written improvement plan to, in extreme cases, removal of resistant faculty from teaching in the curriculum. It is equally important to reward faculty for their commitment to the change and positive participation in achieving the goal (Clark, 2013, 2017b).

Figure 1 *Bridge's three-phase transition model*

Letting Go	*Neutral Zone*	*New Beginnings*
· Fear	· Anxiety	· High energy
· Anger	· Skepticism	· Willingness to learn
· Frustration		· Crossing the finish line

(Data from Deane & Asselin, 2015)

Enhancing support and overcoming faculty resistance are essential to achieving the desired outcome. Keeping lines of communication open through frequent, effective dialogue models civil discourse (Clark, 2017a). It is important to identify change agents, representing various positions within the program, to assist with the planning and implementation of the CBC. Building in rewards for achieving designated benchmarks can be a strong motivator for faculty to recognize their valued contribution toward meeting the goal (Giddens et al., 2015; Venance et al., 2014).

Co-creating and maintaining an environment of civility and respect during a potentially stressful time of change is essential for achieving positive outcomes (Clark, 2017b). Co-creating norms provides important rules of engagement for students as well as faculty. Including faculty in the co-creation of these norms at the outset of the curriculum change process sets a tone of inclusion that supports a culture of civility (Clark, 2014). Team members have an equal voice in developing these rules of engagement, agreeing on consequences for noncompliance and determining rewards for abiding by them. Clark (2014) stresses the importance of living and modeling these established norms to increase the likelihood of meeting the goals within the established timeline. Co-creating norms further empowers faculty to hold themselves and each other accountable for their behaviors and actions, fostering civility throughout the curriculum development, implementation, and evaluation processes (Shanta & Eliason, 2014). Once norms are created, reviewing, revising, and reaffirming them at regular intervals maintains a culture of civility that promotes increased productivity and goal attainment (Clark, 2017b).

Garnering Student Support

Student resistance to a new learning approach is a reality regardless of curriculum type. Progression from prerequisite courses to nursing program courses includes an intense change in how the student gains new knowledge and applies it to real life situations (Billings & Halstead, 2016). It is important to acknowledge that student resistance can be grounded in fear of the unknown (Giddens et al., 2015). This fear leads to barriers affecting acceptance of new ways of gaining and applying knowledge. Erickson and Lanning (2014) recommend that faculty work with students to overcome these barriers through:

- Clearly communicating expectations

- Preparing students for their roles

- Supporting student transition

- Modeling civility

- Open dialogue

When faculty are clear and consistent in communicating their expectations, students have a rubric describing acceptable and unacceptable behaviors and actions. Faculty should consider co-creating norms with their students for each of their theory and clinical courses to facilitate effective learning and encouraging accountability (Clark, 2012; Giddens, 2016). Creating and sustaining an environment that fosters respect and healthy civil discourse is essential to the wellbeing of the students and faculty that ultimately results in the delivery of safe, quality, patient-centered care. Integrating opportunities to practice civility and ethical behaviors as a component of nursing curricula is critical to professional development (Clark, 2017a).

Strategies That Support Conceptual Learning

The role of the instructor in a CBC is to facilitate cognitive connections through integrating new information with current knowledge in a manner that promotes deep understanding the application of theory to clinical situations (Giddens et al., 2015). Constructivism supports a framework for building conceptual learning opportunities for deep learning (Kantar, 2014). Kantar found that student learning is enhanced through the creation of learning environments that transform knowledge from theory to clinical application. Engaging students in active learning opportunities enhances their ability to process information and respond appropriately to clinical situations. Educators facilitate these opportunities by creating a learning environment in which students are actively engaged in the learning process. The students become the center of the learning environment and take responsibility for that learning. Learning activities, based on the curriculum concepts and exemplars, support development of the student's problem solving, critical thinking, and clinical reasoning skills (Billings & Halstead, 2016; Giddens et al., 2015; Kantar, 2014). Actively engaging students in deep learning of primary and related concepts creates an environment where previous knowledge is applied to new situations, helping students to provide patient care in a holistic manner (Erickson & Lanning, 2014).
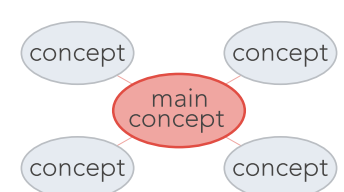
Creating a Conceptual Learning Environment/Classroom

Students must learn how to think and act like a nurse (Benner et al., 2010). Traditional classrooms provide lectures, often accompanied with long slideshow presentations. Students have the opportunity to listen to the lecture, but not apply that knowledge to a situation or event (Erickson & Lanning, 2014). Content saturation is common with this model, ignoring the need to focus on development of a nurse generalist, the NCLEX® test plan, and selecting critical exemplars using incidence and prevalence (Giddens et al., 2015).

