Think Like a Nurse!

Transforming Nursing Education so Our Graduates Are Prepared for Professional Practice
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According to Del Bueno, two-thirds of our current nursing graduates are unable to clinically reason at the most basic level to recognize a worsening change in patient status. This is commonly called “failure to rescue” and happens when the nurse does not recognize trends that reflect a deteriorating status change until it is too late and an adverse outcome or patient death results. For example, a patient, who is sliding into sepsis but early signs are not recognized by the nurse until they are in septic shock with severe hypotension and a lactate >4, may die as a result of the nurse's inability to clinically reason and think like a nurse.

Is the traditional model of educating nurses contributing to the inability of new nurses to transfer their knowledge to clinical practice? In the book Educating Nurses: A Call to Radical Transformation, Dr. Patricia Benner and her coauthors lay a clear vision of what must be done to change the paradigm of nursing education. This outline is intended to be a brief summary of the highlights from Educating Nurses and what the Carnegie Foundation identified is needed to change the paradigm of nursing education so that our graduates are properly prepared for professional practice.

The Problem Is in the Classroom

1. Too much CONTENT!
   a. Dorothy Del Bueno writes in A Crisis in Critical Thinking: “Why can't new registered nurse graduates think like nurses? Although well versed in content, the majority are unable or have considerable difficulty translating knowledge and theory into practice. Why? The author believes that a highly probable cause is the emphasis on teaching more and more CONTENT rather than a focus on APPLICATION OF KNOWLEDGE. A look at the size and plethora of nursing textbooks supports this conclusion.”
   b. Educators feel pressure to “cover” the content, but cover can also mean to conceal or hide from view. When content is “covered,” how many of us realize that we may be inadvertently keeping our students from seeing what is truly important by hurrying through needed content?
   c. With the encyclopedic nature of current textbooks, students are typically expected to know and be tested on the entire chapter’s content, but as a result acquire only superficial learning.
   d. Instead, nurse educators should emphasize what is most RELEVANT and then contextualize this content so students can acquire DEEP learning of what is essential.

2. Content is not contextualized to practice
   a. Content is repeated from the chapter it was derived from with no clinical scenario or “hook” to intentionally apply it to practice in most classrooms. Have we forgotten that students can READ content but our primary responsibility as educators is to spend our lecture time to CONTEXTUALIZE essential knowledge to practice?
   b. Nursing is a practice discipline that takes place at the bedside. Therefore, all content must be intentionally situated to show how it is RELEVANT to the bedside.

3. PowerPoint–driven learning does not engage students with clinical realities
   a. Benner states this best in Educating Nurses: “Classroom teachers must step out from behind the screen full of slides and ENGAGE students in clinic like learning experiences that ask them to learn to use knowledge and practice thinking in changing situations.”
   b. Lecture/PowerPoint–driven presentations are a PASSIVE pedagogy. Only 5-20 percent of content is ultimately retained. After only twenty minutes students begin to disengage. The role of the student is to absorb knowledge, take notes, and passively participate.
   c. Compare this to ACTIVE learning pedagogies that Benner advocates must take place in the classroom. Students actively participate, experience, and construct/apply knowledge. What classroom would you rather be in?
d. Del Bueno again weighs in: “Recall and understanding of content or selection of the correct answer do not equate to clinical judgment. Smart nurses are effective nurses when they THINK CRITICALLY, not when they can pass multiple choice tests” (1).

4. Classroom theory is fragmented and poorly integrated with clinical practice
   a. Currently in most programs, classroom theory and clinical education are in their own separate orbits with little to no intersection. Abstract concepts related to various med/surg topics are typically presented in PowerPoint slides with minimal emphasis on how this content is relevant and how they are used in practice (3).
   b. Students who are novices with minimal clinical experience and little clinical imagination are unable to see the clinical connections required in practice.
   c. If theory content is not situated in the classroom, it is only by chance that the student will be able to practice and apply content with a patient in the clinical setting.

