Teaching the Millennial Nursing Student: Using a "Flipping the Classroom" Model

Antoinette Towle1*, Karen Breda2

1Department of Nursing, Southern Connecticut State University, United States
2Department of Health Sciences and Nursing, University of Hartford, United States

Abstract Working on the front lines of patient care, nurses play a vital role in helping our nation meet the objectives of the Future of Nursing IOM report and the Affordable Care Act. Nursing schools have a new challenge to prepare students to function in vital roles as leading change agents in this different environment. Simultaneously, millennials, a new generation of learners with unique learning needs have inundated our nursing classrooms. How best to effectively teach millennial students is a pressing issue. Millennials think and learn differently than previous generations and nurse educators are being asked to change their teaching styles to meet their needs. The purpose of this article is to introduce the nuts and bolts of “Flipping the Classroom” as a new approach to teaching millennial students. This model offers a revolutionary way to teach nursing students. Designed especially for the millennial-aged student, “flipping the classroom” can result in superior learning outcomes, higher knowledge retention, enhanced critical thinking skills and improved clinical judgment. “Flipping” in nursing requires educators to move away from lecturing as the primary way to deliver information and instead to use various engaging tools and activities to help students make sense of theory and to connect key concepts with realistic experiences. It asks learners to use online resources innovatively and to explore the material prior to class. “Flipping” sets the platform for knowledge application in the classroom. Teachers and students use class time to problem solve, create, critique, and synthesize in a dynamic and engaging environment. Ultimately, both nurse educators and students can be transformed with this unique “flipped” model.

Keywords Millennials, Nursing Education, Flipping the Classroom

1. Introduction: “Spring Semester Nursing 422 Scene #1”

It is 8 am, Tuesday morning, on a typical cold, snowy winter day, the first day of the second semester of the academic year, and the last semester for 32 soon to be “graduate nurses.” Students stroll into class, some that look like they just got up or never went to bed. Students typically sit in the same seat, near the same classmates, open up their laptops or cell phones and immediately settle into texting friends, reading emails, posting pictures and comments on Facebook, and preparing themselves to relax comfortably for the next 2 1/2 hour “show.” As the course teacher or perhaps the “entertainer” I frantically prepare for my “performance” start the computer, PowerPoint projector, pass out handouts, and try every possible trick in the book to ensure the successful delivery of five chapters of content, 100 plus power point slides, ensuring that I deliver every possible piece of knowledge they need to know. I start the class promptly at 8 am even though students continue to trickle into the room for the next 20 minutes. I welcome students to the course and enthusiastically ask them if they have any course related questions, concerns or thoughts. Immediately, a bunch of hands go up and I begin to answer what seems to be the “here we go again” questions asked before every course. “Do we have to buy the book?” “Will you give us a study guide before the tests?” “Can you change the day of the test if we have another test on that same day?” “Tests will be all multiple choice, correct, so we don’t have to write anything?” and of course the greatest question of all “Do we have to write a paper? And if yes, how many “words” does the paper need to be? Will you take off for grammar, spelling, and do we have to follow APA format?” After patiently answering everyone’s question, the curtain goes up and the show begins. At the end of the semester, the last class of the semester, your final performance and “grand finale” the students openly critique how well they were entertained, and received what they feel are the necessary content and skills needed to do the job.

2. Background: Identifying the Problem

Out with the Old and in with the New: Teaching a New Generation
After reviewing this scenario over and over again, we (nurse educators) began asking ourselves at what point does learning originate with the student? We wondered: Are we teaching a new “breed” of students? Are we using current evidence to decide how best to teach the new generation of predominately “Millenials”? For the last 30 years, the style of teaching nursing to students has not significantly changed. Many nurse educators continue to focus on teaching students the content, skills and the baseline safety and educational requirements needed to pass the National Council Licensure Examination for Registered Nurses (NCLEX-RN). However, the problem is that often students graduate lacking the ability to critically think, reason, and use clinical judgment skills required to be proficient in the workplace. While students have been exposed to the terminology and basic concepts of critical thinking, reasoning, and clinical judgments, they rarely have the opportunity to apply these concepts to practice.