Facilitating students' ability to think and act like a nurse requires that educators provide opportunities for students to engage in activities designed to build cognitive bridges that promote deep learning and application of the concepts (Kantar & Massouh, 2015). Roberts (2017) identified the scrambled classroom as a balanced approach to achieving the goal of creating the conceptual learning environment. This model combines the delivery of information with activities that apply knowledge to real–life situations, thereby developing critical thinking and clinical reasoning skills. Developing a robust lesson plan for each class session keeps the focus on established units, limiting content drift (Oermann, 2015). Examples of active learning strategies to consider include Think–Pair–Share, Case Study (static and evolving), Socratic Questioning, and Concept Mapping (Erickson & Lanning, 2014; Giddens et al., 2015; Oermann, 2015) (see Figure 2).

Figure 2 *Active learning strategies*

Classroom Strategies	
Think-Pair-Share (and Square)	• Students are presented with a question about a topic. • The class is provided time to think about the question. • Each student shares their thoughts with another student. This student pair develops a collaborative solution to the problem or issue posed. • In a large classroom, the student pair then shares their solution with another student pair, forming a "square." • Each pair or square of students shares their thoughts with the entire class.
Case Study	• Students are presented with a concept-based case study (static or evolving) in which they identify: 　○ Concepts and related concepts. 　○ Scenario built on identified concept and related concepts. Scenario can be singular or can build over time. 　○ Exemplar 　○ Relevant assessment findings 　○ Priority problems 　○ Evidence-based interventions/rationale/reference 　○ Interprofessional collaboration 　○ Interrelated concepts 　○ Client education

Socratic Questioning	• Students are presented with a topic to discuss. • Faculty facilitator asks a series of questions to elicit deeper thinking. The types of questions include the following. 　○ Clarification 　　• "Can you rephrase that statement in a different way?" 　○ Justification 　　• "Explain the theory or evidence behind that statement." 　○ Probing 　　• "What assumptions are you basing that conclusion on?"	
Concept Mapping	• Students are presented with a scenario and construct a concept map: 　○ Gather patient data 　○ State the primary patient problem 　○ Identify related concepts 　○ Develop patient-centered plan of care 　○ Provide care 　○ Evaluate effectiveness	Example of concept mapping:

Creating a Conceptual Learning Environment/Clinical

The clinical setting (including the nursing lab experience) brings life to concepts and exemplars (Deane & Asselin, 2015; Giddens et al., 2015). Traditional clinical models assign the student a patient for whom they will provide total patient care. This model focuses on tasks that may or may not support the role of the nurse in providing care to the assigned patient or allow the student to make cognitive connections between knowledge and application of the key concept of study (Gaberson, Oermann, & Shellenbarger, 2015; Giddens et al., 2015). In a CBC, the clinical experience is designed to integrate the classroom theory through focused activities that translate to practical application (Gaberson et al., 2015). Clinical instructors identify targeted learning experiences that support concepts previously taught in the classroom, allowing students the opportunity to build cognitive bridges that promote clinical reasoning (Gaberson et al., 2015; Nielsen, 2016). Moving to this model requires communication with practice partners to ensure that clinical experiences meet the nursing program outcomes. Clinical practice partner support is essential to successful implementation of the CBC clinical model (Gaberson et al., 2015). Building clinical partnerships early on in the development of a CBC can be beneficial to its successful implementation (Giddens et al., 2015; Nielsen, 2016). Attending unit meetings, inviting clinical nurses to serve on the program advisory committee and as clinical instructors, are examples of opportunities to foster these relationships (Giddens et al., 2015). Figure 3 contrasts the traditional clinical model with the concept–focused model.

Figure 3 *Traditional clinical vs. concept-focused clinical experiences*

Traditional: Total Patient Care	Conceptual: Focused Learning
Unpredictable, unfocused learning	Focused learning (primary concept and related concepts)
Focus is on patient care-related tasks and skill acquisition	Focus is on developing a deep understanding of concepts.
Missed opportunities for situated, deep learning	Focus is on deep situated learning and clinical reasoning.
Independent learning	Independent and collaborative learning
Uses apprenticeship model and observational experiences	Purposeful linkages to interrelated concepts are observed in a situational context.
Unit manager/staff nurse expectations focus on total patient care	Requires unit manager/staff nurse education to expand focus include deep learning

(Data from Erickson & Lanning, 2014; Nielsen, 2016)

KEY MESSAGES

Focused clinical experience in a CBC does not completely replace the student experience of delivering total patient care. Clinical instructors are responsible for balancing these experiences for students to allow opportunities for applying concepts learned to practice (Gaberson et al., 2015).