The Solution
1. Contextualize theory concepts/content to the bedside
   a. Shift from a focus on covering decontextualized knowledge to an emphasis on teaching for a sense of salience, nurse thinking, and action in a particular situation (3).
   b. Concepts are most effectively caught when taught in the CONTEXT of a clinical scenario. As new concepts are introduced, the student is best served by learning the inter-relationships between these concepts and their situated use in practice. DEEP learning of concepts is essential to professional practice. This can take place most effectively when a situated scenario unfolds over time (2).
   c. Using knowledge can be practiced through clinically derived case studies that situate clinical realities and clinical reasoning in the safety of the classroom. Students are asked to identify what clinical data is important or relevant and WHY (rationale for everything!).
   d. Students must be able to recognize CLINICAL RELATIONSHIPS between sets of data. This must first be situated and PRACTICED in the CLASSROOM so students can transfer this skill to the bedside.
   For example, a patient just admitted with heart failure exacerbation has an ejection fraction of 20 percent, elevated creatinine, elevated BNP, a chief complaint of SOB and assessment findings of crackles half up bilaterally in both lung fields. What are the clinical relationships and the physiologic rationale for these findings? This learning can be situated and practiced in the classroom to prepare students to identify these same relationships in the clinical setting.

2. Provide opportunities to PRACTICE clinical thinking/reasoning by using “clinical imagination” in the classroom
   a. Isabel Hampton Robb, the most influential American nurse educator of the early modern era also recognized the value of practicing any skill. She writes in Nursing Ethics (1900): “Only by constant REPITITION can you become really familiar with the work. Only by doing a thing well again and again can you obtain confidence, accuracy and precision. It is this constant, intelligent PRACTICE that constitutes the difference between the skilled trained professional woman and the amateur. Despite the common use of the term, the ‘born nurse’ does not exist…it will always be necessary to take hold of each task and do it over and over again, being guided by an intelligent, trained mind” (4).
   b. We must recognize that THINKING is a skill that must also be PRACTICED to become proficient. Foley catheterization and other clinical skills require repetition and we give opportunities to do this in our skills lab. The classroom must become this “lab” environment to practice nurse thinking with clinically derived case studies.
   c. Clinical imagination defined by Benner: “Nursing students need to acquire knowledge in a way that relates directly to the skilled know how they are developing in clinical situations and to acquire knowledge in a way that allows them to imagine situations and rehearse for them” (2). Clinical reasoning case studies are one way to make this possible.
   d. Conjure up possibilities of what could happen in this situation and be prepared for the worst possible problem. “What if” questions are an effective pedagogy in the classroom and clinical
to develop this needed nurse thinking skill of ANTICIPATE vs. REACT to a patient problem when it develops.

3. Using knowledge to identify the essence of the clinical situation
   a. Using knowledge is much more than merely “applying” content.
   b. Teaching nurses to think and act like nurses requires the nurse to be able to grasp the nature of the clinical situation and recognize what clinical data and knowledge are most relevant or salient to what the situation requires and then initiate needed interventions. This is also a benchmark of expert practice (2).
   c. Practicing this skill in the classroom with clinically situated case studies as well as mentoring this emphasis in the clinical setting will prepare our students for the bedside.

4. Emphasize clinical reasoning as a systematic approach that reflects how nurses think in practice
   a. Critical thinking has long been the emphasis in nursing education, but it is inadequate to capture needed priority setting and action when a patient has a change in status. NANDA nursing diagnostic language is also unable to capture the essence of needed priority setting when a status change occurs.
   b. Essence of CLINICAL REASONING is the ability of the nurse to THINK IN ACTION, to reason as the situation changes by capturing trends in labs, VS, and assessment data collection, grasping the essence of situation and recognizing the NEED TO RESCUE (3).
   c. Series of clinical reasoning questions that I have compiled based on my own practice as well as input from Linda Caputi and Lisa Day’s paradigm example in Educating Nurses that provide a template for thinking like a nurse in clinical practice:

   i. What is the primary medical problem?
   ii. What is the underlying cause/pathophysiology of this problem?
   iii. What labs, VS, and assessment data are RELEVANT to this patient?
   iv. What nursing priority(s) will guide your plan of care?
   v. What nursing interventions will you initiate?
   vi. What is the rationale for nursing interventions/physician orders?
   vii. What body system(s) will you most thoroughly assess based on primary problem?
   viii. What is the most likely/worst possible complication to anticipate?
   ix. What nursing assessment(s) will you need to initiate and identify this complication if it develops?