In accordance with the Institute of Medicine’s (IOM) report regarding the “Future of Nursing” leading change and advancing health, nurses play a fundamental role in the transformation of the present day healthcare system in the United States (9). Additionally, working on the front lines of patient care, nurses play a vital role in helping us as a nation meet the objectives of the 2010 Affordable Care Act, the greatest health care overhaul since 1965 with the inception of the Medicare program (9). Nursing schools are being challenged. Nurse educators have been placed in a pivotal role and are required to prepare students to function proficiently as nurses in leading change and advancing health.

The Flexner report to the Carnegie Foundation [5] regarding medical education in the United States and Canada emphasized that the amount of information about health and medicine had grown significantly, that health care systems had become increasingly complex, patients had become more engaged in their care, and educational innovations in technology and pedagogy had grown rapidly. Yet, since then little has changed in the way that education is structured and delivered to aspiring health professionals, and in-class lectures continue to prevail in the vast majority of classrooms across the country [20]. In reviewing the literature, research shows us that effective application of vital competencies such as critical thinking, creativity, communication, and collaboration at one's workplace is more likely if these skills are acquired in college [4]. As nurse educators, we are teaching to a new generation of learners who think and learn differently than previous generations, but many of us have not changed our style of teaching to meet their needs.

The majority of undergraduate nursing students are between the ages of 21 and 34, born in the 1980s and 1990s, and part of the Millennial Generation, also called “Generation Y” and “Generation Me.” The Millennial Generation is often criticized for being spoiled, impatient, and most of all, for having a sense of entitlement [11]. They have been accustomed to receiving instant gratification; exhibiting short attention spans; and are seen frequently multitasking [1]. Some of these characteristics may be the result of their parents “sheltering” them. Referred to as “helicopter” parents because they “hover” over their children, parents of millennials often maintain frequent contact with them via text messages, emails, and phone calls. Millennials grew up with set schedules and agendas, were always kept busy, were overstimulated by technology, and learned at a young age that everyone is a “winner.” This is a generation born into an emerging world of technology having grown up surrounded by cell phones, laptops, tablets and other gadgets. Technology is an essential aspect of their lives. Millennials reformed traditional communication by choosing to communicate quickly and effectively via email, social networks or text messaging. Therefore, due to inexperience, millennials often find face-to-face communication and interactions with others difficult.

Nearly four out of every ten millennial has a tattoo (and for most who do, one is not enough, about half of those with tattoos have two to five tattoos and 18% have six or more) [21]. Nearly one out of every four millennial has a piercing some place on their body other than their earlobes, which is about six times greater than any other previous generation [21]. However, even though they enjoy the attention and a variety of forms of “self-expression,” they are open, transparent and they do have limits. Most Millennials have placed privacy boundaries on their social media profiles, creating two faces, the one that they want the world to see and one for their own private domain.

Other interesting key points to note about the millennial generation are: they will become the most educated generation in American history, as well as being the most in debt ($1 trillion in student loan debt); they consider their parents to be their “friends” and remain very connected to them, including living with them, on average, longer than members of any other recent generation; they are considered more narcissistic than those of previous generations. “What is in it for me,” personal fulfillment, and a need to be in the “spot light” are characteristics of millennials. On the bright side, they tend to be confident, ambitious and creative, while enjoying challenges and entrepreneurial activities [6]. Because most millennials grow up in a pseudo-friendship style relationship with their parents and other adults, they are relaxed and comfortable working with adults and are not afraid to question authority. With immediate access to the internet and always having the ability to “Google” the answer, they expect to be given immediate, frequent feedback and will ask for it if not given.

A school and life balance is critical to the millennial. Often this gets interpreted as a generation of “lazy” individuals. However, this is not true. Many millennials have grown up in households with overworked parents which have driven their perception of work [6]. Older generations may perceive this as a commitment issue. However, the millennials merely view life differently wanting to find the best blend of an enjoyable life with a fulfilling school and work environment. Meaningful, engaging work with clearly
outlined goals, expectations, structure, supervision, and frequent praise is required. This is a generation where few students worked during their school years, therefore only a few millennials have any type of formal work experience, lacking in interpersonal communication skills and a work ethic.

