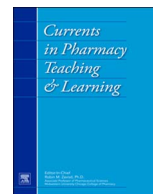




Contents lists available at ScienceDirect

Currents in Pharmacy Teaching and Learning

journal homepage: www.elsevier.com/locate/cptl

Experiences in Teaching and Learning

Students' perceptions of a blended learning pharmacy seminar course in a Caribbean school of pharmacy

Rian Marie Extavour^{a,*}, Gillian L. Allison^b^a School of Pharmacy, Faculty of Medical Sciences, The University of the West Indies, St. Augustine Building 39, Eric Williams Medical Sciences Complex, Champs Fleurs, Trinidad and Tobago^b Optometry Programme, Office of the Dean, Faculty of Medical Sciences, The University of the West Indies, St. Augustine Building 39, Eric Williams Medical Sciences Complex, Champs Fleurs, Trinidad and Tobago

ARTICLE INFO

Keywords:

Blended learning
Pharmacy education
Public health
Seminars

ABSTRACT

Background and purpose: Blended learning (BL) integrates face-to-face and online instructional methods, with applications in pharmacy education. This study aimed to assess pharmacy students' perceptions of BL in a pharmacy seminar course at The University of the West Indies, St. Augustine campus, Trinidad and Tobago.

Educational activity and setting: Topics based on the use of medicines and public health were presented by student groups during live seminars, supplemented with online activities. An online survey of students' perceptions was administered at the end of the course. The usefulness of learning resources and course activities were assessed using 5-point Likert-like scales (1 = not helpful to 5 = very helpful). The effectiveness of the instructor, blended delivery, time value, and development of critical-thinking were rated on a 5-point Likert scale for agreement (1 = strongly disagree to 5 = strongly agree). Topics that were most instructive and additional topics of interest were also identified.

Findings: Approximately 51% of students (37/72) completed the questionnaire; 73% were female and mean age was 24 years. The learning resources and most course activities were generally helpful (median = 4) in facilitating learning. There was strong agreement (median = 5) on the ease of navigating the online platform, and instructor encouraging interest in pharmacy issues. Students agreed (median = 4) that the course facilitated critical thinking, the BL approach was effective, and the time spent was worthwhile. The most instructive topics included medication errors, antibiotic resistance, and medicines in children and the elderly.

Summary: BL in pharmacy seminars is a valuable approach to engage students learning about pharmacy and public health.

Background and purpose

The integration of face-to-face and online communication in education is the underlying principle of blended learning (BL), which enables opportunities for collaborative and self-directing learning beyond the classroom setting.^{1,2} Potential benefits include flexibility in learning, collaboration, and interaction among students and instructors.³ BL has been applied in educational programming for the health professions, including pharmacy, over the past decade.⁴ In clinical health education, BL has been found to improve clinical competencies while bridging the gap between theory and practice.⁵ In assessing its role in pharmacy education in Spain,

* Corresponding author.

E-mail addresses: Rian.Extavour@sta.uwi.edu (R.M. Extavour), Gillianallison@gmail.com (G.L. Allison).<https://doi.org/10.1016/j.cptl.2017.12.007>

1877-1297/© 2017 Elsevier Inc. All rights reserved.

Sancho et al.⁶ reported positive outcomes, time reduction, and student satisfaction when BL was applied in the instruction of complex competencies within microbiology. In Australia, pharmacy students in a practical pharmaceuticals course with face-to-face and online teaching reported positive experiences and preference for partial online teaching.⁷ Similarly, pharmacy students in Canada expressed enthusiasm for the BL approach when applied in a basic pharmacokinetics course.⁸

