The Concept-Based Curriculum: Key Points for a Transition

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THE CONCEPT-BASED CURRICULUM: KEY POINTS FOR A TRANSITION

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The decision for a school of nursing to transition to a concept-based curriculum is multifaceted. Faculty may be looking for a way to manage content saturation and the additive curriculum, answer the call to transform nursing education, or promote thinking and build a learner-centered environment to name a few possibilities (Ironside, 2004; Institute of Medicine [IOM], 2010). Nursing has become heavily laden with continuous increases in the content expected to be covered in a nursing curriculum (Giddens Brady, 2007; Ironside, 2004). It is not possible to cover every topic found in a typical nursing text given the constraints of time and credit hours. Nursing faculty are faced with the task of educating an increasingly diverse group of students who will be able to function in an ever-changing healthcare system (Devereaux Melillo, K., Dowling, J., Abdallah, L., Findeisen, M., & Knight, M., 2013). The use of a concept-based curriculum may assist nursing faculty to address the current issues in nursing education (Giddens, Brady, Brown, Wright, Smith, & Harris, 2008). A concept-based curriculum promotes higher- level thinking and life-long learning as students explore the concepts and related exemplars using a learner-centered approach. Rather than memorizing content, students learn the concepts and their application to common disorders called exemplars (Giddens & Brady, 2007). There are numerous benefits to using a concept-based curriculum, but the transition takes a great deal of planning and effort to be carried out. This paper describes key points to consider as schools of nursing transition to a concept-based curriculum.

Benefits

A concept-based curriculum benefits students and faculty through the deliberate reduction in *content*. **Concepts are used to illustrate the big picture; a concept is "an abstract or generic idea generalized from particular instances"** (Concept, n.d.). The conceptual approach enhances higher level thinking; for one to think conceptually is "…the ability to identify patterns or connections between situations…and to identify key or underlying issues in complex situations" (Hay Group, 2006). The use of concepts allows students to recognize features of a condition and apply what they have learned to a variety of situations (Giddens, Wright, & Gray, 2012). The content-laden curriculum has created an atmosphere where faculty are working to "get through" everything which leads to superficial study of many topics without discovering the interconnected nature of the topics. The use of concepts allows students' study to focus on key, prevalent exemplars and their interconnected nature (Giddens, et al, 2008). Faculty become less concerned with "covering everything" when using concepts and can provide more in-depth guidance to students. The concept-based curriculum is structured so that students first learn the concept followed by in-depth study of selected exemplars to demonstrate a concept.

Exemplars are things which are "… a typical example or excellent model" of the concept and are chosen based on prevalence (Exemplar, n.d.). For instance, the concept may be perfusion and exemplars may be congestive heart failure, atrial fibrillation and hypertension. Using only a few key exemplars allows faculty and students to focus in-depth study on those most prevalent conditions or situations. Faculty can use the conceptual framework to avoid redundancy of information. For instance, the concept of oxygenation would be covered across many courses however, the in-depth study of asthma would only occur in one course and other courses may review the exemplar. This is in contrast to a content-laden curriculum where it is common for students to see the study of asthma in more than one course, once as it relates to adults and again as it relates to children. As a result of the redundancy, students and faculty have difficulty seeing the care of asthma in children and adults as similar.

Figure: The inflammation concept is defined as: "…a protective process initiated to minimize or remove the pathologic agent or stimuli triggering the inflammation and to promote healing" (Giddens, 2013). This diagram demonstrates how inflammation may be illustrated by several exemplars. The similarities of other wise unrelated conditions become obvious through the use of concepts. When teaching the concept of inflammation, only a few exemplars would be studied at a time however, the remaining exemplars may be studied in different courses.
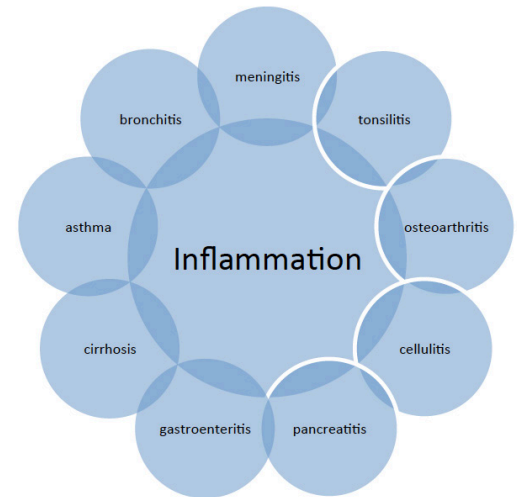
> The conceptual approach and associated learner-centered pedagogy teaches students the discovery of knowledge, identification of interconnected patterns, and recognition of key characteristics. Faculty become a guide for the learning process, instead of the primary source of information.

