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Sharing Success: Expansion of a Tutor-Run Assessment Method to Multiple Courses and Colleges

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Abstract

Objectives: In 2014, data were presented on a successful pilot program using quizzes written by tutors in a single course at Wegmans School of Pharmacy. The objective of this study was to use the methods from the pilot to expand the program to other pharmacology courses at Wegmans School of Pharmacy as well as the University of Arkansas for Medical Sciences College of Pharmacy.

Methods: Methods from the previous study were replicated, whereby tutors wrote weekly quizzes administered using ExamSoft®. The optional quizzes were openly accessible to students in preparation for course exams. Performance data were collected from students in one course at each institution and compared to the pilot study. Performance data collected included quiz and course exam scores. All students that utilized quizzes, as well as tutors, were surveyed to assess perceptions of the method.

Results: The use and impact of quizzes was similar to the results in the pilot study. However, the magnitude of improvements was slightly lower than what was observed initially. Exam scores were significantly higher than quiz scores on 6/10 exams measured, compared to 5/5 exams in the pilot. Students who utilized the quizzes performed significantly better than those that did not on 3/10 exams (3/5 in the pilot), and earned significantly higher course averages. Student (n=155) and peer instructor (n=13) feedback remained positive after expansion of the program.

Implications: This method is a tool that can be translated to different courses and different institutions with a valuable impact on student performance.

Keywords

fsc2016

Disciplines

Pharmacy and Pharmaceutical Sciences

Comments

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Sharing Success: Expansion of a Tutor-Run Assessment Method to Multiple Courses and Colleges

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Objective:

In 2014, data were presented on a successful pilot program using quizzes written by tutors in a single course at Wegmans School of Pharmacy (manuscript currently in press at *Am J Pharm Educ*). The objective of this study was to use the methods from the pilot to expand the program to other pharmacology courses at Wegmans School of Pharmacy (WSOP) as well as the University of Arkansas for Medical Sciences College of Pharmacy (UAMS CoP).

Methods:

Methods from the previous study were replicated, whereby student tutors wrote weekly quizzes administered using ExamSoft®. The optional quizzes were openly accessible to students in preparation for course exams. Performance data (quiz and course exam scores) were collected from students in one course at each institution and compared to the pilot study. All students that utilized quizzes, as well as the tutors, were surveyed to assess perceptions of the method.

Results:

