

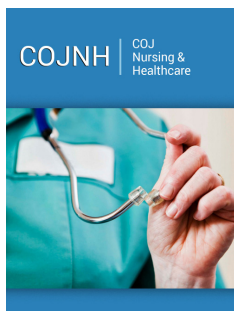
Learning Activities to Engage Multigenerational Nursing Students

Louise Manasco¹ and Nashat Zuraikat^{2*}

¹Doctoral student, Indiana University of Pennsylvania, USA

²Professor of Nursing, Department of Nursing and Allied Health Professions, Indiana University of Pennsylvania, USA

ISSN: 2577-2007



***Corresponding author:** Nashat Zuraikat, Professor of Nursing, Department of Nursing and Allied Health Professions, Indiana University of Pennsylvania, USA

Submission: 📅 December 27, 2023

Published: 📅 January 26, 2024

Volume 8 - Issue 5

How to cite this article: Louise Manasco and Nashat Zuraikat*. Learning Activities to Engage Multigenerational Nursing Students. COJ Nurse Healthcare. 8(5). COJNH. 000696. 2024. DOI: [10.31031/COJNH.2024.08.000696](https://doi.org/10.31031/COJNH.2024.08.000696)

Copyright@ Nashat Zuraikat, This article is distributed under the terms of the Creative Commons Attribution 4.0 International License, which permits unrestricted use and redistribution provided that the original author and source are credited.

Abstract

Current learning environments, such as lecture-based classrooms, in nursing education often lack appropriate student engagement, which is necessary to encourage critical thinking. Student engagement is an important component to allow for retention of information. When students retain information, they are more likely to utilize it in new situations and begin the process of critical thinking. Critical thinking must be taught to throughout nursing programs to encourage safe and competent nurses in practice. With the introduction of the Next-Generation NCLEX-RN, students need to begin the critical thinking process early in their nursing programs. Active learning strategies can be used to foster engagement. This topic is significant to nursing as there is a wide array of ages in nursing classrooms, potentially spanning up to three generations of learners. Educators need to be able to adapt learning activities to meet the needs of different generations of learners they will encounter in the nursing classroom. Each generation has different learning styles that need to be addressed to encourage engagement and foster critical thinking. Three different strategies, audience response systems, simulation, and the flipped classroom approach, are discussed with best practice strategies and suggestions for use in the classroom. Based on how these strategies were incorporated into classrooms in the literature, this may serve as a guide for nurse educators to implement any of the three presented strategies into their nursing classrooms, thus encouraging a more effective teaching environment.

Learning Activities to Engage Multigenerational Nursing Students

Multigenerational learners are abundant in nursing education today [1,2]. Nurse educators need to be able to adapt learning strategies to meet the needs of these learners and develop competencies necessary of nurses today [1]. Due to the extensive amount of information in nursing education, classes are often taught in a lecture-based format [3]. Lecture-based learning allows an educator to distribute a vast amount of information quickly. However, lectures create a passive learning environment as students merely listen to the delivered information and take notes [3]. Students must be engaged in learning activities to process and incorporate new information into their knowledge base. Billings [1] describe how educators can facilitate engagement by incorporating active learning strategies into the classroom environment. This manuscript will discuss three strategies nurse educators can use to engage multigenerational learners in the classroom setting.

Background

According to Bristol et al. [3], 79.91% of nurse educators indicated that lectures were utilized more than 25% during classes. Lecture-based environments cannot foster higher-order thinking, which is necessary for nursing students today [4]. To build critical thinking skills, students must be able to utilize information they have previously learned and apply it in new situations. To encourage this, students need to be engaged in their learning activities [4]. Classrooms that focus on lectures as the primary mode of information dissemination have difficulty allowing student engagement [5]. Consequently, educators need to foster active learning techniques that meet the needs of learners.

In nursing schools today, there are a vast array of ages represented. According to the National League of Nursing (NLN, 2022) enrollment data for Baccalaureate Degree Nursing (BSN) programs in 2022, three generations of students were accounted for. About 77% were under 25 years, 20% were between 26 and 40 years, and 2.9% were between 41 and 60 years (NLN, 2022). This data is consistent with age spans of Associate Degree Nursing (ADN) and diploma programs. With the vast age ranges typical of schools today, educators must be able to adapt their teaching styles to encourage engagement and foster retention of knowledge. This is necessary for critical thinking and clinical judgment as patients are often sicker with multiple comorbid conditions. Clinical judgment is now being evaluated for all new graduates with the next-generation NCLEX-RN exam. According to Currier [6] for the National Council State Board of Nursing (NCSBN), clinical judgment is a circular process by which the nurse obtains information, identifies pertinent data and concerns, and provides evidence-based interventions to ensure safe patient care. However, this is not an innate process that comes from having content knowledge; it must be worked through progressively [6]. Students must be able to use content knowledge to think critically and clinically judge to ensure safe patient care.

