EFFECT OF DIGITAL LEARNING ENVIRONMENT ON LEARNING **OUTCOMES IN A UNIVERSITY-LEVEL ENGLISH COMPOSITION COURSE**

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Does replacing the traditional lecture format with technologyenhanced lab exercises increase learner achievement?

CONTEXT

We compared the achievement of learning outcomes of students from two sections of ENGL213, taught in different formats by the same instructor in one term.

METHODOLOGY

INSTRUCTIONAL APPROACH

The course instructor collected and graded all assignments as usual, and these were the offical course grades.

The students' written assignments were marked by an independent grader for the purposes of this study.

One instructor taught two sections of this course during the same term.

TRADITIONAL CLASS



- 26 students
- met once per week
- lecture format
- used traditional textbook

ASSIGNMENT GRADES

• assignments submitted in class

LAB-BASED CLASS



• 24 students

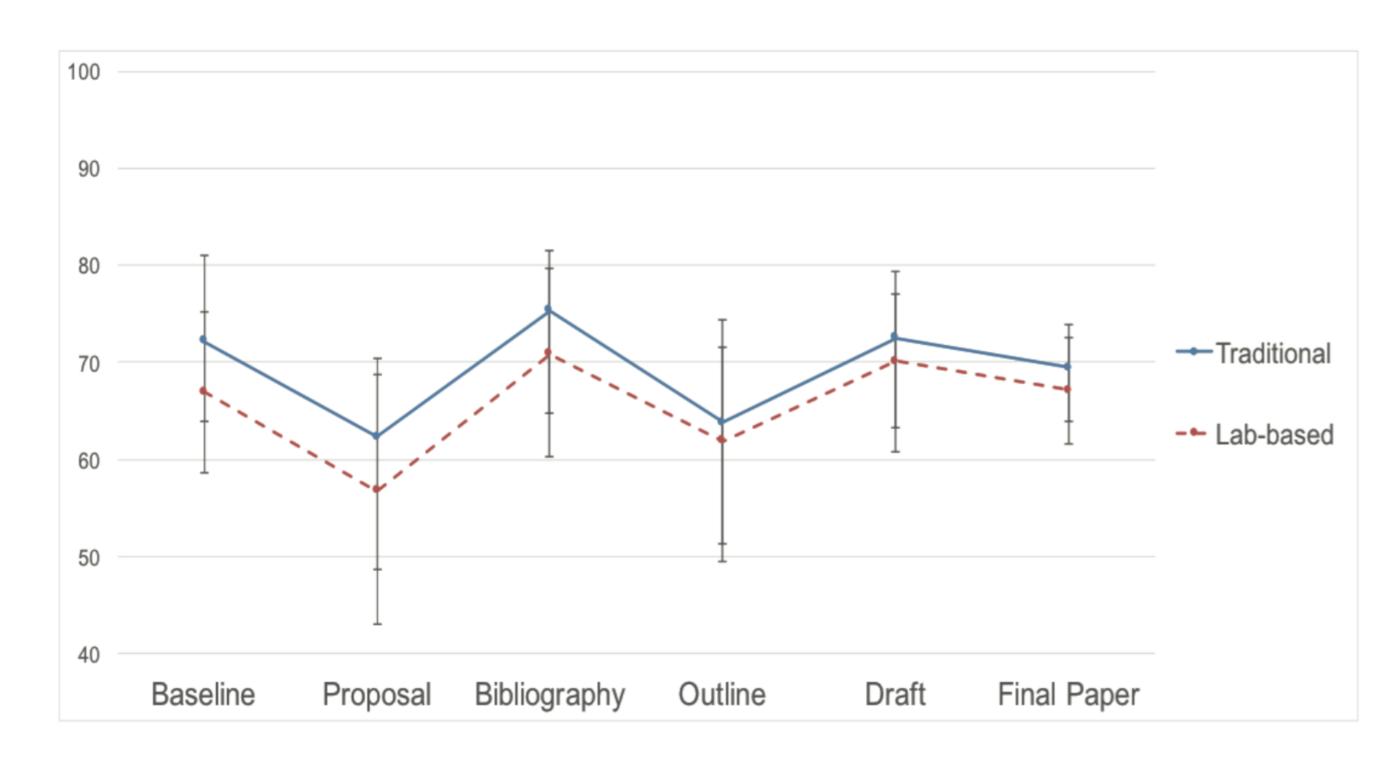
- met once per week in computer lab
- used Pearson's MyWritingLab in place of textbook and for in-class activities
- classtime: online activities interspersed with limited lecturing
- digital content included short videos, info sheets, multiple-choice quizzes, and short answer questions
- all assignments submitted online

PROJECT **Proposal Topic**

Learning Outcome: Students should be able to write an appropriately titled proposal for a reserach paper that defined a problem, includes a thesis statement that suggests a solution to that problem, and justifies their solution.



Learning Outcome: Students should be able to produce a properly cited biliography by conducting research in a library and online, and evaluating the reliability and relevance of sources.



Although the students in the Lab-based course had significantly lower scores on the baseline skills test, the assignment grades in the two classes did not significantly differ.

KEY FINDINGS



Learning Outcome: Students should be able to write an outline that reflects the structure of their arguments, and describes the way in which arguments will be built and supported by researched evidence.



Draft

Learning Outcome: Students should be able to write a well-researched essay with a clear thesis statement in an appropriate voice and style for the audience.



1. Learners in the two different classes had similar performance on all assignments.

2. Students in the lab-based class handed in significantly more late submissions than students in the traditional class.

RECOMMENDATIONS

While the digital exercises have benefits, the course instructor recommends using them as supplementary exercises for completion outside of class.

MyWritingLab: INSTRUCTOR'S PERSPECTIVE

BENEFITS

The tool provides useful exercises for students to practice skills, and many opportunities to provide feedback.

DRAWBACKS

There was less interaction between students and instructor compared to the traditional class, and greater feelings of isolation.







Learning Outcome: Students final draft should be more refined and reflect their abilities to write a well-researched essay with a clear thesis statement in an appropriate voice and style for the audience.

Instructor observed that he gave more detailed feedback working with a digital copy compared to his typical grading approach.

The software program's grading mechanism was not compatible with instructor's workflow, which caused some duplication of effort for the instructor.