A concept-based curriculum provides an opportunity for students to transfer the understanding of concepts across multiple areas, and make connections to current and future learning experiences. Faculty find a sense of relief as the burden to find where new content is going to be placed in the curriculum is reduced and faculty remain more focused on the most prevalent conditions found in healthcare.

Preparation

Whatever the reason for a change in nursing curriculum, faculty and administrators must be ready to commit personnel and financial resources in to the change. Moving to a concept-based curriculum is rewarding and may ultimately increase job satisfaction; however it comes with additional responsibility and work (Oregon Consortium for Nursing Education [OCNE], 2012). The Oregon Consortium for Nursing Education (OCNE) reports that faculty and administrators need to first determine if they are ready to work on a daily basis toward the curricular change. As a result, faculty will need to be active in changing to a concept-based curriculum in addition to the regular workload, scholarship, and service expectations (OCNE, 2012). Administration must plan for ongoing education including workshops, webinars, and possibly consultants to drive and support the curriculum change and to meet faculty education needs (Faison & Montague, 2013).

Education will initially focus on helping faculty understand why the conceptual approach is needed, what it is, and how it will be developed at the institution. Faculty will need education in order to assist in overcoming the possible fear of losing control over how they teach and have taught for years. Faculty may resist the call for a movement toward a learner-centered education environment where the educator tends to have less control over the classroom structure. Faculty often cite that they have taught specific content for a number of years using a particular method and they don't plan to change because students are thought to be successful with the content. Ongoing support for the curricular change can be found by partnering with Elsevier Education and Implementation Services to integrate the chosen course materials and assist faculty to further understand the application of a concept based curriculum. Administrators need to be prepared to intervene where resistance to change by individual faculty interferes with the movement toward a concept-based curriculum and learner centered approach. When faculty are not consistently using the conceptual, learner-centered approach students become confused and frustrated making the education disconnected which undermines the conceptual approach.

Concepts

Choosing the concepts which will be used within the nursing curriculum can be a daunting task. No single set of concepts is a perfect match for every nursing curriculum. When choosing these, faculty will need to consider their difficulty, current nursing practice standards, and the unique features of the institution (Giddens,Wright, & Gray, 2012). It may be initially helpful to explore and identify concepts used by other nursing schools. Giddens, Wright, and Gray (2012) describe the use of a framework to explore and choose concepts. Some texts identify and organize concepts which could also be used as the starting point to choose concepts (Giddens, 2013). The Concepts for Nursing Practice text (Giddens, 2013) is one example which can be used as a framework from which to build the concepts and course structures. Giddens and Brady (2007) discuss the importance of reviewing nursing literature to both identify and define the concepts. Choosing and defining the concepts may be an emotional undertaking for faculty and lead to conflict. It is helpful to follow a pre-defined process for choosing the concepts to assist in working through the emotions and conflicts that will likely arise (Giddens,Wright, & Gray, 2012).

Exemplars

Choosing exemplars may be challenging for faculty because traditional content may be moved, altered or removed from the curriculum. Exemplars are conditions which assist in illustrating the concept. Giddens and Brady (2007) discuss the importance of choosing exemplars which best represent the concept and avoiding the use of excessive exemplars. Exemplars may be chosen according to various criteria. One approach to choosing exemplars is to use those conditions with the highest incidence and prevalence (Giddens & Brady, 2007). The Centers for Disease Control and Prevention (CDC) may be a helpful resource to identify priority exemplars.

> It is important not to use too many exemplars to illustrate a concept. When too many exemplars are used, students are once again faced with content saturation and lose sight of the concept.

It is easy to utilize too many exemplars because faculty have been accustomed to adding topics to courses over the years making content saturation the norm. Initially faculty and administration may feel that too much content has been removed from the curriculum and the education will be lacking essential aspects; this feeling likely stems from the previous content saturation. The effectiveness of a concept-based curriculum will soon be realized as students are able to apply the concepts to a number of new exemplars, even those not explicitly covered in the classroom.