Literature Review

The literature review aimed to determine available information regarding engagement in nursing classrooms, the learning styles of different generations of students, and active learning strategies currently used in the nursing classroom. The electronic databases searched included a Cumulative Index of Nursing and Allied Health Literature (CINAHL), PubMed, and ScienceDirect. The terms “classroom engagement” and “nursing students” were used in CINAHL and PubMed databases. The terms “classroom engagement” and “nursing education” were used in ScienceDirect searches. After limiting articles to full text and reviewing abstracts, 12 articles were included in the review. Rodriguez-Gonzalez et al. [7] conducted a study to evaluate engagement in nursing students and found that students considered the engagement level of these students to be average. In a primarily lecture-based environment, student engagement is challenging to employ. Through engagement with activities, students may feel more adept at “working through challenging material” [3]. Iduye et al. [4] found that diverse student populations may experience disengagement in the nursing classroom and that educators need to be attuned to these concerns and adjust activities to meet the needs of these students.

According to Shepherd [8], the learning styles of those in Generation X view the teacher as the expert in the topics taught. They prefer using kinesthetic activities during learning and are comfortable with technology [1]. These individuals tend to value independent learning [8]. Individuals in Generation Y also favor kinesthetic activities; however, they highly value visuals and interactive learning with technology. These individuals tend to value interactive learning [8]. Hampton et al. [9] evaluated the learning styles of individuals in Generation Z and found that they prefer that learning is engaging and practical with visual and technological aspects. Active learning strategies are strategies that the educator can use to encourage student engagement and incorporate

different technologies. With these learning strategies, the student becomes an active participant and builds new knowledge through existing knowledge. This process is facilitated through interactions with others [1]. Engagement is necessary to facilitate knowledge retention, increase student outcomes, and improve critical thinking skills [3,10]. A few strategies discussed in the literature include audience response systems like clickers, simulation, and the flipped classroom. Researchers found that incorporating these strategies into the classroom improved student’s involvement in class time and understanding of class material [11,12].

Audience response systems

Porter [11] completed a study using audience response systems, such as clickers, in the nursing classroom. In classroom presentations, NCLEX-RN questions were incorporated to evaluate specific content knowledge. By incorporating questions into the classroom presentation, the educator and students could evaluate their understanding of the material and, if needed, clarify questions and talk through rationales for answers. This may assist students in test-taking and critical thinking as they get real-time feedback about answering NCLEX-style questions and the thought processes used. Furthermore, Russell et al. [12] found positive effects of using clickers in the classroom environment, including improved attention for students and, thus, improved exam preparation. The authors utilized case-based questions in presentations to help the student think like a nurse. Often, the questions requested the student pick the best option and reflect on nursing practice more realistically. This allowed the educator to discuss strategies for tackling these question types and allowed educators to discuss rationales for right and wrong answers to help students begin to think critically. A key aspect was that educators needed to take on an active role in the instruction to help students go through this thought process [12]. Dozier et al. [10] discuss technology, such as Mentimeter [13] or Kahoot [14], that can incorporate this strategy in the classroom. Mentimeter [13] is a voting tool that uses personal smart devices to allow students to answer questions included in classroom presentations [13]. This technology can be used in in-person or online classrooms. Kahoot [14] is a game-based learning tool that educators can create quizzes to use in class that students can be involved in with their tablets, phones, or computers [10,14].

Simulation

Hall et al. [15] incorporated simulation in nursing classrooms. Prior to the activity, educators created a scenario and aligned the scenario with course learning objectives. Guidelines were provided to those acting as the nurse and the patient in the actual scenario. A Kahoot quiz was created to determine actions for the students to choose from a pivotal point in the scenario. At the time of the scenario, students were given background information about the case and watched as it was completed in real-time. Intermittently, the students would have options as to what the nurse’s following action would be, and based on the majority vote, that action would be completed. It played out through 6 different decisions that students had to make, and once it was completed, debriefing took place. Carrero-Plannells et al. [16] incorporated high-fidelity

simulation in a fundamentals nursing course to teach nursing procedures related to vital signs and basic patient assessment. The authors had three scenarios that students may encounter, and there were specific learning outcomes that students needed to achieve throughout the scenarios. Based on their assessment, there were specific interventions that students should have completed. In this study, students noted satisfaction related to the realism of the scenario. They noted that the activity may help them overcome fears related to patient care in the clinical area [16]. Simulation effectively provides “real-life scenarios which prompt student decision-making and clinical reasoning skills” [10]. These can be completed in person or through virtual scenarios, depending on planned student learning outcomes. In-person scenarios can utilize low-fidelity or high-fidelity simulation mannikins or standardized patients depending upon the needs of the scenario and technology available to the educator. Students can complete these activities individually or in small groups [16].