So, what is the crux of the problem in teaching millenial students in nursing? The overarching problem is that despite all of the gifts and assets that millennial students in nursing hold, upon entering the health care workplace millennials often lack the required skills to critically think, reason, and use clinical judgment skills required to be proficient in their nursing role. In looking at the evidence about teaching styles, it is possible that retooling nurse educators to “flip the classroom” may offer the millennial student in the 21st century classroom a new vehicle for learning. Essential critical thinking and reasoning skills as well as hands-on decision making with real life scenarios are fostered in the filled classroom model.

3. What is the Purpose of this Article?

The purpose of this article is to introduce the nuts and bolts of “Flipping the Classroom” as a new approach to teaching millenial students. “Flipping” offers a revolutionary way to teach millennial nursing students. Why should nurse educators consider this new approach? The rationale for using this model with the millenial-aged student is that “flipping the classroom” can result in superior learning outcomes, higher knowledge retention, enhanced critical thinking skills and improved clinical judgment.

Flipping the classroom is an innovative, pedagogical model that can capture the attention of the millenial student. This model provides an opportunity to have learning start with the student. Gone are the days of teachers “entertaining” students. Using all of the research and evidence known about the present generation of learners, the millennials, as a guide, nursing educators can easily and painlessly transform the way they teach nursing to students. In the “Flipped Classroom” nurse educators can facilitate learning, act as “personal trainers”, guide students to practice, acquire, and become proficient in using critical thinking, reasoning, and clinical judgment skills.

By using a “flipped classroom” model, nursing professors can transform their classroom from an “instructor-centered” learning environment to a “student-centered” learning environment [7]. The flipped classroom is a fairly new pedagogical model, first appearing in the literature, similar to the “inverted classroom” in 2000, in which the typical lecture and homework elements of a course are reversed. In 2007, two chemistry teachers Jonathan Bergmann and Aaron Sams, using some of the basic principles used in the inverted classroom developed the “flipped classroom” teaching model [3]. Their original intent was to record and annotate lessons, and post them online making them available for absent students to review so they would not fall behind in class. However, they quickly learned that having all of their students watch and listen to the lessons prior to class gave them invaluable classroom time to do interactive projects and activities. Thus, they coined the term “flipped classroom” and further developed the pedagogical model.

The main purpose of the “flipped classroom” as an educational model is to move away from lecturing as the primary way to deliver information and to devote class time to active learning strategies where students become the center of their own learning experience. The “flipped” part of the flipped classroom means that the student is required to watch, read current evidence-based articles, listen to online lectures, videos, and complete a variety of other content learning activities prior to class. The role of the teacher changes from that of a “presenter” of content to that of a coach, or a “student trainer” who is developing the talents of students. In-class time is devoted to actively engaging in collaborative learning through activities such as discussing case scenarios, role playing, teamwork, and other meaningful, interactive activities. Flipping a classroom involves shifting the energy away from the instructor and onto the students and then leveraging educational tools to enhance the learning environment [3]. The flipped classroom may or may not use technology. Class time is devoted to active learning, putting the student at the center of the learning experience. It aims to move, “beyond basic acquisition of facts to emphasize application of content to real world scenarios” [8].