The University of the West Indies (The UWI), St. Augustine campus, is located in Trinidad and Tobago in the Caribbean. From 1995 until 2016, the Faculty of Medical Sciences of the St. Augustine campus was the only one among the three regional campuses to offer a Bachelor of Science (BSc) degree in Pharmacy. In 2004, the Campus Principal introduced a mandate for all courses to offer an online component to support learning. This initiative was integrated into The UWI's Strategic Plan 2012–2017, where BL was recognized as a strategy to make learning flexible, promote student engagement, and reduce the demand for classroom spaces.⁹ A BL policy was subsequently introduced with the goal that by September 2015, each faculty at St. Augustine would offer at least one blended program, whereby 50–75% of courses use a combination of online delivery with face-to-face teaching modes.¹⁰ To facilitate online teaching and learning, The UWI provides a learning management system (LMS) through a Moodle® platform, branded myeLearning. Via myeLearning, students and instructors may interact via online messaging, discussion forums, assignment submissions and feedback, wikis, calendars, and resource sharing (e.g., documents, web-sites). From 2004, use of the LMS has grown from 169 courses in 2005 to 3489 courses in 2011, indicating that instructors across the campus were using BL approaches.²

As part of the core curriculum, students in the final year of the BSc Pharmacy program at The School of Pharmacy of The UWI, St. Augustine campus enroll in a pharmacy seminar course. Prior to September 2015, the seminars were based on live student group presentations and discussions of pharmacy practice issues, where E-mail was the only online interface used for sharing documents and notices. The instructor noted that several non-presenting students would not be involved in the live discussion or read the material prior to the seminar. In order to increase the engagement of students throughout the semester, a BL approach was applied in September 2015, whereby internet-based resources and weekly asynchronous activities were introduced.

No published studies describing students' perceptions of BL at the UWI, St. Augustine or in pharmacy seminars in other schools have been found. Hence, this study aimed to understand students' perceptions of a BL approach to pharmacy seminars and to identify relationships between age, sex, and previous pharmacy work experience. The objectives of the study were: 1. to describe students' perceptions of the BL approach in pharmacy seminars; 2. to describe students' perceptions of the effectiveness of course activities and resources in learning in pharmacy seminars; 3. to determine if previous pharmacy work experience, age and sex were associated with students' evaluation of the course; and 4. to assess students' interest in contemporary pharmacy and public health topics presented during seminars.

Educational activity and setting

Course aims and objectives

The goal of the seminar course is to develop critical-thinking and communication skills of students, in the context of contemporary pharmacy practice and public health. The objectives of the course are to enable students to: 1. demonstrate enhanced verbal and written presentation skills; 2. develop analytical skills to think critically about contemporary pharmacy issues and public health; 3. demonstrate skills in providing peer evaluations; 4. work effectively as a diverse group; and 5. participate in self-directed learning and continuing professional development.

Course delivery and assessment

In September 2015, the course was redesigned from solely live presentations of articles or cases to include online discussions and quizzes. Students were randomly assigned to groups of three or four to develop team skills in diverse groups. Each group was required to select and present the findings of systematic reviews on the given topic. Each article was approved by the instructor, and subsequently posted to myeLearning one week prior to the seminar to allow non-presenting students to prepare for the live discussion. Online discussion forums visible to all students were used by presenting groups to post summaries of the articles prior to the seminar, inclusive of the implications for pharmacy practice and/or public health, and their recommendations. Members of a randomly assigned peer review group were required to comment on the extent to which the article's main points were captured by identifying any aspects of the summary that required clarification. Weekly seminars consisted of two group presentations highlighting the study background, design, findings, implications, and recommendations for local pharmacy practice and/or the use of medicines in public health. Presentations were followed by brief discussions based on questions from non-presenting students and the instructor. During the course, each group presented once, and reviewed an assigned peer group once.

Students were assessed on verbal communication (presentation) skills, article summaries, and content (online quizzes). To promote student engagement in the topic, online quizzes (10-min) were administered following the seminar that all students were required to complete within four days.

Students' perceptions

To determine perceptions, all students were invited to complete an online questionnaire ([Appendix I](#)) at the end of the course, prior to the publication of final course marks. The questionnaire was created by the course instructor and reviewed by a second instructor in the basic health sciences. It was administered using an independent platform (Google Forms®) to provide anonymity,

Download English Version:

<https://daneshyari.com/en/article/6839967>

Download Persian Version:

<https://daneshyari.com/article/6839967>

[Daneshyari.com](https://daneshyari.com)