

## **Use of the Flipped Classroom Method in Specialized Nursing Areas**

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**Abstract:** The flipped classroom method has been utilized by nurse educators to offer nursing students a preferred method of active learning. The flipped classroom method has not been widely studied in specialized nursing areas like mental health. Due to the limited amount of time that students have in specialized nursing classes and the benefits of active learning in education, the flipped classroom method is an exciting and viable option. A pilot study was completed to determine the value of using the flipped method for mental health baccalaureate nursing students. Qualitative statements concluded that students valued the active learning method and felt it improved their academic progress, confidence, and satisfaction rates.

**Key words:** Flipped classroom, mental health, nursing education

### **The Problem**

The lecture method of teaching is still the most common instructional strategy used to educate university nursing students (Afrasiabifar & Asadolah, 2019). Although the lecture method has been a relevant and worthy method of educating, it is now considered outdated by many millennial and Generation Z students. Lecturing is a method that may not engage the audience, provides passive learning, and lacks individualization (Poirier, 2017).

### **Possible Solution**

Students prefer active learning strategies due to their technological abilities and short attention spans (Poirier, 2017). One example of an active learning strategy is a flipped classroom. With a flipped classroom method, students encounter the weekly topic before the in-class setting. Students can then apply what they have learned during class by engaging in active learning assignments which encourage higher critical thinking skills (Harvard University, 2023). There are other added benefits of using a flipped classroom including (1) learning from peers, (2) flexibility for both students and facilitators when it comes to time, and (3) receiving feedback from an instructor in-person. Lastly, it allows for the facilitator to engage a diversity of learning style preferences by making many assignments active learning (The University of Texas at Austin Center for Teaching and Learning, 2023).

### **Background**

In 2022, we investigated the positives and negatives of employing a flipped classroom method on student satisfaction, confidence, and academic progress in undergraduate nursing programs (Banks & Kay, 2022). The author used the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement and investigated several electronic databases including the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and Pubmed with the terms “undergraduate,” “higher education,” and “flip class.” The author limited the articles to quantitative/mixed-methods studies that were peer-reviewed and published after 2010. Sixteen articles were reviewed, and the findings concluded that flipped classrooms result in increased student satisfaction, confidence, and academic performance. None of the sixteen articles

concluded the flipped classroom method had a negative effect on learning. In addition, this literature study found no discussion of the flipped classroom in specialized nursing fields like mental health.

In 2018, a randomized control trial was completed to determine if a flipped classroom could be an effective way to improve the overall learning of nursing students (Hannaoui et al., 2021). The intervention included the use of a flipped classroom over three months. Pre-recorded lectures were assigned to be watched by students before class. Students completed and discussed active learning assignments in the classroom. The sample size included 32 traditional Bachelor of Science in Nursing (BSN) students who were divided into two groups: a control group with 15 students and an experimental group of 17 students. Results concluded the value of  $p < 0.0001$  was significant at 95%; from this, the author determined that using the flipped classroom had a positive effect on the motivation of nursing students. As noted by the author, however, the sample size was small and suggests a need for further studies.

In 2015, a descriptive phenomenological study was completed to determine if a flipped classroom can enhance motivation and the learning experience of traditional BSN nursing students (Post, Deal, & Hermanns, 2015). Instructors assigned lectures for homework viewing, and typical homework-style assignments such as case studies, worksheets, and readings were completed in class by a sample size of 18 nursing students. This allowed students to engage in active learning strategies during class time as a group where they could learn from each other and the instructor. Results concluded that the flipped classroom increased motivation and learning when used in nursing classes.

Overall, these previous studies suggest that the flipped classroom method offers an advantage for nursing students compared to the lecture method. Nevertheless, the flipped classroom method does not occur without challenges or complaints. From the above evidence, the number one student complaint was an increase in pre-class responsibilities. These additional out-of-class responsibilities put those with a job and/or family at a disadvantage (School of Education Online Programs, 2020).