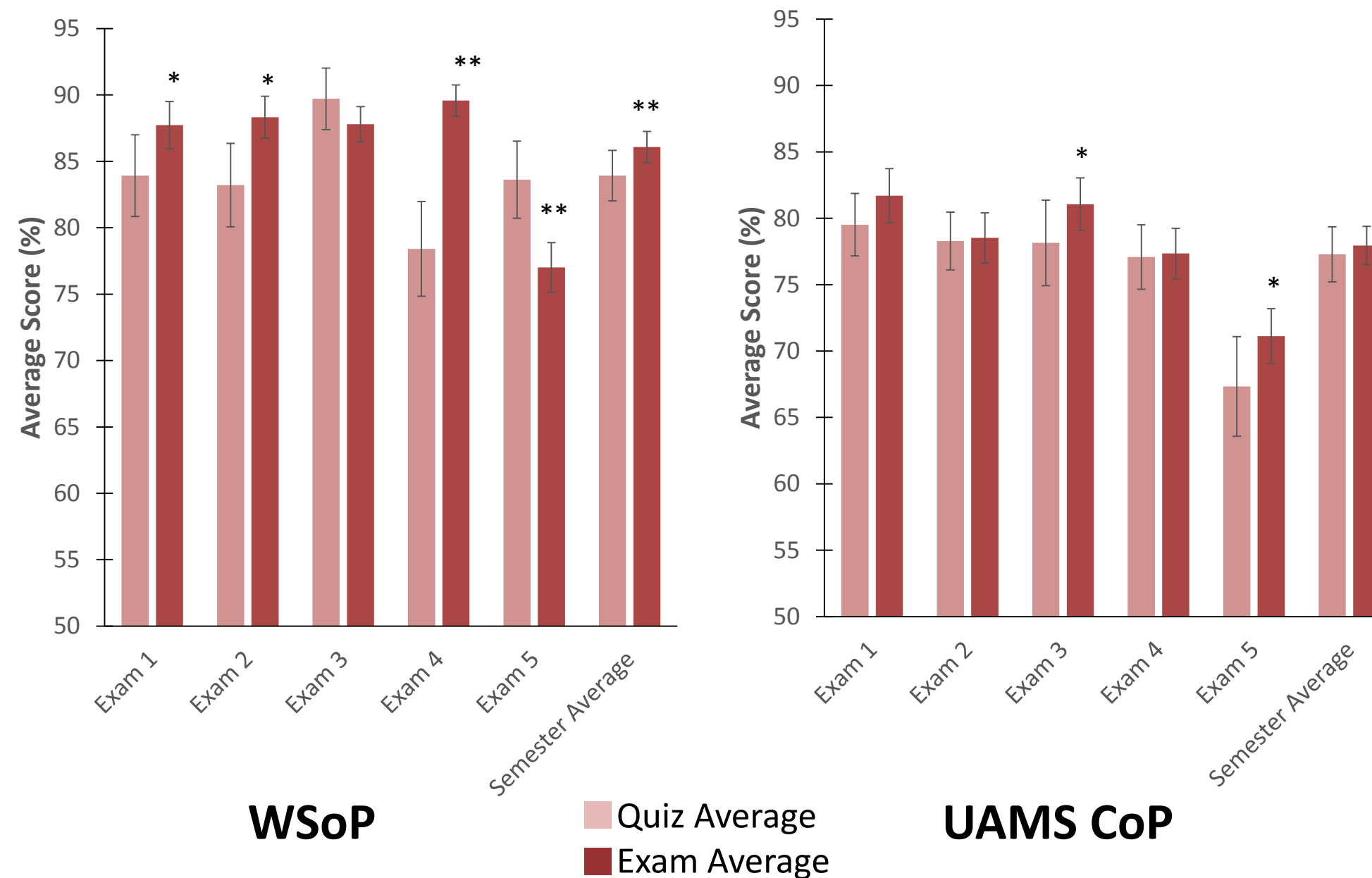
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Implications:

This method is a tool that can be translated to different courses and different institutions with a valuable impact on student performance.

