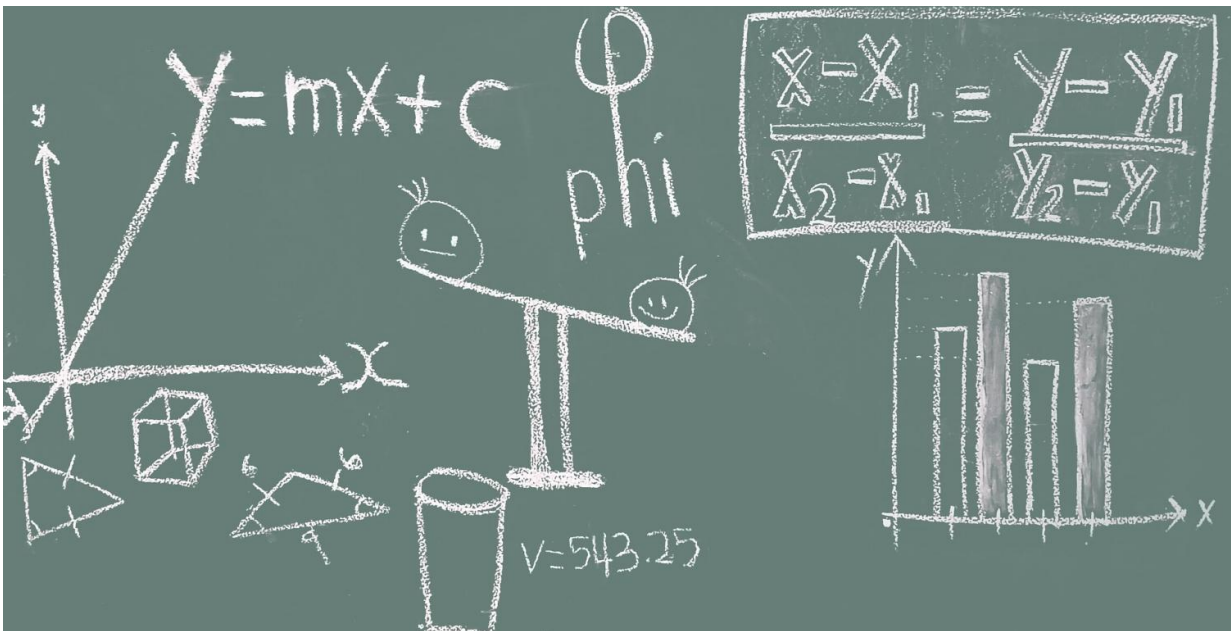


# Games are the secret to learning math and statistics, says new research

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Games may be the secret to learning numbers based subjects like math and economics, according to new research.

Many students say they struggle with subjects like economics and statistics, with 83% of university courses in these subjects taught using a traditional lecturing approach.

However, [new research](#) has shown that by including games in the teaching of these subjects, [student achievement](#) and satisfaction can be significantly increased, with numbers of students failing their course cut significantly.

Assistant Professor Joshua Fullard of Warwick Business School, who led the research, commented, "This research backs up what we already know—that traditional lecturing is not the best approach for learning, even in numbers-based [subjects](#) like economics or statistics."

"The effects of games on students are not small or limited to some people in the class. Applied across a college or university, the increased rates of student success would result in hundreds of students not failing, achieving higher grades and being more satisfied in their learning at the same time."

In the research, two groups of students went through their studies, with one incorporating games into learning, while the other did traditional teaching only.

The study found that the group who included games achieved significantly better grades, with the average exam score up by 7%.

Overall, the median student in the group with the games achieved a 69% as opposed to the median student in the other group who achieved a 60%—almost the difference between a 2:1 and a first in their degree.

The rate of failure for students who played games was also lower, only 7%. In the other group, almost a fifth of students failed. This suggests that games benefit all the students in the class, even those who do not get a higher grade.

The students who used games also had a much higher rate of student

satisfaction, as well as higher attendance to lectures and seminars.

One reason why more teachers and lecturers don't use games in their teaching is due to [time pressure](#) they are under, with lots of ground to cover and only limited time to achieve this.

The new research suggests several short, easy to implement activities to improve [student learning](#) without educators having to sacrifice hours of [teaching](#) time.

**More information:** Using games to improve students' engagement and understanding of statistics in higher education.

[libjournals.mtsu.edu/index.php ... ticle/view/2475/1459](https://libjournals.mtsu.edu/index.php...ticle/view/2475/1459)

Provided by University of Warwick

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