White Paper

Flipping the Classroom

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FLIPPING THE CLASSROOM

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In most disciplines, especially those related to healthcare, teaching content and facts is no longer plausible. Content overload has become a common problem that administrators and faculty are dealing with at all levels of academia. To think that an allied health department could provide a student with every fact they need to know before graduation is not even considered a possibility (Giddens & Brady, 2007).

Combining the reality of content overload with the fact that today's learners are expecting variety and engagement, leads to a call for change. Employers are expecting a graduate that is creative and possesses strong critical thinking skills. Society is creating a standard that the learner should be in charge of their own customized educational experience. These challenges are prompting academia to rethink the way post-secondary education is developed and delivered.

Paradigm Shift

Faculty need to remember that it is crucial to create learning experiences that replicate reality. This is hard to accomplish when trying to 'get through all the slides' before the end of class. As a step in the right direction, faculty must focus on helping students discover the facts prior to the classroom experience. One crucial aspect of the paradigm shift required for flipping the classroom is that the students must own the crucial content themselves. This is not just important to student success during class me, but also for life as a professional. Nursing and health professions faculty often claim that their students view learning as 'the teacher telling me what I need to know to pass the test.' One must realize that these attitudes about learning are not conducive to essential quality and safety in place. The Institute of Medicine has made it clear that lifelong learning, and all the accompanying attitudes, is no longer just a 'nice idea' for professional mobility, it greatly impacts the outcomes of our patients

Another element to this paradigm shift involves acknowledging that students' attitudes about learning came from when they sat in lecture halls and gazed intently at the chalkboard, PowerPoint presentation, or whiteboard in the front of the room. When it comes to learning how to learn, the learning experience we design for our students in the professional program shapes the foundation of their own professional personality.

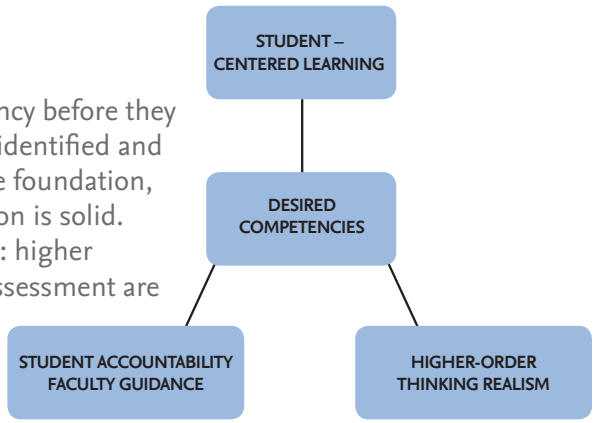
Partnership is the next part of the paradigm shift. Faculty often approach learning experiences from a philosophy of 'the teacher is the provider of knowledge.' Students often come to class with the idea that the presentation at the front of the class is the only voice that matters. While there are multiple reasons for these common attitudes, the fact of the matter is that both parties will have a more effective outcome when partnership is a central theme (Berrett, 2012; Carlson-Sabelli, Giddens, Fogg & Fiedler, 2011).

When faculty partner with students, the faculty are better able to customize the learning experience to meet the students' needs. In a true partnership, formative assessment is continuously being used. From the student perspective, when they are expected to be significant contributors to the learning experience, they are being told 'you matter, you have worth, the team is relying on you.' This builds not only ownership, but also fosters the development of leaders. Both of these concepts are not only important to effective learning, but some would argue essential to success in the 21st century.

While exploring 'the flip,' keep in mind that this is not just about attaining competency, it is about 'learning how to learn' for lasting success.

The Flip

Flipping requires that we help students build a foundation of competency before they engage the classroom learning experience. The desired competency is identified and derived from programmatic goals and outcomes. To begin building the foundation, students will need accountability and guidance to ensure this foundation is solid. Next, the classroom experience is designed with two key goals in mind: higher order thinking and realism. Finally, it is imperative that learning and assessment are approached from a student-centered philosophy.



The Foundation of Flipping

The foundation of flipping the classroom is a student that arrives to class ready for the learning experience. Because flipping the classroom hinges on an active learning experience where application and analysis are the focus, the knowledge and comprehension levels of learning must have occurred prior to class time. Because so many students arrive to class unprepared, this becomes one of the main barriers to flipping the classroom.