### **Implementation of Flipped Classrooms in Specialized Nursing**

A flipped classroom method was deployed to teach mental health to junior and senior prelicensure baccalaureate nursing students. The classroom facilitator pre-recorded a video presentation of the weekly mental health topic area and posted the videos on an online learning platform that all students have access to throughout the semester. Students were asked to complete a weekly reading assignment in their textbook and watch the pre-recorded video before coming to class. The reading assignment followed directly along with the short video lectures; therefore, it eliminated two pre-class assignments. The pre-recorded video was opened a week before class, allowing students ample opportunity to watch the video. Students were encouraged to take notes while watching the pre-recorded video and bring any questions with them to class. The video was published in a format where students could slow down or speed up the video if they felt the instructor was speaking too fast or too slow for their notetaking needs. The notes would later serve as a study guide for exams.

Mental health didactic took place two days a week for 1.5 hours. At the very beginning of class, the instructor invited questions regarding the weekly video lectures. Immediately afterwards the facilitator would assign interactive assignments to keep students engaged. The facilitator rotated the type of assignments in accordance with student preferences. Some examples of the in-class activities based on evidence are listed below.

#### **In-class activity 1**

The facilitator divided the classroom into eight groups. She then assigned the group a podcast focused on the weekly topic. Afterwards, the students answered a series of questions together as a group. At the end of class, the facilitator had the class discuss the podcast together.

#### **In-class activity 2**

At the beginning of each cohort, students are asked to purchase an educational product package. That product package contains case studies that relate to all the various nursing

disciplines. The instructor divided the class into groups of eight and assigned each group a separate case study that pertained to the weekly topic. The groups completed the case study together and gave a short in-class PowerPoint presentation.

### **In-class activity 3**

The facilitator divided the class into groups of eight and assigned YouTube video presentations related to the weekly topic. The students watched the video. Then they designed a group activity that could be used in either an inpatient or outpatient mental health facility. The activity was part of a treatment plan regimen for people diagnosed with the mental health topic of the week. At the end of class, each group presented their activity to their fellow students. If time allows, the students in the class complete the group activity.

### **In-class Activity 4**

The instructor, with the help of the university simulation coordinator, designed role-play scripts that resembled mental health symptoms. The facilitator divided the class into groups of eight and handed out the various scripts to each group. The groups took turns acting as the patient, nurse, family member, and observers. At the end of the period, one set of students acted out their script to the entire class, creating the basis for wide discussion. This activity provided time for students to practice their communication skills, abilities to identify mental health symptoms and conditions, and education techniques.

### **In-class Activity 5**

The facilitator assigned a non-graded quiz to be completed through a free online application. The instructor manually entered each quiz question that she located in free test banks that closely resembled NCLEX-style questions. The students competed to see who could get the higher score. Each quiz consisted of ten questions; however, two of those questions were fun questions that did not relate to the content area. At the end of the quiz, the class reviewed the quiz together as a group to discuss the answers. This activity closely resembles that of a

gamification activity that has been proven to increase student motivation, skill knowledge, and self-confidence (Elzeky et al., 2022).

### **In-class Activity 6**

The facilitator designed a mental health game that she hosted during class. The game closely resembles the current TV show *Jeopardy*. To play the game, students were divided into groups of nine. Each group had to determine a captain, and that person operated the buzzer. All group members could contribute when answering a question; however, the captain had to give the final answer. The groups competed against each other, and the winner was the group that ended up with the most points. Students answered mental health style questions with comments, e.g., “This mental health patient must have experienced at least one manic episode in their lifetime.” The correct answer would be, “Bipolar Type I.” This is another type of gamification activity that has proven to be beneficial in nursing education (Elzeky et al., 2022).

The activities above are examples of active learning strategies used in a flipped classroom platform that allow students the opportunity to engage in class and be a part of their education. These activities are proven to lead to higher academic achievement and greater student satisfaction (University of Minnesota, 2023). In addition to the academic benefits, active learning strategies have the added benefit of improving interpersonal skills that are necessary in the field of nursing.