Flipped classroom

Billings [17] discusses utilizing the flipped classroom approach in the nursing classroom. Pre-class activities, such as short videos or practice tests, allow students to come prepared with basic knowledge they can use in the classroom. In-class activities should be used to foster material application and allow time for feedback. In-class activities included clinical cases, simulation, role-play, debate, or discussions. Feedback should be offered to students in real-time throughout an activity. To ensure that students can interact with small groups, Billings [17] notes that classrooms should be configured to facilitate collaboration by using tables versus desks or incorporating technology that facilitates interactions. Follow-up should be completed after class sessions through online or in-person discussions. In a study by Ng [18] to evaluate the effects of a flipped versus traditional classroom using mixed methods, the result showed an increase in exam scores and cognitive engagement in the flipped classroom approach versus the traditional lecture-based classroom approach. In the flipped classroom approach, students completed preparatory work such as pre-recorded videos and follow-up activities online prior to class, and then, during class time, students completed interactive activities such as working in small groups to complete “problem-solving exercises [and] group discussions” following a brief review of content and potentially a short lecture time for advanced content [18].

Best Practice Strategies

Implementing any of these strategies into the classroom environment requires forethought by the educator and the student’s motivation to utilize these strategies in the classroom effectively. However, educators need to be able to adapt teaching styles to address the needs of multigenerational students. Educators should use a variety of activities to appeal to different student populations. Teaching strategies to appeal to multigenerational learners include using technology in activities, identifying practical benefits to knowledge, and providing timely feedback. Initially, the educator should create learning objectives for the lesson. Based on the learning objectives, the educator can decide which strategy would

best fit the needs of the lesson. The educator can begin creating the activity with the best strategy in mind.

Discussion

Audience response systems

To incorporate audience response systems into the classroom, the educator should seek out potential technologies that will allow for student engagement, such as Mentimeter [13] or Kahoot [14], Dozier AL [10]. There are free versions that the educator can utilize initially. If available, clickers can also be used; however, using the former technologies allows students to use mobile devices to connect to the presentation questions without additional supplies [13,14]. Once the educator has determined that this method will best address the needs of the lesson, work can begin to create NCLEX-style questions to incorporate into the presentation. The educator should seek to write questions on the high points of the lesson or areas with the most emphasis and strategically place them within the presentation to keep students’ attention. Depending upon the length of the presentation, the educator can determine how many questions to include. For Kahoot, educators can create a quiz based on the high points of the presentation to complete at the end [14]; however, the educator must keep the presentation to a set length of time to avoid losing the students’ attention. Educators must also ensure they are actively involved in discussions while encouraging student involvement. By doing this, educators can see students’ thought processes and recommend improving their thinking processes [19].

Simulation

To incorporate simulation into the classroom, the educator can seek out potential scenarios that would be best optimized to use simulation strategies, such as an acute change in patient status or basic skills. The educator would need to determine the best arena for providing the simulation, whether in an online or in-person environment. Various technologies are available to incorporate online simulations into the classroom, such as Shadow Health through Elsevier, Assessment Technologies Institute (ATI), and vSim through Laerdal Medical. Educators may also be able to record a simulation activity and disseminate it to the students with critical thinking questions based on actions if they do not have access to other technologies. For online or in-person simulations, the educator should create learning objectives to ensure that students can complete the activity objectives. Based on the objectives, the educator can build the scenario. The scenario should last a predetermined time, and specific decisions must be made based on the scenario. Depending upon the length of time of the scenario can equate to a specific number of actions the student needs to take. Students should go through pre-briefing with the educator, where they find out background information about the patient, complete the scenario, and then debrief, where the discussion about the scenario occurs after completion.

Flipped classroom

To incorporate the flipped classroom approach into the classroom, educators need to create a culture of responsibility

for learning. The flipped classroom approach to teaching requires that educators develop learning opportunities for the students, but ultimately students need to take responsibility for their learning. To implement this approach, educators must create preparatory assignments, such as readings, presentations, or activities to prepare the students for class. During class, the educator should create activities requiring student engagement, such as case studies, discussions, or role-play. The educator should ensure that the activity is designed to focus on the high points of the lesson or the most seen diagnosis in practice and that collaboration between students can happen. To allow for collaboration, the educator should set up the classroom appropriately by pushing desks or tables together or setting up group areas at different spaces in the room. During the activity, the educator should be available to answer questions and provide feedback to each group of students as needed. Following the activity, the educator should assign follow-up activities to evaluate understanding or mastery of the material. These can be through reflective activities or quizzes.