Often students ask for a study guide before the exam. There are a few reasons for this. First there is a lack of clarity about what is going to be 'covered' on the exam. Secondly, there is a lack focus while the concepts are being covered (sometimes by faculty, sometimes by students, usually by both). This goes right to the root of students being unprepared for class. The research is clear that students will learn better if they are engaging concepts on a continual basis over a period of time — not cramming the night before.

Guided Study

Instead of the students waiting for a faculty-created study guide, what if they experienced 'guided study' throughout the course? Guided study involves providing students with specific activities to accomplish while they are 'reading' their book in preparation for class. Instead of being told to read 6 chapters, hoping they get the key points, ask the students to perform activities that demonstrate understanding or at least give evidence that some of the key points were explored and understood. See Box 1 for a few examples of guided study instructions to students.

Box 1. Guided Study Examples

1. For each chapter, choose and write down the 3 priorities for a nurse related to the concepts found in that chapter. Write the 3 priorities on a notecard and bring it to class, which will begin with sharing the cards. Students will get into groups of 2-3 for the purpose of giving each other feedback on the priorities chosen. One variation of this activity is that the priorities are shared in an online discussion forum where feedback and collaboration occurs. The class time begins by the instructor opening the online discussion forum on the big screen at the front of the class.
2. As you study for class time next week, complete the case study at the end of each chapter. Bring the answers on a piece of paper to class. For each case study, document 3 priority assessments in the electronic health record (EHR). For each of the 3 systems, enter 3 priority assessments (3x3). Note that you will need to justify your priority choices when you arrive to class.
3. As you read, you will notice 2-3 care plans per chapter. Your ticket to class is an effective/well-developed SBAR (communication to another healthcare professional that focuses on situation, background, assessment, and recommendation) on at least two of the care plans. These 2 completed SBARs should be placed in the preclass discussion forum online. You need to make sure you give online feedback to at least one peer before class. In class, I will randomly pull up the SBARs and we will ask you to discuss why and how you developed your SBAR. Note that this is a part of your participation grade for the class.

4. Your ticket to class is taking the online quiz at least 2 hours before class begins. The quiz will consist of 20 questions randomly chosen out of a pool of 50. You can use your book, notes, and even work with friends. Note that the quiz will only stay open for 20 minutes. You can take the quiz as often as you like. Your required score for class is 80% or better. Each time you take the quiz, you can see your new grade in the gradebook but you won't know which questions you got wrong. Therefore, you need to carefully study the concepts contained in those questions. The item analysis from this quiz will direct the focus of class time.

These examples are designed to carefully guide students as they study. This will decrease confusion and frustration while helping them to be better prepared for the class time learning experience.

A concern often voiced with this strategy is that the students may not read the entire chapter. One should ask, "what if the student only reads the material needed to complete the case study or take the quiz?" It is important to remember that the goal is not to read an entire chapter but rather to effectively care for clients with certain needs.

The Class Time Experience

When a person trains for a marathon, they need to run. When a person wants to learn how to be a pilot, they need to fly. When a student aspires to become a healthcare professional, they need to care for patients.

One of the great benefits of flipping the classroom is that the classroom can become a clinical learning environment. By helping students pursue knowledge and comprehension (the two lowest levels of cognitive learning) prior to coming to class, they can spend class time focusing on application and analysis.

When flipping the classroom, instructors now have the freedom to create learning experiences that replicate actual health care interactions. These experiences allow students to use their newfound discoveries to meet the needs of simulated patients (case studies, role plays, YouTube videos, mannequins, etc.). Class time is no longer reserved for acquiring knowledge. Now, the learner can use knowledge to grow their understanding of deeper concepts. Because the instructor is no longer confined to the role of imparting knowledge, she or he can act as a coach, facilitator, or mentor to the learners who are spreading their wings.

In this model, learning objectives are met in a very realistic and intentional situation. See Box 2 for examples of strategies that may be used during class time when flipping the classroom.

