

# Gamify courses with tools built into your LMS to enhance self-determined and active online learning

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## Introduction

- “Gamified” active learning can increase student engagement, create enthusiasm, provide instant feedback, and make more social connections than standard course settings.
- However, the costs to use an educational game design with efficient delivery of the game/course plan can be problematic.
- It is difficult to find a good fit between the games on the market and the learning objectives of course materials.

## Research Findings

- Subjects were Master of Public Health students enrolled in online Bio-Stats courses across two consecutive academic years (2015-2017) from a Midwestern university.
- There were two online surveys for this study including pre-test in the beginning of the semester and post-test at the end of the semester.
- A two-tailed independent *t*-test revealed a significant difference ( $p < 0.001$ ) in the mean exam scores of two different sections of the Biostatistics course (a section with gamification vs. the other section without gamification).
- Student evaluations of the instructor (on items such as overall teaching ability, critical thinking, and subject interest) were substantially higher in the section with gamification implementation than in the non-gamification implementation section.
- More than 65% of students want gamified activities to facilitate learning in other courses.
- About 70% of students agreed that gamified activities helped in reviewing and/or understanding concepts.
- Finally, 80% of students enjoyed gamified activities.

## Discussion & Take-Away Points

- Built a solid foundation for the course FIRST.
- Craft well-defined purpose and objectives.
- Consider different platforms based on students’ needs.
- Explore different gamified activities and have some fun.
- Gather feedback and opinions to improve the effectiveness of learning activities from gamification.
- Keep in mind that not every student would like gamification.

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Examples of  
Gamification