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Is lecture vs. flipping the classroom an either/or issue for nurse educators, or is there an alternative that combines the best of both methods in a complementary manner?

A paradigm shift in nursing education is occurring, one that is changing the role of both the nurse educator and student. Active learning strategies are being integrated into more classrooms to “shift the focus from covering decontextualized knowledge to teaching for a sense of salience and situated cognition” (Benner, 2010, p. 82). To accomplish this goal, one recommendation has been to flip the classroom. A flipped classroom is a pedagogical model in which activities commonly associated with homework and lecture are reversed or “flipped” in regard to their placement in the learning process. Students complete pre-class assignments and come to class prepared to engage in interactive learning strategies. However, the execution of a flipped classroom has been met with opposing views. A study by Missildine, Fountain, Summers, and Gosselin (2013) found that while learning is improved by the use of a flipped classroom, student satisfaction is lower. So, is lecture vs. flipping the classroom an either/or issue for the nurse educator? Dr. Pamela Barnett (2014) suggests that “scrambling the classroom” instead of flipping in its pure sense allows both lecture and active learning strategies to be used in a complementary manner.

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Key Message

The paradigm under which nursing education exists must change to accommodate the knowledge explosion of the 21st century. To help students learn how to manage this superfluity of knowledge, a variety of instructional strategies must be employed. Using a scrambled classroom approach provides educators the advantage of using the best of both lecture and active learning strategies as students strive to construct higher-order thinking and learning within a complex health care environment.

Traditional Classroom

The traditional classroom can be described as one in which direct instruction, in the form of lecture, is provided by an educator in a group learning space (Talbert, 2014). Lecture has been the backbone of learning for centuries. Research has shown that lectures are valuable in presenting information and providing explanations that support understanding (Bligh, 2000; Brown & Minogue, 2001). It can be used in both large and small classrooms, and helps students discern what knowledge will be relevant and integral to their practice.

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According to Benner (2010), knowledge needs context to provide students the cognitive skills they need to be able to administer safe patient care in the complex health care systems of today and in the future. Application of knowledge in the clinical setting can no longer be relied upon as it once was. The theory–clinical gap that was taken for granted is no longer a luxury educators can afford. Lecture needs to be augmented by bringing the patient into the classroom and putting a face on the health alteration or exemplar under study. The use of active learning strategies and simulation are being promoted as a means to provide context to the delivery of pure knowledge.

Flipped Classroom

The flipped classroom is a pedagogical model in which the typical lecture and homework elements of a course are reversed (Educause, 2012). The flipped classroom has been used by other disciplines for decades, in particular science, technology, engineering, and mathematics (STEM) classes. Eric Mazur, a physics professor, began using peer instruction and interactive learning in the 1990s. He was prompted to change his instructional methods when students at the end of his physics course demonstrated a lack of understanding of basic concepts. He deduced that the traditional approach to education reduces learning to a transfer of knowledge (Mazur, 2009). Only recently has nursing begun to challenge the effectiveness of the lecture–dominant traditional classroom and the advantages of using active learning strategies with nursing students.

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A flipped classroom employs a variety of in–class active learning strategies that build on pre–class activities. Classroom time is then “repurposed” to allow students heads–on and hands–on time to apply new knowledge while building on prior knowledge with their peers. Educators create a learning environment that supports student engagement and group activities. Educators take on the role of facilitating students’ acquisition of knowledge instead of delivering content that students memorize for future use.

Scrambled Classroom

The scrambled classroom is composed of a “mix of direct instruction and practice and feedback” (Barnett, 2014). It allows educators to use both lecture and active strategies in a balanced, complementary manner. Replacing one rigid pedagogy with another rigid pedagogy is subsequently avoided. The term “flipping the classroom” can be problematic for many faculty who are apprehensive about completely changing how they teach. Replacing “flipping the classroom” with the less intimidating and more accurate “scrambled classroom” might support a more positive attitude towards using active learning strategies (Barnett).

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The scrambled classroom gives the educator the opportunity to select which strategy is most appropriate for the topic of discussion and where to place the strategy during the class session. Students are exposed to a mix of direct instruction in the form of “lecture bursts” (mini-lectures of 15 minutes or less) and practice in the form of active learning strategies. Recognizing that the attention span of students is 10 to 20 minutes, breaking down lectures into smaller chunks of time, interspersed with periods of reflection or active use of the information, increases the value of time spent on lectures (Bunce, Flens, & Neiles, 2010).

Scrambling the classroom also allows faculty who are apprehensive about flipping the classroom to retain a level of control and comfort. The goal is not to completely remove lecture from the educator’s repertoire of instructional strategies, but to integrate active strategies into the class session that give students the opportunity to synthesize and apply new knowledge. Students are subsequently given the opportunity to experience a mix of content transmission, practice, and assessment to enhance higher order learning (Barnett, 2014).