Core Group

Throughout the curriculum development process it is likely that frequent changes will occur (Fiason & Montague, 2013). As faculty become more familiar with the concept-based approach and as varied faculty are involved in the decision process new ideas and approaches may emerge, leading to proposed changes. The proposed changes could be limitless and delay progress toward full curriculum development. Using a core group of faculty and administration to lead the curricular change may be helpful to prevent never ending changes. The core group is deeply involved and educated in aspects of a concept-based curriculum and is able to see the entire curriculum structure which may be initially difficult for all other faculty to realize. The core group may include an outside consultant who can provide objectivity and guidance. Members of the core group are helpful in providing consistency, direction, and support in the curriculum development process. The core group works closely with all faculty and administration to develop the concepts, competencies, and exemplars across the curriculum. The use of a core group may be helpful in reducing unwanted overlap or omission of key exemplars and competencies. During development of the curriculum, departments who provide support courses must also be involved and may be part of the core group. The changing nursing curriculum may affect the schedule and placement of support courses which needs consideration along the way.

Pedagogy Change

Once the curriculum framework is designed, consideration for both classroom and clinical pedagogy changes must occur. The change to a concept-based curriculum should lead to a shift from a teacher-centered environment to a learner-centered environment. Making a complete change in pedagogy will take time and effort. Faculty will need time to experiment, become comfortable and confident, and expand the use of learner-centered activities (Ironside, 2004). Some faculty will likely be uncomfortable with the change and fearful of negative student evaluations as the change in pedagogy occurs. Faculty education dedicated to a learner-centered pedagogy will be essential.

It is helpful for administration to support faculty by reducing the focuson student evaluations while learning the new pedagogy. When students initially experience a new pedagogy it may disrupt their usual learning approach and cause discomfort, thus leading to negative course evaluations. When faculty do not have the pressure to achieve high ranking student evaluations they may be more at ease to experiment with new approaches. Faculty need to allow themselves to fail or struggle with the new teaching approach. New approaches don't always go well the first time and often need revised and revisited while developed. Support for faculty may be provided by educational design specialists who can assist in development and revision of the teaching approach. The resources found in Concepts for Nursing Practice (Giddens, 2013) and the related curricular materials provide numerous ideas for building the active classroom and a conceptual approach. These resources may be key in assisting faculty to develop a new teaching approach by providing materials and resources which can otherwise take an extensive amount of time for the faculty to develop on their own.

Clinical Changes

Curricular changes in the clinical setting will need to be approached with the involvement of clinical partners. The traditional clinical approach provides students with an assigned "patient of the day" focusing on superficial skills and tasks which do not promote a deep understanding (Nielson, Noone, Voss, & Matthews, 2013). Promoting a deep understanding in the clinical setting requires a change in the approach which may not be well-understood by all parties involved.

A New Approach to Clinical Assignments

Prior to clinical, students are provided a study guide specific to a concept which directs reading, data collection and performace of a focused assessment. During the clinical experiences, students may be assigned to a specific patient. HOWEVER, students also perform a focused assessment for 1-3 additional patients, to provide a point of comparison. The student will then present what was learned at the end of the clinical day.

— Nielson, Noone, Voss, & Matthews (2013)

Faculty may find that not everyone will be open to or ready for changes in the clinical teaching approach. Depending on the unique situation and needs of an institution, it may be helpful to transition slowly to the concept-based approach in clinical. For example the student may still receive an individual patient assignment but the focus of learning is on key points of the assigned concept for clinical rounds. The student may also assess additional patients on the clinical unit, looking for potential or actual alterations in the assigned concept. In this way a transition from skill and task based learning may occur gradually, allowing all key players to understand and trust the new approach.

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Evaluation

Students who have been involved in the concept based curriculum which is used in both clinical and classroom applications find that they are able to better see the "big picture" when it comes to patient care. These students relate the ability to see the varied ways in which patients present the alterations or potential alterations of the concepts. Students are better able to view the medications, interventions, and treatments as combined efforts rather than individual unrelated actions. Using the conceptual approach in the clinical setting and assessing multiple patients helps students better understand that not every patient will demonstrate every possible alteration of the concept. This approach is assisting students to develop stronger assessment skills and build a strong foundation for clinical judgment.

Evaluation of the new curriculum is an ongoing process. Student retention, success and ultimately, NCLEX pass rates will demonstrate the effectiveness of the transition to a concept-based curriculum. Employer surveys as well as input from clinical sites also provide assistance in evaluation of the new curriculum. Changes are consistently made based on continuing evaluation; ensuring student learning outcomes are being met.

Each institution will have unique challenges and approaches as the decision to change to a concept-based curriculum occurs and the transition is carried out. Key aspects in making a change successful is to ensure that adequate financial and personnel resources are available, ensure education of all parties involved, be prepared to try new approaches, and be patient as the change will not occur all at once. The use of a conceptual approach is satisfying to both faculty and students as faculty learn to embrace the new approach and students are demonstrating deeper understanding of the essential aspects of nursing practice.

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