Preferred Teaching Strategies for Students in an Associate of Science Nursing Program [1]

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ABSTRACT

The constituents of the nursing classroom have evolved over the years from the traditional high school graduate to a multigenerational student population. Diversity in student demographics brings new challenges to educators. Implementation of innovative teaching strategies has now become a driving force in nursing education to better meet the needs of a multigenerational classroom.

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Background

In the traditional classroom, students tend to focus more on note taking than actually listening. Instructors present content in a lecture-type monologue, which may result in lack of student engagement. In effort to enhance student engagement and facilitate learning, experiential teaching strategies in nursing education have been on the rise in recent years (Shin, Sok, Hyun, & Kim, 2015). While traditional lecture can be effective in the short term, this method does not consistently meet each identified learning style (visual, aural, reading, kinesthetic) that is employed by students in the classroom (Vark-learn, 2016). Research has shown that the best way to provide an inclusive environment of learning is to design a curriculum that will meet the diverse learning needs of each student in the classroom (McAllister, 2010). DeCelle and Sherrod (2011) give this explanation of learning:

> Comprehension, appreciation, and integration of andragogy; self-directed, transformative, and experiential learning; and Western and non-Western ways of knowing can help educators to develop personal teaching approaches to transform classroom and clinical learning and promote a more diverse health professions workforce (p. 583).

To that end, educators need to identify the learning preferences of their students. Once identified, they can build a curriculum that will promote student success and attainment of student learning outcomes (Robert, Pomarico, & Nolan, 2011).

The purpose of this pilot study was to identify which teaching strategy is most preferred among nursing students in an associate of science nursing (ASN) program and to determine if findings correlate to current literature recommendations regarding the use of experiential learning in today's classroom.

Literature Review

The review of literature found very little current research (2012–2017) published on the subject of preferred teaching strategies. The delivery of nursing education is evolving as new technology is developed. No longer is a single static teaching strategy effective to meet the needs of learners in the classroom (National League for Nursing, 2015). Instructors are beginning to "see the light" and realize that traditional lecture is not the only method through which students can learn. Case studies, role-playing, and simulation scenarios provide new ways of delivering nursing education (Lange & Purnell, 2011). Devising a curriculum and teaching plan to effectively meet the needs of each student is the challenge and privilege of nurse educators. One strategy identified to be useful in meeting the needs of the individual learner is implementation of the flipped classroom. In the flipped classroom, students listen to narrated lectures prior to the classroom experience; then, the instructor employs dialogue, case studies, and other strategies to engage learners in critical

thinking and clinical reasoning (Volpe, 2015). Simulation takes learning to the next level, where the student applies knowledge acquired through traditional lecture and the flipped classroom. Reality and Web-based simulation provides a safe learning environment in which students practice the skills necessary for development of clinical reasoning and critical thinking (Partin, Payne, & Slemmons, 2011).

A study performed by Shin et al. (2015) measured the difference in performance and critical thinking between a group of students participating in a traditional lecture classroom and a group involved in active learning. The study found that the active learning group scored significantly higher overall than the traditional lecture group. Critical thinking skills and nursing skills improved significantly in the active learning group, as opposed to the traditional lecture group. Findings from the Shin, Sok, Hyun, and Kim study were consistent with previous studies (Berman et al., 2014; Duane & Satre, 2014; Hoke & Robbins, 2005; Masters, 2014; Mills et al., 2014; Pines et al., 2014). These studies also concluded that the use of alternative methods result not only in increased learning but found there is also a higher level of accountability when utilizing nontraditional methodologies, such as experiential learning (Shin et al., 2015).

Missildine, Fountain, Summers, and Gosselin (2013) suggest that providing an integrated classroom approach, including strategies, such as the flipped classroom, simulation, role-playing, case studies, and problem-based learning, can meet the challenges of a transformational classroom. A study conducted by Mills et al. (2014) received positive qualitative and quantitative responses to surveys regarding the use of simulation and unfolding case studies. The responses showed an increase in learner satisfaction and learning retention with the use of human patient simulation as an adjunct in the clinical learning field as opposed to a strict, and often described as intimidating, hospital experience. Similar studies involving simulation and active learning showed an increase in critical thinking, clinical performance, and clinical decision making (Webster & DiBartolo, 2014; Yuan, Williams, & Man, 2014).