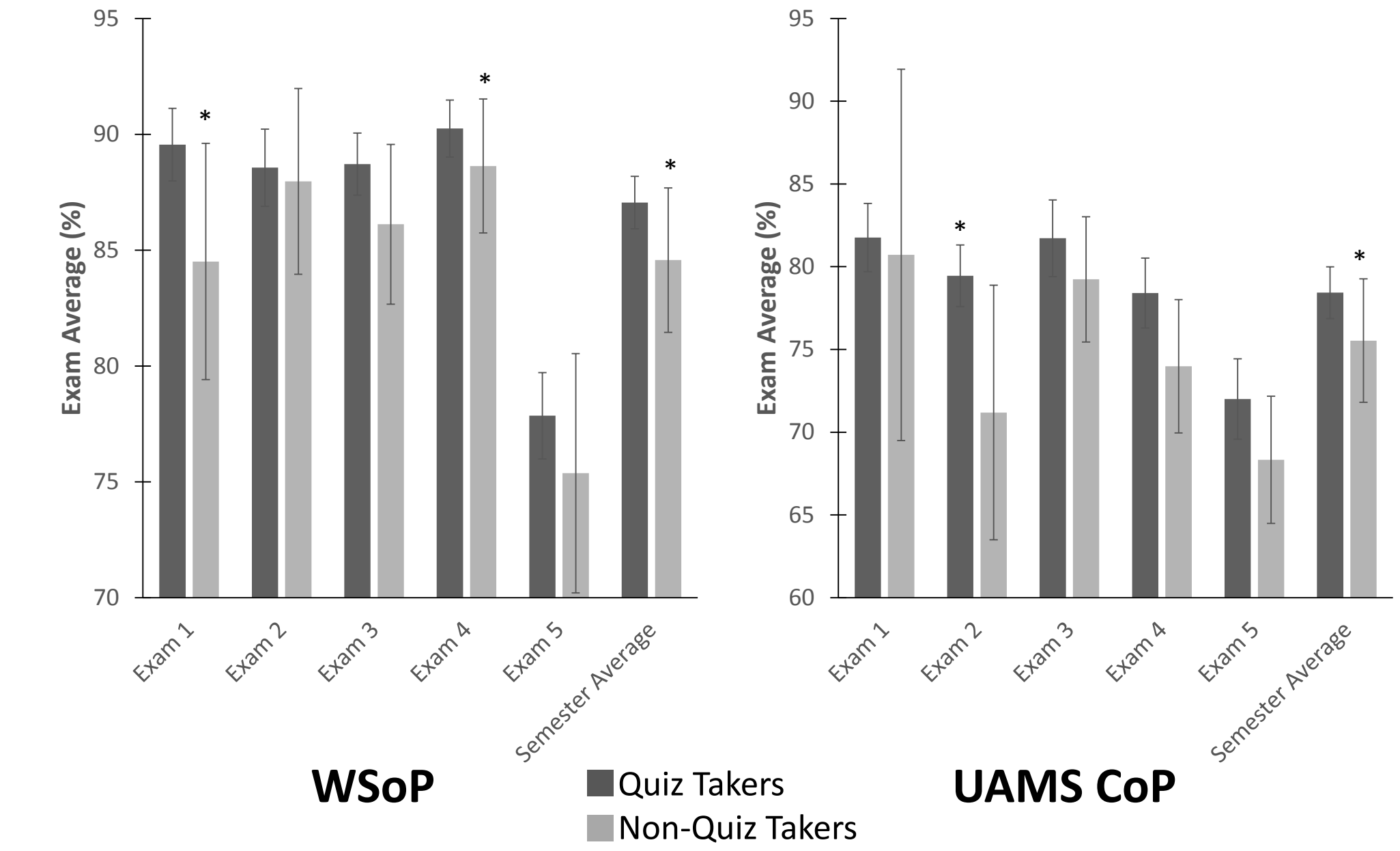
Quiz Scores versus Exam Scores

Data are expressed as average with the 95% confidence interval. *p<0.05; **p<0.001



Exam Scores in Quiz Takers versus Non-Quiz Takers

Data are expressed as average with the 95% confidence interval. *p<0.05



Quiz and Exam Summary	WSOP		UAMS CoP	
	Online Quizzes	Exams	Online Quizzes	Exams
Number	10	5	14	5
Average Score (%) ± SD	83.9 ± 7.6	86.1 ± 5.3	76.7 ± 9.4	78.0 ± 8.1
Average # Students Taking Each Assessment ± SD (% of class)	45.4 ± 5 (57 ± 6%)	80 ± 0 (100%)	96.5 ± 11 (80 ± 9%)	121 ± 0 (100%)