### **Grading Activities**

The students were asked to upload their in-class group activities to a learning platform. The facilitator of the class created drop boxes for each group to submit their assignment at the end of each class. Students received semester participation grades for turning in their activities.

### **Instructor Reflection of In-Class Activities**

Students appreciated the diverse choice of activities that the facilitator assigned during class. Although the assignments were not given a number grade, they were checked for accuracy

and completion. Success in a flipped-classroom method includes being present and engaged in active learning; therefore, submission of the completed activity during class time is sufficient to prove advancement and understanding. In addition, after the implementation of the flipped classroom, the average on exams improved from 80% to 88%, whereas the 80% average was achieved when the facilitator used a lecture-based classroom.

### **Student Responses**

At the end of each semester, students were asked to fill out an anonymous survey regarding the flipped classroom method. There were numerical and written responses. Below are some of the qualitative responses received from students regarding the flipped classroom method in the undergraduate mental health nursing course, as shown in Table 1.

**Table 1**

*Qualitative Quotes from Students Regarding the Flipped Classroom Experience*

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<b>Effective Reinforcement of Content</b>
<ul style="list-style-type: none"><li>• “I enjoyed listening to lectures outside of class and then completing activities during class. It was helpful to reinforce learning.”</li><li>• “I loved the flipped classroom in this course. I wouldn’t change a thing. The professor provides many different resources which is great because everybody learns differently. It was helpful because if you did everything you were supposed to, you were exposed to the content so many ways.”</li><li>• “I really enjoyed the flipped classroom. I think by watching a lecture first and reading the book, then having an activity in class allowed me to revisit the material several times which definitely increased my understanding and memory of the content.”</li></ul>
<b>Engaging Design of Class and Interactive Learning Strategies:</b>
<ul style="list-style-type: none"><li>• “I love the way this course was designed, doing activities in class. It has been the best course I have taken in this college of nursing so far.”</li><li>• “I love the way this course was structured, flipped. I learned so much through this method.”</li><li>• “With the flipped classroom approach, we were able to apply what we learned in class. It helped to prepare me for exams.”</li><li>• “The flipped classroom allowed me to learn the material without making me feel overwhelmed. More professors should use this method.”</li><li>• “I liked everything about this course. The flipped classroom works very well in this course. The activities are not a waste of time.”</li><li>• “This is the first time I have got a passing score on a Hesi exam, and I know it is because of how the professor has this class organized. We get the material by so many different methods using the flipped classroom. This is also my first time getting an A+ in a nursing class.”</li><li>• “I really liked this course, and the setup helped me to remember material much better than through lecture alone. It was very organized compared to my other courses. I learned from my friends as well.”</li></ul>
<b>Valued Application of Content</b>

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- “I liked the way we watched the lectures outside of class and then applied what we learned in class on assignments. I was never bored.”
  - “I liked the format of learning first, then applying the material in class for review.”
  - “This is the first time I have got a passing score on a Hesi exam, and I know it is because of how the professor has this class organized. We get the material by so many different methods using the flipped classroom. This is also my first time getting an A+ in a nursing class.”
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Overall, the students who took part in the pilot study appreciated the implementation of the flipped classroom method. The three themes noted by the qualitative data concerning the flipped classroom were (1) effective reinforcement of content; (2) engaging design of class and interactive learning strategies; and (3) valued application of content. One of the challenges students noted in their course evaluations was an increase in time commitment outside of class.

### Conclusion

The flipped classroom method that allows for active learning is the preferred method of education for nursing students. Literature in the nursing education field suggests that the flipped classroom method has been used for some time with success in typical fundamental nursing classroom settings; however, there is not much evidence to suggest its use in specialty classrooms, such as mental health. Due to the limited amount of time that nursing students have in the specialty areas, the flipped classroom method is an excellent way to improve academic progress, understanding of material, confidence, and student satisfaction.

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