Adaptive Learning Assignments Improve Learning in Anatomy and Physiology Jessica B. Snow, PhD



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INTRODUCTION

- Anatomy and Physiology is a foundational course for undergraduate health sciences students.
- At the University of Evansville, student success in Anatomy and Physiology is often a limiting factor in students' progress in their respective degree programs.
- We sought to determine whether completion of adaptive learning assignments in Exercise Sciences 112 and 113 improves student exam scores and student satisfaction in these courses.

HYPOTHESIS

We hypothesize that students who complete more adaptive learning assignments for in Anatomy and Physiology will score higher on exams and higher in the course than those who do not.

METHODS

Designing Adaptive Learning Assignments

- Which concepts are most important for students to learn in Exercise Science?
- How much time will students commit to a supplementary assignments?

Collecting Data

- Examine student data for assignment completion percentage and grade in the course.
- Poll students at the end of term on experiences \bullet with assignments and expected grades.



A Weak Correlation (0.30) was Measured Between Course **Grade and Adaptive Learning Assignment Completion**



Completion of Adaptive Learning Assignments (1=100%)

Most Students Anticipated A's and B's in Anatomy and **Physiology Regardless of Whether They Completed Adaptive** Assignments

How often did you complete smartbook assignments for this course?

Course Average:	2.32	Always	1
Institution-Wide Average:	2.32	Usually	
Course Standard Deviation:		-	
Institution-Wide Standard Deviation:	1.07	Sometimes	
Interpolated Median:	2.25	Rarely	
Minimum Value:	1.00		
Maximum Value:	5.00	Never	
Low Response:		-	
High Response:		N/A	0
Response Count:	38		0 0
•			9

. Please selected the grade you expect this semester.

3.71		
3.71		
0.52		
3.82		
0.00		
4.00		
38		





Adaptive learning assignments may improve student learning outcomes in a population of freshman exercise science students at University of Evansville.

A change in course design to require students to complete such assignments may offer a strategy to improve student success in Anatomy and Physiology.

ONGOING STUDIES

- Additional data will be collected from the 24-25 cohort of students in Anatomy and Physiology.
- Impact of requiring adaptive assignments on course performance will be measured.



ACKNOWLEDGMENTS

- Jessica Johnston, Intern in Anatomy and Physiology
- **UE IRB Committee** \bullet

CONCLUSIONS