

Is a Flipped Classroom an Effective Educational Method to Meet Nursing Students' Learning Needs?

Jessica Naber, PhD, RN

Daniel Best, BSN Student

Murray State University

ABSTRACT

Due to the constantly changing environment in healthcare, nurses must be able to adjust their techniques, mindset, and strategies to provide excellent care for their patients. Nurses have to be able to provide emergent care, assess critically ill patients, and identify both obvious and subtle changes in healthcare status; therefore, nursing education must be unique. Nurses need to be educated using methods that improve critical thinking and utilize active learning. The flipped classroom is a strategy that has been introduced in nursing education, but there is a shortage of empirical research about flipped classrooms and a lack of information and congruency about this educational strategy. The authors investigated the issues involved with implementation of the flipped classroom. Additionally, they distributed a questionnaire to students and faculty members to determine their opinions about the flipped classroom technique. Many benefits and obstacles of flipped classrooms were identified through this study. This information will be valuable for nursing educators in determining if they want to implement flipped classrooms, how to best define a flipped classroom, how to incorporate the strategy, and what obstacles to be aware of.

INTRODUCTION

- In recent years there has been an outcry for educational reform on many levels from grade school to Doctoral Programs. The goal is not for students to regurgitate information but to truly learn material; this is extremely crucial in healthcare related fields.
- The Institute of Medicine (IOM) (2001) report, *Crossing the Quality Chasm*, describes the current healthcare workforce as inadequately prepared to meet the needs of a growing and increasingly diverse patient population.
- Individuals in a healthcare setting must be able to critically think, defined here as “actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication” (Paul & Scriven, 1987).
- The term “flipped classroom” was coined in 2007 by two high school chemistry teachers in Colorado, Jonathon Bergmann and Aaron Sams (2012).
- They described the flipped classroom as follows: “that which is traditionally done in class is now done at home, and that which is traditionally done as homework is now completed in class” (Bergmann & Sams, 2012, p.13).
- Flipping a classroom makes the students actively participate in their own education, taking responsibility for their own learning (Hawks, 2014, p. 268).

“It is time to alter current nursing educational tactics to better educate future healthcare workers and create a smarter and safer environment .”



BENEFITS

- Enables students to partake in active learning. Active learning is generally defined as an instructional method that engages students in learning. It requires students to do meaningful learning activities and think about what they are doing (Prince, 2004, p. 223).
- Demski (2013) said “That’s how we all learn: by actively engaging in the material rather than sitting in a classroom and writing down the words said by a professor” (p. 33).
- Flipping a classroom makes the students actively participate in their own education, taking responsibility for their own learning (Hawks, 2014, p. 268).
- It is a good idea for educators to assess students’ understanding of the material before class with a pre-class quiz or some type of discussion board where questions can be asked for clarification.
- Sometimes in the traditional classroom, educators are concerned about students coming to class unprepared for learning. The social pressure of the flipped classroom, working with other students in class on group projects, presentations, case studies, and activities, may force students to be prepared so as to not disappoint their group members.

CHALLENGES

- An issue with the flipped classroom is that there are many methods of implementation and opinions on the best methods. According to Hawks (2014) one crucial point for implementation is explanation.
- The International Association of K-12 Online Education (iNACOL) said that the biggest mistake educators make with a flipped or online classroom is simply transferring what they do in a face-to-face setting (Schachter, 2012).
- With technology, issues can arise. Students may not have internet capability or they may have technical difficulties, but typically schools have computer labs, help desks, and other solutions to this dilemma.
- Herreid and Schiller (2014) said, “The bottom line is that we need more excellent cases supported by videos that are targeted, readily obtained/accessibile (e.g., via YouTube), and need we say it again... free” (p. 80).
- One large concern when discussing flipped classrooms is time. Nursing students are commonly expected to read multiple chapters prior to class, so adding more pre-class work, such as videos, discussion, or quizzes may overwhelm and frustrate students. Likewise, professors will spend a large amount of time preparing for each class.

CONCLUSION

- While there have not been very many studies on the effectiveness of this new educational reform, the data corresponding with exam scores seems to represent a positive result.
- There is a lack of existing empirical work describing the effectiveness of the flipped classroom. Studies need to be performed in multiple university settings, particularly in nursing or healthcare related programs, to better understand the implications of flipping a classroom.
- These studies need to incorporate professor and student, patient, and faculty satisfaction and success, and need to be both cross-sectional and longitudinal. Additionally, specific activities, plans, and techniques need to be further explored so that guidelines for effective strategies could be available for use by educators. This could eliminate some of the time involved in preparation for faculty.
- According to Hawks (2014), the flipped classroom helps students “grow into becoming responsible, self-regulating learners”.
- Goodwin and Miller (2013) stated “if we only implemented strategies supported by decades of research, we’d never try anything new”.

PERSONAL RESEARCH

A descriptive study, aimed at understanding the opinions from students in a flipped classroom as well as professors who have already implemented this technique, was recently performed by the authors at a mid-size regional university. This study was approved by the university’s IRB (Institutional Review Board), and both student and professor identities were kept completely confidential and anonymous. Students were asked to fill out a questionnaire and return it. The students polled were first semester seniors who were currently in a course with all flipped classes. Many participants stated they felt they were “teaching themselves” and they did not feel like they had a source to contact if confused while reading the assigned work before class. Other students were very positive, stating that they had more time to direct their own education and could “skip” areas they already feel comfortable in. Three professors who have already implemented flipped classrooms were also asked to anonymously fill out a separate questionnaire made specifically for professors. All professors indicated that, in previous semesters, by the end of the semester their students had a positive experience with this new technique. Some advice given from these professors referring to the Flipped Classroom: “Required more preparation for each class (case studies, discussion topics, and development)”. “Only as effective as any other assignment provided by instructors. There must be clear guidelines, direction, and motivation”. Faculty members must “examine the feasibility of using this technique. It does not work for every classroom”.

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