Theoretical Framework

Robinson, Scollan-Koliopoulos, and Kamienski (2012) conducted a study of learning preferences among 122 nurses in a large metropolitan hospital based on Kolb's Experiential Learning Theory (1984). The study looked into generational differences and learning styles. The results of the research found that older generations tend to be divergent and accommodator learners, whereas younger learners fit into converger and assimilator learning styles. Years since graduation and number of years of practice also came into play when assessing learning style preferences. Findings reinforce the value of multiple teaching modalities in ensuring that all students receive and process the information presented.

Kolb's (1984) Experiential Learning Theory served as the theoretical framework for the study. The theory is composed of a four-step cycle: (a) concrete experience, (b) reflective observation, (c) abstract conceptualization, and (d) active experimentations. Kolb believed that learning is an ongoing cycle in which knowledge is acquired by the conversion of experience into intellectual constructs that alter the way a learner thinks and behaves. In 1984, Kolb presented three separate growth and development steps: (a) acquisition (extending from birth to adolescence), (b) specialization (extending throughout formal education and/or career training), and (c) integration (culminating in achievement and progressing toward social security; D'Amore, James, & Mitchell, 2012). Today's ASN classroom is composed of students who bring to the classroom varying levels of life experience. As Kolb theorized, concrete experience is the foundation for acquisition of knowledge. In an ASN program, student nurses will pull from life experience to provide a foundation upon which new learning constructs are realized.

Methodology

To meet the challenge of teaching across the generations, a varied approach was employed in the delivery of nursing education. A quantitative pilot study was developed to evaluate adult learner response to and preference of varied teaching strategies, including traditional lecture, flipped classroom, Web-based activities, and interprofessional collaboration with guest lecturers and multidisciplinary interactions in clinical settings. The authors obtained approval from the university's institutional review board (IRB) prior to initiation of the study.

At the beginning of the term, 90 students completed the visual, aural, reading, and kinesthetic (VARK) questionnaire (Version 7.2) to identify individual preferences for receipt of learning information. As stated by Fleming (VARK-learn, 2016), VARK is simply a tool that allows the learner to identify his or her preferred method of receiving input. Input categories are visual, aural, reading, and kinesthetic with additional categories of multimodal for learners who demonstrate equal preference for multiple input category (2016). There were 31 junior-level nursing students and 59 freshman level students who completed the assessment. Results of the VARK questionnaire can be seen in Table 1. Throughout the semester, each learning category was matched with a teaching strategy to deliver nursing education. Teaching strategies included reading assignments; access to prerecorded lectures for preclass preparation; classroom discussions, including case studies; gaming, such as jeopardy for maternal–child nursing; and targeted remediation by topic.

At the end of the semester, a questionnaire was administered to elicit feedback regarding each teaching strategy and its perceived effectiveness. To capture generational demographics, questions included age, race, gender, language, and program level.

Sample

For the purpose of the study, a convenience sample was collected from the student body of an ASN program. Approval for the study was received by the governing university's IRB, signifying study adherence to the IRB ethical guidelines for research. Participants were recruited through e-mail invitation to participate in the study by completing an anonymous online questionnaire. An information letter explaining the study was sent to participants with a link to the survey included at the bottom of the letter. Clicking the link to access the questionnaire indicated consent to participate; however, participants were allowed to discontinue the questionnaire at any time if they chose to withdraw from the study. Of the 90 invited to participate, 50 respondents completed the questionnaire. One set of responses was excluded when a respondent reported intentionally misrepresented personal demographics, leaving a final sample size of 49.

Tool

The principle investigators (PIs) distributed a questionnaire utilizing SurveyMonkey®, an online distribution program. The questionnaire consisted of five demographic items, two questions regarding participants' preferred teaching strategy, and two questions regarding participants' self-reflection. The five teaching strategies included the flipped classroom, lecture, simulation, Web-based training, and interprofessional collaboration. With this self-reflection, participants were able to identify how their own learning preferences and age influenced study habits, ease of learning, and retention of knowledge. A copy of the questionnaire can be seen in Fig. 1.