Figure 4 provides an example using the concept of mobility:

Figure 4 *Mobility classroom, clinical example*

Concept	Exemplar	Clinical Setting	Focused Activity	Total Patient Care
Mobility	Post-operative orthopedic patient	Rehabilitation facility	• Identify all patients with this alteration • Compare and contrast concept of focus for each patient • Identify related concepts • Develop concept map • Present at postconference	• Fall risk assessment • Patient transfers • Ambulation • Medications • Safety education • Assistive devices • Develop patient-centered plan of care

Summary

Designing and implementing a CBC is a comprehensive approach to facilitating the development of clinical reasoning based on deep understanding of concepts and exemplars as they apply to the delivery of safe, effective, patient-centered care. Successful design and implementation requires faculty and student buy-in. This buy-in may be met with resistance, supporting the co-creation of norms that facilitate the (Shanta & Eliason, 2014). Students are provided opportunities to apply knowledge gained in the classroom directly to the clinical environments (Erickson & Lanning, 2014; Giddens et al., 2015). Aligning classroom and clinical activities around identified concepts and exemplars is a key difference between a traditional curriculum and a CBC. This paradigm shift requires collaboration between the program and clinical practice partners to ensure that the student learning experiences achieve the desired student learning outcome (Gaberson et al., 2015). Navigating the move to a CBC is both a complex and rewarding process that provides students the knowledge and application opportunities to think and act like a nurse (Benner et al., 2010; Erickson & Lanning, 2014; Giddens, 2016).

KEY MESSAGES

Students learn best from a comprehensive approach that supports concept introduction to concept implementation (Giddens et al., 2015).

References

Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Josey Bass.

Billings, D. M., & Halstead, J. A. (2016). *Teaching in nursing: A guide for faculty* (5th ed.). St. Louis, MO: Elsevier.

Clark, C. M. (2012). *The pedagogy of civility: Innovative strategies to create an engaged learning environment*. Retrieved from http://www.shawnee.edu/academics/celebration-of-scholarship/media/the-pedagogy-of-civility-clark-acg-2013.pdf

Clark, C. M. (2013). National study on faculty-to-faculty incivility: Strategies to foster collegiality and civility. *Nurse Educator, 38*(3), 98–102. http://doi.org/10.1097/NNE.0b013e31828dc1b2

Clark, C. M. (2014). Seeking civility. *American Nurse Today, 9*(7), 18–46.

Clark, C. M. (2017a). An evidence-based approach to integrate civility, professionalism, and ethical practice into nursing curricula. *Nurse Educator, 42*(3), 120–126.

Clark, C. M. (2017b). *Creating and sustaining civility in nursing education* (2nd ed.). Indianapolis, IN: Sigma Theta Tau International.

Deane, W. H., & Asselin, M. (2015). Transitioning to concept-based teaching: A discussion of strategies and the use of Bridges' change model. *Journal of Nursing Education & Practice, 5*(10), 52–59. http://doi.org/10.5430/jnep.v5n10p52

Erickson, H. L., & Lanning, L. (2014). *Transitioning to concept-Based Curriculum and Instruction: How to Bring Content and Process Together*. Thousand Oaks, CA: Sage.

Gaberson, K. B., Oermann, M. H., & Shellenbarger, T. (2015). *Clinical teaching strategies in nursing* (4th ed.). New York, NY: Springer.

Giddens, J. F. (2016). Underestimated challenges adopting the conceptual approach. *Journal of Nursing Education, 55*(4), 187–188. http://doi.org/10.3928/01484834-20160316-01

Giddens, J. F., Caputi, L., & Rogers, B. (2015). *Mastering concept-based teaching: A guide for nurse educators*. St. Louis, MO: Elsevier.

Johnston, D. M. (2017, January). *Navigating the move to concept-based curriculum: part 1: Designing a concept-based curriculum*. Retrieved fom https://www.atitesting.com/Libraries/pdf/Navigating_the_Move_to_CBC.sflb.ashx

Kantar, L. D. (2014). Incorporation of constructivist assumptions into problem-based instruction: A literature review. *Nurse Education in Practice, 14*(3), 233–241. http://doi.org/10.1016/j.nepr.2013.08.010

Kantar, L. D., & Massouh, A. (2015). Case-based learning: What traditional curricula fail to teach. *Nurse Education Today, 35*(8), e8–e14. http://doi.org/10.1016/j.nedt.2015.03.010

Nielsen, A. (2016). Concept-based learning in clinical experiences: bringing theory to clinical education for deep learning. *Journal of Nursing Education, 55*(7), 365–371.

Oermann, M. H. (2015). *Teaching in nursing and the role of the educator*. New York, NY: Springer.

Shanta, L. L., & Eliason, A. R. M. (2014). Application of an empowerment model to improve civility in nursing education. *Nurse Education in Practice, 14*(1), 82–86. http://doi.org/10.1016/j.nepr.2013.06.009

Venance, S. L., LaDonna, K. A., & Watling, C. J. (2014). Exploring frontline faculty perspectives after a curriculum change. *Medical Education, 48*(10), 998–1007. http://doi.org/10.1111/medu.12529