

7-27-2014

# Expanding the Role of Pharmacology Tutors Through the Use of Online Quizzes

Melinda E. Lull

*St. John Fisher College*, mlull@sjfc.edu

Nicole E. Moore

*St. John Fisher College*, nem08860@students.sjfc.edu

Matthew Stryker

*St. John Fisher College*, mds05927@students.sjfc.edu

Jennifer Mathews

*St. John Fisher College*, jmathews@sjfc.edu

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### Publication Information

Lull, Melinda E.; Moore, Nicole E.; Stryker, Matthew; and Mathews, Jennifer, "Expanding the Role of Pharmacology Tutors Through the Use of Online Quizzes" (2014). *Pharmacy Faculty Publications*. Paper 74.

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# Expanding the Role of Pharmacology Tutors Through the Use of Online Quizzes

## **Abstract**

Objectives: Pharmacology tutors have been available each semester for the past two years, but have been under-utilized by the student population. The primary objective of this study was to use innovative methods to increase the use of tutors in pharmacology courses.

## **Disciplines**

Pharmacy and Pharmaceutical Sciences

## **Comments**

Presented at the American Association of Colleges of Pharmacy Annual Meeting in Grapevine, Texas, July 27, 2014.

Title: Expanding the role of pharmacology tutors through the use of online quizzes.

School Name: Wegmans School of Pharmacy; St. John Fisher College

Authors: Melinda E. Lull, Ph.D.; Nicole Moore, Pharm.D. Candidate; Matthew Stryker, Pharm.D. Candidate; Jennifer L. Mathews, Ph.D.

Objectives: Pharmacology tutors have been available each semester for the past two years, but have been under-utilized by the student population. The primary objective of this study was to use innovative methods to increase the use of tutors in pharmacology courses.

Methods: Prior to the implementation of expanded services, tutors offered 3 office hours a week and group review sessions prior to exams. At the beginning of the spring semester, tutors altered their services to include 1.5 office hours, review sessions before every exam, and 1 hour of quiz preparation. Each week, a ten question quiz was prepared on the previous week's material. Quizzes were made available through ExamSoft®, the software used for all pharmacology exams. Use of ExamSoft® also allowed students to experience questions in the same format as exams and track their progress. Students could take each quiz multiple times and were allowed to review each question. Data collected from the quizzes included: number of students taking each quiz, average quiz scores and performance on each question.

Results: Implementation of online quizzes increased both face-to-face interactions with tutors and self-directed learning through tutor-provided materials. Participation in tutoring services increased from 1 per semester, to an average of 80 per exam. Exam and quiz questions were mapped to course learning outcomes and performance was compared, revealing improvements in performance between quizzes and exams (average improvement of 8%).

Implications: Expanding the role of class tutors increased utilization of tutoring services, mainly through self-directed learning. The expanded role also benefited student performance on exams.