Examining the Impact of a Student-Centered Learning and Assessment Strategy on Engagement among Nursing Students

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Abstract

Background: Engaged students have better learning experiences and outcomes.

Methods: A descriptive, exploratory study using the Student Course Engagement Questionnaire examined the impact of a student-centered learning and assessment strategy on engagement among accelerated nursing students.

Results: Overall, the finding show positive support for the student-centered learning and assessment strategy. Of the four engagement factors, performance engagement ranked the highest and participation engagement ranked the lowest.

Conclusion: While students are more engaged in student-centered learning environments room for improvement remains.

Keywords: Student-Centered Learning; Engagement; Assessment; Nursing Students; Student Course Engagement Questionnaire

Abbreviations: AACN: American Association of Colleges of Nursing; ABSN: Accelerated Baccalaureate Student Nurses; SCEQ: Student Course Engagement Questionnaire.

Introduction

Nursing's current education model, developed in the 19th century, no longer supports the complexity of educating today's professional nursing workforce. Knowledge is evolving faster than nursing education can adapt leading to an alarming decline in the initial preparedness of new graduate nurses [1]. The American Association of Colleges of Nursing (AACN) New Essentials: Core Competencies for Professional Nursing Education is spurring a cultural shift in nursing education, whereby students will be held accountable for the mastery of competencies rather than knowledge acquisition and skills [2]. This evolution in nursing education must occur along with new teaching and learning strategies including a shift from teacher-centered learning to student-centered learning.

Background

Traditional teacher-centered learning can decrease student autonomy and motivation [3]. In contrast, student-centered learning is competency-based and personalized to the student [4]. In student-centered learning students shift from passively absorbing information to actively participating in the learning process [5]. Learning is shaped by the student's interests and experiences while faculty serve as facilitators rather than knowledge masters.

Student engagement is a multidimensional construct, which includes behavioral, emotional, and psychological involvement to achieve course outcomes [6,7]. Handelsman, et al. [6] identified four dimensions of student course engagement. These dimensions were skill engagement, emotional engagement, participation engagement and performance engagement. Engaged students are curious and ready to learn [8,9]. Student engagement has been broadly examined at the institutional level and is a predictor of academic success [6,8,10,11]. Yet engagement is all about connections, emotions, and relationships that occur at the individual course level.

Historically assessment has been used to evaluate student comprehension, however assessment practices can also be used to engage students. Student-centered assessments help students synthesize their learning experiences and take control of their learning journey [12]. The literature suggests that engagement is tied to a student's sense of control and that students who have some control over their own assessments demonstrate deep learning [5,12]. Limited research has explored student-centered learning and assessment strategies among nursing students. The purpose of this study was to examine the impact of a student-centered learning and assessment strategy on engagement among accelerated nursing students.

Methodology

A descriptive, exploratory design was used for this pilot study. Participants included accelerated baccalaureate student nurses (ABSN) at a small private university. The program attracts students with a diverse range of educational experiences. All participants were enrolled in a Nursing Research and Evidence-Based Nursing course which is a compulsory course. The course was delivered as a weekly in-person course using a flipped classroom delivery method. Students completed an evidence-based practice project in phases (receiving feedback with each phase) and were offered a choice of submitting their project as a podium, poster, manuscript or slide share presentation. Approval for the study was received from the university institutional review board. Limited demographics of the respondents were collected for this study as this information was restricted to protect students.

The 23-item Student Course Engagement Questionnaire (SCEQ) was used to measure student engagement [6]. The SCEQ consists of four factors measuring skills engagement (9 items), emotional engagement (5 items), participation engagement (6 items), and performance engagement (3 items). Reliability of the engagement factors range from .76 to .82. Response options for each question ranged from 1 indicating that the statement was "much less like me" to 5 indicating that the statement was "much more like me". All questionnaires were administered at the end of the course, et al. by a third party not connected to the teaching of the course, and all students were given appropriate instruction on completing the questionnaire. Descriptive statistics were used to analyze the data. Frequency distributions were used to summarize study variables.