My Response as a Nurse Educator

As a practicing nurse who continued to work part-time in the ED and ICU while teaching, the paradigm changes advocated in Educating Nurses resonated so strongly with me, I knew I could not go back to “classroom as usual” with content-heavy presentations. I reworked my content to emphasize essential concepts, then situated these concepts with recent examples I had seen in clinical practice. I then implemented clinically derived case studies that brought “clinical imagination” in the classroom. I have since created three levels of clinical reasoning case studies complete with student version and faculty key. Blank templates to develop your own clinical reasoning case studies can be downloaded from my website at no cost.

1. Rapid Reasoning Activity: Short/condensed “just right” clinical reasoning activity for any med/surg level to supplement your lecture content. Contains ten foundational clinical reasoning questions that provide a template for “nurse thinking” in practice as well as two questions that situate caring and the “art” of nursing practice.

2. Fundamental Reasoning Activity: Ideally suited for first year/fundamental level. Clinical scenario is presented to help students see the RELATIONSHIPS between data that lay the foundation for critical thinking as well as incorporating pharmacology, nursing process and priority setting.

3. Unfolding Reasoning Studies: Unfolds over time and is longer in length. The most common changes in patient status are also incorporated as “clinical curveballs” that must be recognized by the
students as well as same foundational clinical reasoning questions. Optional QSEN and National Patient Safety Goal questions are able to be included by the educator.

**Practical implementation strategies for the classroom:**

*No Student will RISE to low expectations.* This quote is my thesis statement that guides me in classroom and clinical education. Students will go no higher than what you expect of them. High but realistic is the bar I set as an educator and when students see the relevance of your expectations to practice, most will meet or exceed them. This statement gave me permission to be BOLD and implement needed changes to transform my classroom!

a. With a typical fifty minute time block of lecture, I lectured no more than twenty to twenty-five minutes.
b. I used the remaining time for a clinical reasoning case study that situated the content I just taught.
c. These were my expectations as I implemented these needed paradigm changes in the classroom:
   - Come to class prepared by reading the textbook BEFORE class.
   - APPLY your understanding of the content by working through the clinical reasoning case study I posted one week before class either individually or preferably in small groups.
   - Group DIALOGUE of case study in class. I led the discussion, but student response and dialogue was expected with no spoon feeding allowed!
   - My role as educator was to facilitate/direct/emphasize salient points of the case study.
d. Another nurse educator found the following approach effective in her classroom:
   - Break classroom into small groups.
   - Assign one to two questions from case study to each group.
   - Given fifteen to twenty minutes to collaborate using textbooks/each other.
   - Each group presented answers to class.
   - Role as educator was to facilitate/direct/emphasize salient points of the case study.

When I did a survey at the end of the semester implementing these changes in my classroom, not one student wanted to go back to the traditional content lecture. Below are sample comments from a student and another educator who used this pedagogy in her classroom.

**Student response:** “It was very helpful. I didn’t feel like I was memorizing for the test. I felt like I was able to APPLY the information. It helped put KNOWLEDGE into PRACTICE and made it clear why it was RELEVANT.”

**Faculty response:** “This format makes such a difference in helping to bring clinical into the classroom. It helps students to APPLY information and look at the big picture in our patients. I had so much fun teaching in this way and didn’t see anyone nodding off in the back of the class!”

**In Closing...**

We have two choices as we face a fork in the road regarding our manner and approach to teaching our students. Follow the pack that do what is comfortable and resist needed change or choose the hard and narrow road of radical transformation that Benner is calling us as educators to embrace. Together, one classroom at a time, we can realize Benner’s transforming vision of nursing education to not only promote the learning of our students, but more importantly produce better outcomes for the patients they care for.

**References**