Box 2. Examples of Class Time Activities for the Flipped Classroom

1. Role-play providing education to a client. To ensure all students get the opportunity to practice providing the education, put students in groups of 3 to 4. Assign one student the role of evaluator. Ask the evaluator to provide 2 compliments and 2 suggestions for improvement (2+2) to the other students in their team.
2. Develop a hand-off communication (SBAR report) related to a patient situation. Students then verbally give report to another student. Next, each student must provide their peer with 2 compliments and 2 suggestions for improvement (2+2).
3. Students write a one-minute plan of care for a patient. They then swap the plan of care with another student and provide feedback (Herrman, 2008).
4. Students develop a 5-item quiz (multiple-choice and 'select all that apply' questions). They administer their quiz to another student. After their peer has completed the quiz, they discuss the results and give each other feedback. Faculty can make this activity more engaging by randomly selecting a couple of the questions created, editing the chosen questions, and placing them on an exam.
5. Have the students work in small teams to complete a case study. Once the case study is complete, provide them with a change in the scenario. For instance, inform the students that the patient is now homeless. Maybe the patient has now been the victim of abuse. Maybe change the age or developmental level of the patient.

6. Have the students work in small teams to develop a case study (reverse case study strategy). Once the case study is complete, they swap with another small team.
7. Ask students to develop short videos (usually less than 10 minutes, using their phones) explaining a concept or skill. Ask them to share the video with the class in an online discussion forum. During class pick 2-3 videos to watch and have the class vote on the best one. Once the best one is chosen, ask all students to write a test item on that video. These test items are loaded to the discussion forum and some are chosen to be placed on the next quiz or exam (with a bit of modification).

The goal with all of these activities is to have the learners 'using' their knowledge. The freedom of these activities comes from the instructor and the learner not being bound to a topical outline. When interacting with a client in the clinical setting, the student must care for the whole client. They can't focus just on the concept that is being studied at that point in time. Therefore, when flipping the classroom, providing patient care means that the learning is more realistic as compared to a lecture on one certain topic. Essentially, clinical is brought to class.

The Assessment

Assessment of progress provides the learner, the instructor, and the organization with crucial information about competency and efficacy. When flipping the classroom, it is essential to address overall outcomes.

One crucial area of 'learning how to learn' that must be assessed relates to the habit of prioritization (e.g., the ability to set priorities). Asking students to practice prioritization during learning activities is just as important as assessing prioritization skills on exams. Learning and assessment of prioritization skills necessitates a variety of strategies.

Students should have the opportunity to not only prioritize the list of skills to be done, or which patient to see first, but also prioritize what information is important. In the age of endless information, the health care professional is required to quickly consider a large volume of information and decide what is most important to the client at that point in time. Assessment of this skill is well suited for activities in the flipped classroom.

Because of the complex nature of this type of assessment, it is important to note that a multiple-choice exam does not always give a complete picture of a student's competency level. For this reason, other forms of assessment should be employed. When flipping the classroom, it is possible to assess students with a variety of strategies and techniques.

Flipping the classroom also allows for more peer interaction. Capitalizing on this interaction, peer feedback and assessment provides many benefits to the learning experience. One of the main benefits is in line with the Institute of Medicine's assertion that all health care professionals should be able to work with others. From an academic perspective, if a student is receiving feedback from peers (as opposed to just the instructor), they potentially receive two to three times the feedback available from the instructor alone. Finally, one of the best ways to attain competency and understanding is to evaluate a peer related to those same outcomes.

Realistic assessment is another crucial aspect of flipping the classroom. As we seek to assess at the application and analysis level, we can meet this challenge by using realistic assessment. The assessments would include reports generated from completing case studies and other activities. One example is the report generated from the academic electronic health record. Another example may be the evaluation tool used in simulations. Using this assessment tool to have peers give each other feedbacks (related to a role play or video) can make assessments more realistic.

Another component of the assessment process is that adult learners need to see relevance. When using a flipped classroom model, ensure that what happens during class appears on exams. If what is happening during class is not seen as important to the next exam, the adult learner will have difficulty focusing. Faculty need to ensure that the active learning strategies address key concepts found on the exam. If the students feel a complete disconnect between what happens in class and what is on the exams, they will experience a great deal of frustration.

Remember, the licensure exams are still awaiting graduates. This necessitates that students have adequate exposure to practice with online testing and feedback that replicates these exams. Students must be coached in the area of performing self-assessments frequently until the very day of the standardized exam and/or licensing exam to ensure they are maintaining the required competency level.

Conclusion

Flipping the classroom is a rewarding experience that allows for successful health occupations education. By motivating the students to prepare for class, the class time is free to become a learning experience that more closely resembles real practice. Class time is used for application and analysis. Faculty are able to take on the role of 'clinical instructor' and guide students through realistic learning experiences. Realistic experiences provide learners with more opportunities for developing their clinical reasoning skills.

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