Results

Of the 45 students invited to participate, 21 students completed the SCEQ for a response rate of 46 percent. Two respondents were male, and all were between the ages of 20 and 30 and had completed a previous baccalaureate degree. Quantitative analysis was completed using SPSS statistical software (SPSS, Chicago, Illinois).

Based on the 23 statements in the SCEQ, the total mean engagement score was 3.63 with observed values ranging from 2.66 to 4.66. The mean engagement levels ranged across the four factors from 3.94 (SD, 0.8) for performance to 3.26 (SD. 0.6) for participation, as rated on a scale of 1–5. The mean score for skills engagement was 3.72 (SD, 0.8) followed by emotional engagement at 3.61 (SD, 0.9).

Individual level statements were analyzed for further insight. The median score for performance engagement was 4.0. All three items of this scale had medians of 4.0. The total median score for participation engagement was 3.33. Four of the six items in this factor scored below the total median engagement score. These items were "raising my hand in class", "participating actively in small group discussions", "asking questions when I don't understand the professor" and "going to the professor's office hours to review assignments or test or ask questions", and "having fun". The median score for emotional engagement was 3.80. One of the five items in this factor scored below the total median score. This was "finding ways to make the course interesting". The median score for skills engagement was 3.89. Four of the nine items in this factor scored below the total median score. These items were "doing all the homework problems", "staying up on the readings", "looking over notes between classes", and "taking good notes". One item scored above the total median engagement score: "coming to class everyday".

Discussion

This study provided insight into ABSN student's perceived levels of engagement in a course incorporating a student-centered learning and assessment strategy. The total mean engagement score was 3.63. In comparing engagement scores of these nursing students to the scores of students in

other studies, undergraduate college students reported total mean engagement scores of 3.39 [11]. Since ABSN students are pursuing a second degree this finding is not surprising. Both the total mean engagement score and mean engagement factor ratings across three of the four domains were above the mid-point of the scale. These findings demonstrate positive support for the student-centered learning and assessment strategy.

Students reported higher levels of engagement in performance, which was in line with findings from previous studies [11,13]. Performance engagement is reflected through extrinsic motivators such as grades that serve as rewards to positively reinforce behaviors [14]. Given the challenging nature and high academic expectations of nursing education programs, it is not surprising that performance engagement was ranked higher than the other engagement factors.

Participation ranked lowest of the four engagement factors in this study, which was supported by previous findings [6,9,15]. Faculty strive to engage students through traditional techniques such as asking questions and innovative techniques such as participant response devices, cellphones, and gaming. It is important to remember that faculty play a key role in student course engagement. Students are more engaged when faculty establish positive faculty-student relationships and individualize materials to student needs [13,15,16]. Graham reminds us that student participation does not occur or sustain itself without support, thus faculty should purposefully incorporate opportunities to foster student participation [17].

Student actions in terms of "coming to class everyday", "putting for effort", and "being organized" were perceived by students as the most effective strategies in facilitating skills engagement, while "staying up to date on readings" was the least effective strategy. Completing pre work is a key expectation of students in student-centered learning, yet the literature indicates that students do not enjoy required reading [13]. Studies have shown that students prefer the traditional classroom and lectures, particularly as compared to the flipped classroom [13]. Flipped classrooms, commonly used in student-centered learning, provide students with the opportunity to apply information gleaned from course readings. This finding helps to explain student dissatisfaction with flipped classrooms as well as identifies a possible disconnect between faculty and student expectations and accountability.

As usual, there are limitations to this study. This was a pilot study, so studies involving larger and more diverse populations would offer generalizable results. Certainly, the voluntary nature of the study and the use of a self-report tool limit the study.

Conclusion

Catalyzed by the AACN New Essentials: Core Competencies for Professional Nursing, nurse educators are mobilizing to meet the competency-based benchmarks set forth. Student-centered learning offers an educational framework for reshaping teaching and learning practices. However, faculty struggle with the shift from teacher-centered learning to student-centered learning, as do students. Student engagement, a measurable factor in academic success and student satisfaction, provides insight into teaching and learning effectiveness. While determining the best mix of strategies to engage students remains elusive, insight gleaned from this study should be considered when designing learning environments to shape tomorrow's students.

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