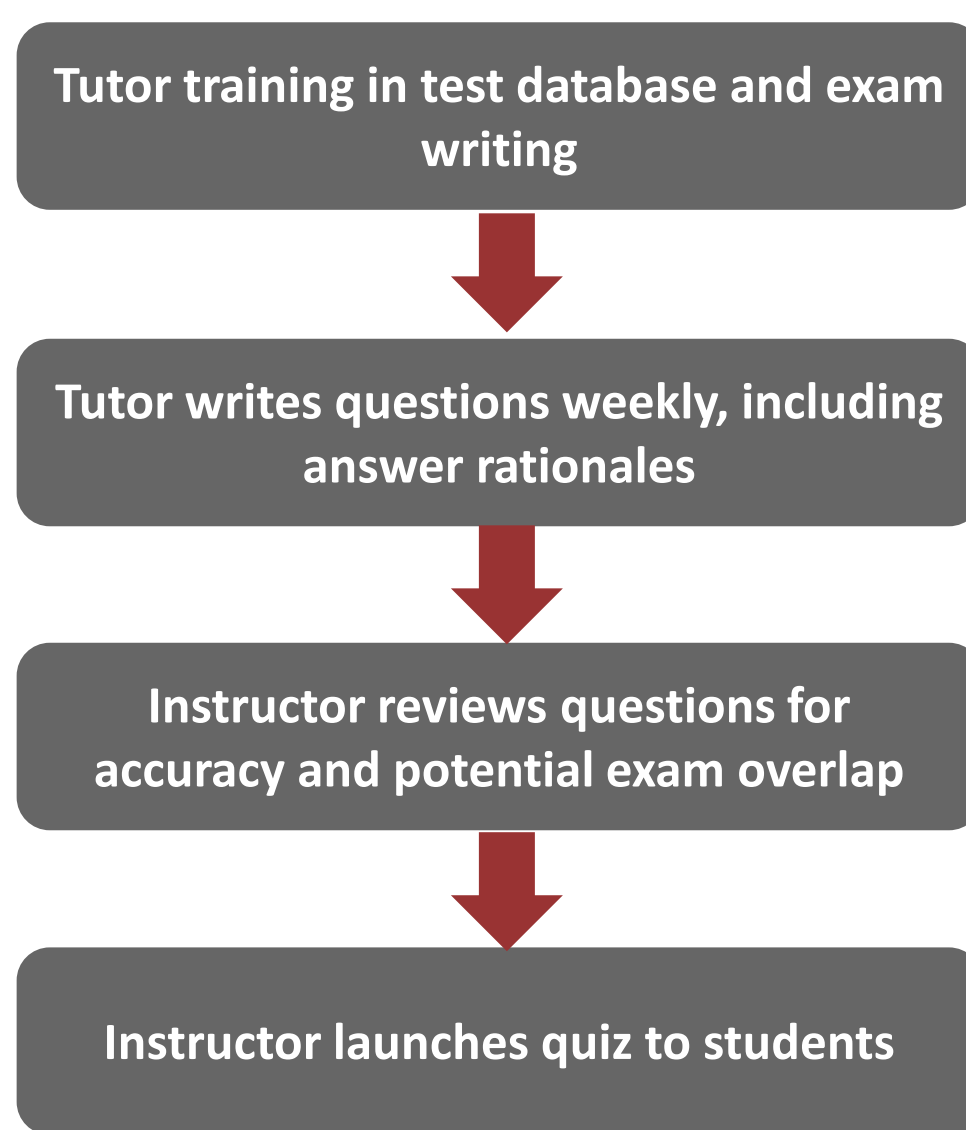
Tutor Perceptions*	WSOP (n=11)		UAMS CoP (n=2)	
	Average Score out of 5 ± SD	% SA/A	Average Score out of 5 ± SD	% SA/A
Online tutoring quizzes were a valuable resource for the students I was instructing.	4.45 ± 0.7	91%	5 ± 0	100
Writing online tutoring quiz questions increased my knowledge of the course topics covered.	4.27 ± 0.7	91%	5 ± 0	100
Learning to write quiz questions was a valuable learning experience.	4.36 ± 0.7	91%	5 ± 0	100

* Based on a Likert Scale of 1-5 (1= Strongly Disagree; 5= Strongly Agree); SA= Strongly Agree; A= Agree; SD = Standard Deviation

Student Perceptions*	WSOP (n=98)		UAMS CoP (n=57)	
	Average Score out of 5 ± SD	% SA/A	Average Score out of 5 ± SD	% SA/A
I feel that the tutoring quizzes are a valuable resource.	4.57 ± 0.7	98%	4.4 ± 0.8	93%
The tutoring quizzes influenced the way that I studied for the exams.	3.77 ± 1.0	65%	3.9 ± 1.0	75%
I feel that taking the tutoring quizzes increased my confidence going into the exam.	4.27 ± 0.8	83%	4.1 ± 0.9	86%
I feel that taking the tutoring quizzes increased my performance on the exam.	3.99 ± 0.8	73%	3.9 ± 1.1	74%
I feel that the tutoring quizzes accurately reflected the material that was on the exams.	4.04 ± 0.7	84%	3.9 ± 1.0	72%
I recommend continuing to offer tutoring quizzes in the future.	4.70 ± 0.7	98%	4.5 ± 0.6	95%
Using the tutoring quizzes will increase my likelihood of using other tutoring services in the future.	3.81 ± 1.0	59%	3.7 ± 1.0	60%

Assessment Workflow

Faculty & Tutors



Students