4. Making a Theoretical Link

Bloom’s Taxonomy provides an excellent framework for comparing the lecture-centered class to the “flipped” class. This framework forces nurse educators to focus on higher level learning outcomes during class time and lower level outcomes outside of class [7]. Bloom's taxonomy seeks to create a holistic framework for learning in which higher levels of learning depend on first attaining lower level knowledge and skills. The traditional “lecture” classroom model places more emphasis on Bloom’s lower level thinking skills such as knowledge transfer and comprehension, whereas the flipped classroom model emphasizes Bloom’s higher level thinking skills such as application, synthesis, and evaluation. Mastering higher level skills enables critical thinking. For students to learn at higher levels in class, they must first attain the prerequisite knowledge acquisition prior to class. The flipped classroom helps develop analytical thinking. Flipped classroom teachers encourage students to take chances, and make mistakes during in-class discussions and activities. According to Tucker, students use class time to work through problems, advance concepts, and engage in collaborative learning [22]. This type of knowledge cannot be obtained from simply reading or memorizing from a book, it must be
experienced [11]. Embracing the flipped classroom model is in sync with Blooms taxonomy and is an enjoyable way for both teachers and students to apply, synthesize and evaluate new knowledge.

5. Intervention: How and Why to Use the Flipped classroom model

As nurse educators we might ask ourselves; “ok, we know it is a different generation of learners and we understand that we need to use a different educational approach, but what are the advantages of using a flipped classroom model over other more traditional learning models?” First, advances in technology with easy access to information are compounded by a population of students who are well prepared with the skills and expertise to use such technology. They have learned at an early age how to “Google” to discern answers to their questions quickly and efficiently. Students know how to find and read course content far better than we give them credit for. However, they are also able to quickly access incorrect content and are often unable to decipher which is correct.

The flipped classroom can be designed in a wide variety of ways. Detailed posted online pre-class instructions that include course and class objectives, required readings, pre-class quizzes, resources, videos, and any other materials required to be completed prior to the class, the millennia student can accomplish these tasks with faculty assistance given through emails, texting, group discussion boards, blogs etc…By front loading content, the flipped classroom encourages students to explore the material and develop new skills on their own, with the understanding that they will apply this new knowledge through various classroom activities. Because this is a change in mindset and change is difficult, the student is now required to actively prepare for class versus passively coming in and listening.

A common complaint especially heard in the beginning of the semester by students is the “excessive” amount of pre class required work. Students state that they feel like they are “teaching themselves” therefore they do not see the need to go to class. It is imperative that the course professor makes it clear to the students the important connection between the two modes, pre-class preparation and classroom activities. When the content is properly integrated there is an interdependence between what goes on in the classroom and what goes on prior to class creating that “Ah ha” moment we all long for [10].

To be successful, faculty must make it crystal clear that all pre-class work is expected to be completed prior to class and is reviewed and graded. Most colleges and universities have some type of learning management system to deliver online courses and augment on-campus courses which make tracking students pre-class assignment completion easy. Timely feedback by faculty on completed work is crucial. Students want to know that teachers have reviewed and read their work, emphasizing its importance.

As stated, millennials were protected and sheltered by their parents and have limited experience interacting with the “real world.” Due to the economic recession and the limited number of jobs, millennial students may have never held an actual job. Outside of their role as student, friend, and family member, they have limited exposure working with others. The flipped classroom model provides an opportunity for students to practice leadership skills, gain experience working with their peers and in intradisciplinary teams. It prepares them to communicate effectively and clearly with co-workers, patients and families, to act professional, to develop conflict resolution and problem-solving skills, and to practice the art of delegation and prioritization. The flipped classroom allows valuable class time for problem solving, creating, critiquing, and synthesizing with peers and professors in a flexible, dynamic, engaging, non-judgmental, and trusting environment.

The flipped classroom education model is a perfect fit for millennial students because it provides a format they are comfortable using. It offers easy access to information wherever and whenever they want it. This model allows for consistent teacher-student interaction and support (i.e. online, emails, text) which they are accustomed to having with their parents. Millennials enjoy clearly defined and outlined objectives, goals and class expectations (remember millennials like structure, order, schedules, outlines and agendas).

Similarly, millennials like self-paced learning activities and experiences with continuous feedback from a one-to-one “student trainer.” Nonetheless, like any change, transitioning students and faculty to a flipped classroom model can be a challenge. With time, patience, and persistence, teachers and students can successfully embrace this exciting and interactive method of teaching and learning.