Implications for nurse educators

To keep students engaged in learning, educators need to be able to adapt teaching styles to meet the needs of the students and the activity. The educator should plan to incorporate a variety of experiences into the classroom environment. Three methods that can be utilized for many content areas were discussed. When planning learning activities, the educator should keep the learning objectives in mind and evaluate the activity after completion. This could include a survey of participants or a quiz to evaluate knowledge. These strategies appeal to multigenerational learners by incorporating technology, group work, and the potential for hands-on experiences. With audience response systems, students will use technology to answer critical thinking questions throughout a presentation. This appeals to all generations of learners. It fosters immediate feedback, which is essential to students as well. With simulation, students may practice skills hands-on, which appeals to kinesthetic learners. Simulation may also allow students to use multiple learning styles, such as visual, auditory, and kinesthetic properties. Hands-on opportunities appeal to many of the generations of students. Group work is essential to multigenerational students as well. In the flipped classroom approach to learning, group work is an essential component of the classroom environment and can appeal to the needs of these students as well.

Conclusion

As a nurse educator, student engagement is key to creating an effective classroom where information is retained, and critical thinking can occur. To foster this environment, the educator must include activities to enhance this process. The methods discussed included audience response systems, simulation, and the flipped classroom; however, many other options are available. These activities can foster student engagement and incorporate critical

thinking into the classroom, which is critical of nursing schools' education modalities today. By utilizing any of these strategies in each class session, the nurse educator can work to meet the learning needs of multigenerational nursing students.

References

1. Billings DM, Halstead JA (2016) Teaching in nursing: A guide for faculty. (5th edn), Elsevier, Amsterdam, Netherlands.
2. National League for Nursing (2023) Proportion of student enrollment by age and program type, 2022. NLN Data View TM.
3. Bristol T, Hagler D, McMillian-Bohler J, Wermers R, Hatch D, et al. (2019) Nurse educators' use of lecture and active learning. *Teaching and Learning in Nursing* 14(2): 94-96.
4. Iduye D, Vukic A, Waldron I, Price S, Sheffer C, et al. (2021) Educators' strategies for engaging diverse students in undergraduate nursing education programs: A scoping review protocol. *JBI Evidence Synthesis* 19(5): 1178-1185.
5. Licu M, Paun S, Ionescu CG (2022) Active learning and a good relationship with students-The foundations of facilitating learning. *Euromentor Journal* 8(4): 45-57.
6. Currier J (2019) NGN talks: Clinical judgement model. National Council State Boards of Nursing, USA.
7. Rodriguez-Gonzalez R, Martinez-Santos AE, De La Fuente NV, Lopez-Perez ME, Fernandez-De-La-Iglesia J (2023) Identifying engagement and associated factors in nursing students: An exploratory study. *Journal of Professional Nursing* 48: 77-83.
8. Shepherd J (2020) Generational differences in learning style preferences among adult learners in the United States. *Journal of Behavioral and Social Sciences* 7: 137-159.
9. Hampton D, Welsh D, Wiggins AT (2019) Learning preferences and engagement level of Generation Z nursing students. *Nurse Educator* 45(3): 160-164.
10. Dozier AL, Gilbert BG, Hughes VW, Mathis DP, Jenkins LJ (2021) The use of active learning strategies during the COVID-19 pandemic to promote critical thinking. *The ABNF Journal* 32(1): 12-16.
11. Porter AG, Tousman S (2010) Evaluating the effect of interactive audience response systems on the perceived learning experience of nursing students. *Journal of Nursing Education* 49(9): 523-527.
12. Russell JS, McWilliams M, Chasen L, Farley J (2011) Using clickers for clinical reasoning and problem solving. *Nurse Educator* 36(1): 13-15.
13. Mentimeter, Boost learning outcomes. Education.
14. Kahoot! (2023) Kahoot! for higher education.
15. Hall LC, Gatto SL, Lefevre L, Murphey T (2022) Live interaction classroom simulation: A student engagement strategy. *Nurse Educator* 47(4): 254-255.
16. Carrero-Plannells A, Pol-Castaneda S, Alamillos-Gaurdiola MC, Prieto-Alomar A, Tomas-Sanchez M, et al. (2021) Students and teachers' satisfaction and perspectives on high-fidelity simulation for learning fundamental nursing procedures: A mixed-method study. *Nurse Education Today* 104: 1-6.
17. Billings DM (2016) Flipping the classroom. *American Journal of Nursing* 116(9): 52-56.
18. Ng EKL (2023) Flipped versus traditional classroom and student achievement and cognitive engagement in an associate degree nursing fundamental course. *Nurse Education in Practice* 68: 1-6.
19. Merriam-Webster (2023) Engaged. In: Merriam-Webster.com dictionary.