According to Benner (2010), educators need to shift their focus from covering knowledge without a context to teaching for a sense of salience and situated cognition. However, this does not need to be an either/or decision regarding which strategy to use. According to the author, the classroom is “prime real estate,” making every minute of class a valuable commodity. Using lecture bursts to clarify students’ misinterpretations, reinforce critical information, and promote understanding and synthesis of complex information is an important part of the learning process. Integrating active learning strategies that reinforce new knowledge and give students the opportunity to apply that knowledge in the context of a patient situation also supports the development of critical thinking and clinical reasoning.

How to Scramble a Classroom

When preparing to scramble a classroom, the impact on educators and students must be addressed. Educators will benefit from faculty development that introduces new pedagogies that support student-centered learning. They will need support to be able to use active learning strategies in a confident and enthusiastic manner that facilitates student engagement and interest. Reconciliation of their previous role with their new role as that of both imparter of knowledge and facilitator of learning will also be necessary.

*Change is not easy—it is a process, not an event.
DON'T STOP TOO SOON.
(Moellenberg & Aldridge, 2010)*

Students also need to be prepared for a different role because many come to class with a preconceived mental picture of a traditional classroom that is inconsistent with active engagement. Students’ orientation is critical to the success of the scrambled classroom so they understand the rationale for their engagement in the learning process. It is necessary for them to understand that their new role will require them to be active participants in their learning process with a focus on learning and how to think critically and apply new knowledge.

How to Scramble a Class Session

- Analyze the content outline of a selected lecture.
- Map out upper and lower levels of learning.
- Assign pre-class activities that focus on lower levels of learning.
- Create a quiz or assignment that assesses students' level of understanding.
- Require completion of a quiz or handout that can be used as a “ticket to class.”
- Chunk remaining lecture into 10- to 15-minute lecture bursts.
- Interject active learning strategies and periods of reflection between lecture bursts.
- Use classroom assessment techniques (CATs) during and after class sessions.
- Be agile in responding to student needs as they are uncovered.

Strategies That Support a Scrambled Classroom

- Have students think-pair-share between lecture bursts for reflection and assimilation of knowledge.
- Embed media and technology into PowerPoint presentations to enhance interactivity of lectures.
- Use Socratic questioning to challenge students' answers to a question even if it is correct.
- Visually/spatially engage students with media that stimulates multiple senses.
- Focus on contextualization and relate stories from the trenches that students love to hear.
- Put a face on a health alteration/exemplar using case studies, narrative pedagogy, or other strategies.
- Bring the patient into classroom through the use of multimedia, case studies, simulation, etc.
- Engage students in problem-solving/problem-based patient scenarios.
- Use concept maps to assess students understanding of conceptual relationships.

A Time for Change

A paradigm shift from educator-focused, content-driven nursing classes to student-focused, application-based classes is occurring. This is a requisite change to ensure students are prepared for their future roles as clinicians and to be able to accommodate the knowledge explosion of the 21st century. The scrambled classroom allows the educator to create an engaging environment that uses both lecture and active learning strategies in a complementary manner that supports students' opportunities to learn, contextually apply knowledge, and bridge the theory-clinical gap.

References

- Barnett, P. E. (2014). Let's scramble, not flip, the classroom. *Inside Higher Education*. Retrieved from <https://www.insidehighered.com/views/2014/02/14/flipping-classroom-isnt-answer-lets-scramble-it-essay>
- Benner, P. (2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass.
- Bligh, D. A. (2000). *What's the use of lectures?* San Francisco, CA: Jossey-Bass.
- Brown, G., & Minogue, M. (2001). Refreshing lecturing: A guide for lecturers. *Medical Teacher*, 23(3), 231-244.
- Bunce, D. M., Flens, E. A., & Neiles, K. Y. (2010). How long can students pay attention in class? A study of student attention decline using clickers. *Journal of Chemical Education*, 87(12), 1438-1443.
- Educause. (2012). *Things you should know about flipped classrooms*. Retrieved from <https://net.educause.edu/ir/library/pdf/eli7081.pdf>
- Mazur, E. (2009). Farewell, lecture. *Science*, 323, 50-51.
- Missildine, K., Fountain, R., Summers, L., & Gosselin, K. (2013). Flipping the classroom to improve student performance and satisfaction. *Journal of Nursing Education*, 52(10), 597-599.
- Moellenberg, K., & Aldridge, M. (2010). Sliding away from PowerPoint: The interactive lecture. *Nurse Educator*, 35(6), 268-272.
- Talbert, R. (2014). Flipped learning skepticism: Do students want to have lectures? *The Chronicle of Higher Education*. Retrieved from <http://www.chronicle.com/blognetwork/castingoutnines/2014/05/05/flipped-learning-skepticism-do-students-want-to-have-lectures>