6. Nuts and Bolts “Strategies” for Flipping the Classroom

Creating a successful course design for a flipped classroom entails more than simply converting content for online delivery or finding related activities to do with students in class [10]. Strategies in the implementation of a flipped classroom require creativity and planning. As stated by Ash [2], “the need for upfront planning is critical, but at the same time, there's also a need to learn along the way and have the flexibility to make changes.” Students become “active learners,” practicing critical thinking skills, learning clinical reasoning and judgment. Although a flipped classroom design does not need to use technology, using technology with the millennial generation is essential. This generation grew up with technology and is highly proficient with electronic communication.

Strategy 1: Creating Course Modules: A starting point in one’s course design is to divide the course into individual
class modules, one module for each class. Each module follows the same format, divided into several different categories such as class learning objectives, required preclass assignment, class content, class activities, and class summary and reflection. The pre-class assignment category includes required readings, such as textbook chapters and content related articles, watching videos, and researching important content related websites. A minimum of ten multiple choice class content related questions, including one essay type critical thinking question, need to be answered and submitted prior to the start of class. The expectation is that students come prepared to class to discuss the module content they reviewed prior to class. Pre-class work is averaged into the students final course grade which acts as a very big incentive to complete the work. No credit is given for work completed after the start of the class.

Strategy 2. Team Based Learning (TBL): TBL is one of the many great strategies that work nicely in the flipped classroom setting. TBL is a team-directed educational method in which multiple small groups of students are created within a single classroom. It aims to move “beyond basic acquisition of facts to emphasize application of content to real world scenarios” [14]. On the first day of class create assigned teams by using a random selection process such as selecting names or team numbers out of a bag and not giving students a choice of team members. Not having a selection of who is on your team simulates a work environment of which one has no choice in who their fellow work mates are. Teams should have between 4-5 members, small but yet large enough to provide for active discussion and participation. Once teams are established, the student remains in the same team throughout the entire semester. Within each team, students must designate a team leader, establish team rules, establish a team name and create a fictional working location i.e. medical floor, transplant unit. Throughout the remainder of the semester students are required to sit with their teammates and function as a team in all groups and decision making activities. Teamwork teaches students to work collaboratively together to solve problems, make decisions, set priorities and delegate workloads [14].

Early on in the semester each team is given a specific topic to explore along with a detailed rubric outlining the content to be covered, the expectations, the time frame, the presentation date, and any other pertinent instructions. Teams are instructed to be “creative” and not permitted to use a lecture format such as reading power point slides or other materials to the class. It is truly amazing how excited, creative, and enthusiastic teams can become with TBL. Teams have created games using common themes from television shows, calling these games “Prioritize Jeopardy,” “Wheel of Delegation,” and “Achievement BINGO,” to help them explain and discuss key concepts in nursing such as the art of delegation and prioritizing patient care. Remember, this is a generation of students who know how to use technology and are resourceful and experienced in its application, so capitalize on this skill.

Strategy 3. Pre-class Assignments: Students can be required to answer a critical thinking question and submit their response through an online assignment drop off box prior to class. Critical thinking questions are questions that are based on the pre-class assignment content for the upcoming class and require the student to actively process, conceptualize, apply, analyze, synthesis, and evaluate this content to reach an answer or conclusion. It sounds complicated but it basically asks students to reflect on what they have learned in the pre-class assignments and think about how they can use this knowledge. Students are asked to bring a copy of their critical thinking responses to class with them each week. Each class, students meet in their teams for 20 minutes to review and discuss their responses to that week’s critical thinking question. After group discussion, each team reports to the class as a whole the general points their team discussed. This process allows the students time to share and reflect on their own thoughts and ideas, as well as those of others. It also provides an excellent opportunity for the course professor to identify gaps in knowledge, areas of confusion, and provide immediate feedback.

Strategy 4. Analyzing Strengths, Weaknesses, Opportunities, and Threats (SWOT): The use of a “SWOT” Analysis is another excellent tool that can be used either individually or in teams. A SWOT analysis is a structured planning tool used to evaluate the strengths, weaknesses, opportunities, and threats involved in a case scenario, project or in a business venture [16]. Ironically, the SWOT analysis was used predominately in the business world however, lately it has been found to be an effective organization and planning tool in many other disciplines. Students identify their objective and then research the strengths, weaknesses, opportunities, and threats that may impact their ability to meet the objective. It is an excellent fit for nursing because it provides a holistic view of the entire situation which opens the door to effective and efficient planning and implementation.

Strategy 5. Case Studies: The use of case studies is another extremely useful learning tool in the flipped classroom. Case studies are a form of problem-based learning (PBL), where the professor presents a situation that needs a resolution [15]. Case studies are a useful tool to improve a learning experience. Students quickly get involved and are excited to immediately use newly acquired skills. These studies provide students with an opportunity to solve real life problems with newly acquired knowledge. There are no unpleasant consequences for getting it “wrong,” and cases give students a much better understanding of what they really know and what they need to practice. The National League for Nurses (NLN) has created an excellent resource for nursing faculty called the “Advancing Care Excellence for Seniors (ACES)” [19]. The ACES program contains a series of audio unfolding cases, in which the individual or couple introduces themselves and their complex problems to be addressed. Nursing faculty can use these ongoing, unfolding cases to help students apply and
practice pre-class assigned content. Students enjoy storytelling, filling in the missing pieces, and looking at “what if scenarios.” These unfolding cases make a great venue for such a classroom activity. These NLN resources are free to members and available at a nominal fee to nonmembers.

**Strategy 6. Creative Concept Mapping:** Concept mapping has a branching, hierarchical diagram of concepts and demonstrates how concepts are connected using arrows and labels that identify interrelationships [18]. It can be a strong visual learning tool. In a study conducted by Moattari, Soleimani, Moghaddam, and Mehbodi [17] concept mapping “resulted in an increase in students’ ability to identify dimensions of critical thinking, justify their reasoning, and provide appropriate explanation.” In using this classroom activity, students work together in teams to identify the relationships between key concepts presented in the pre-class content material. An additional “plus” to this type of activity is “peer pressure.” Students are more likely to complete pre-class assignments knowing they will be responsible to discuss the contents with their peers.

**Strategy 7: Role-Playing and Simulation Exercises:** Role-play is a type of simulation exercise where students take on assumed roles in order to act out a scenario in a variety of settings. Students act out their assigned roles in order to explore the scenario, apply skills, experience the scenario from another student’s view point, evoke and understand emotions that maybe alien to them [12]. It helps to make sense of theory and gathers together key concepts into a realistic experience.

Role-play exercises can be done with or without videotaping and is an energizing, fun activity that students truly enjoy. It allows students to contribute actively (even the quieter ones). It is time efficient, and it needs little preparation for the professor. Role-play exercises can be simple or complex, short or long and can be adapted to meet the needs of the content being taught. Kumar states “experiential learning is more powerful than instructions, and it can be adapted to deliver any learning objectives from simple to complex concepts.” Role-playing moves students outside of their comfort zones, helps bring on attitudinal change by exposing them to different viewpoints, and fosters development of all domains of learning, cognitive (knowledge), psychomotor (skills) and affective (emotional) [12]. Role-playing can be used to apply and practice skills (such as communication skills i.e. assertiveness, negotiations, collaboration, conflict resolution, and delegation), understand complex ethical issues (such as problem solving scenarios “what would you do?”), experience the scenario from another view point, explore attitudes and beliefs, and evoke and understand emotions that maybe alien to them. Videotaping the role plays, reviewing them as a group and offering constructive feedback provides students with not only immediate feedback but also a visual critique. Remember, millennial students love technology and enjoy watching themselves on video!

**Strategy 8: Innovative Quiz Styles:** Using innovative, “game like” multiple choice quizzes are an effective grading tool as well as a wonderful team building activity. Multiple choice quizzes based on situational themes (i.e. delegation, negotiation, conflict resolution, prioritization) require students not only to know the content but also to use critical thinking skills to determine the best answer. Instead of completing the quiz independently and submitting the quiz for grading, students first take the quiz independently and then review and discuss their answers with their team. The team is allowed to submit only one completed quiz with the final answers and rationale. The exercise teaches collaboration, negotiating, problem and conflict resolution skills and helps students understand multiple viewpoints. This process takes the primary emphasis off the “grade” and places the focus on the “process.” It can help the millennials who focus on “me” and need to know “what is my grade, what skills did I learn, and how does this information impact me to grow and change.”

7. Conclusions: Tying it all Together

The “Flipped Classroom Model” can capture the attention of millennial students and help them evolve into active learners. It is a powerful teaching tool that can result in superior learning outcomes in the student’s retention of knowledge, enhance their critical thinking skills and improve their clinical judgment. Simultaneously, it can transform us as nurse educators. Flipping the classroom requires that we teach in a new way, making the entire teaching learning process more exciting and inspiring creativity and innovation.

As nurse educators, we are teaching a new “breed” of students and evidence based research exists on how best to teach them. Millennials think and learn differently than previous generations, so we must change our current style of teaching to meet their needs and the future needs of the patients and families. With the implications noted in the IOM Report, “The Future of Nursing,” and the Affordable Care Act, nursing schools face increasing demands to improve learning experiences, and better prepare students to meet the healthcare needs of a rapidly growing, diverse population of people in a wide area of settings, as well as capture the attention of Millennial students. The flipped classroom educational model provides these opportunities.

Using the flipped classroom model nursing educators facilitate learning, acting as “personal trainers,” and transform their classroom to a student-centered learning environment to guide students to practice, acquire, and become skill proficient. The model provides a comfortable learning style for the millennial student. It also provides students with easy access to information wherever and whenever they want it, continuous professor interaction and support, clearly defined and outlined objectives, goals and class expectations, self-paced learning activities and experiences with continuous feedback.
Strategies in the implementation of a flipped classroom require creativity and planning. However the educator has increased flexibility during classroom time and can direct classroom activities and learning experiences to meet individual student’s learning needs. Using online resources to create, post and deposit required assignments is an excellent tool to not only prepare students for class content but also to maintain student-professor interaction. Team Based learning (TBL), through the use of assigned teams, teaches students to work collaboratively together solving problems, making decision, setting priorities and delegating workloads. The process allows students time to share and reflect on their own thoughts and ideas, as well as those of others. It provides an excellent opportunity for the course professor to identify gaps in knowledge, areas of confusion, and provide immediate feedback.

There are numerous useful tools and activities that can be used in a flipped classroom model. The use of SWOT Analysis, provides a holistic view of the entire situation which opens the door to effective and efficient planning and implementation. Case studies, a form of problem-based learning, are an effective, fun, realistic learning tool. Concept mapping, a visual learning tool which requires students to first individually learn the content to be discussed and second, work collaboratively to understand and identify interrelationships in the content. This classroom activity increases the student’s ability to critically think and reason. Capturing on the idea that millennial students love technology and enjoy watching themselves on video, using role-playing and simulation exercises are excellent activities that help students make sense of theory and connect key concepts into a realistic experience. Role-playing and simulation exercises are fun, creative, easy to implement, engaging and beneficial to all students.

“Flipping” testing styles, changing how and what we test is a critical component of the flipped classroom model. Testing techniques that measure knowledge and skill acquisition instead of content is key. Creating multiple choice quizzes based on situational themes requiring students not only to know the content but also to use critical thinking skills to decipher the best answer. Testing is based on application verses content alone.

To Flip or not to Flip? Absolutely! As nurse educators we can learn about and use this model. Why? Because the flipped classroom model is designed especially for the millennial student. It provides an opportunity to have learning start with the student. Gone are the days of nurse educators “entertaining” students. Using flipped classroom model can help educators to facilitate learning, guide students to practice new skills, acquire new knowledge and gain proficiency in critical thinking, reasoning and judgment skills required of them in their nursing roles. Using the flipped classroom model, nurse educators can lay the groundwork and prepare nurses to better meet the challenges of today’s healthcare world.

REFERENCES


