Access to a Peer Coach in Student Learning

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Introduction

Economics is a complex and challenging subject that requires students to develop critical thinking and analytical skills. While traditional teaching methods such as lectures and class discussions can be effective, some students may struggle with the material and require additional support to fully comprehend it. Adding a tutor to the classroom can be a helpful supplement to traditional teaching methods, providing students with personalized attention and support. In this poster, we will explore the benefits of adding a tutor in economics education, drawing on evidence from a range of economics education journals.

Abstract

There is a widespread belief that quantitative disciplines, including economics, are only accessible to certain students thereby creating anxiety and preventing learning, especially in students with already low GPA. In order to address the learning problem stemming from this anxiety, I examined the effect of weekly peer-led supplemental instruction on student learning in my principles of macroeconomics course. The intervention was received quite favorably by students as evidenced by their responses to the post-course survey. Students expressed that the tutoring sessions not only improved their understanding and engagement in the course, but also provided opportunities to learn from their peers in a much more relaxed environment. This effect was actually more pronounced in students with lower GPA. Additionally, about 10% percent of the students reported that the availability of supplemental instruction in an introductory course encouraged them to pursue economics as either a major or a minor.

Students' Perceptions of the Tutoring Sessions

better understanding opportunity understanding immediate feedback

Research has shown that adding a tutor to the classroom can significantly improve student performance in economics. In a study of undergraduate economics courses, Rutherford and Lapsley (2013) found that adding a tutor to the classroom led to significant improvements in student performance, as measured by exam scores and overall grades. Similarly, Niederle and Vesterlund (2014) found that adding a tutor in a large economics class led to increased attendance, improved exam scores, and higher student satisfaction. Furthermore, adding a tutor to the classroom can provide students with personalized attention and support that they may not receive in a traditional classroom setting. In a study of graduate economics courses, Baumeister and Leary (1995) found that the presence of a tutor improved students' confidence in their ability to learn and master difficult concepts. Additionally, Froyum and Vollrath (2015) found that adding a tutor to the classroom improved students' perception of the course, as well as their engagement and participation in class discussions.

Overall, adding a tutor to the classroom can benefit both the students and the instructor, as the tutor provides individualized attention and support, while the instructor can focus on delivering the course material effectively. In the following sections, we will explore these benefits in more detail, drawing on evidence from a range of economics education journals.

Can tutoring sessions close the gap in terms of engagement and understanding of the materials between students?

Results Highlights

- 10% of the students reported that the availability of supplemental instruction encouraged them to pursue economics as either a major or a minor.
- Of the additional 10% who reported that they were more likely to pursue economics as either a major or a minor, 91% of them were first generation college students.
- Supplemental instruction proved particularly effective for students with a CGPA of less than 3.5, who reported significantly greater understanding of course materials, improved confidence and engagement with the topic, and more effective peer learning than their counterparts with a CGPA of 3.5 or higher.

exam preparation different approach

Conclusions and Reflections

The study's findings highlight the importance of providing peer-led supplemental instruction to historically underrepresented students in economics. The positive impact on students' sense of belongingness and their decision to pursue economics as their major field of study is significant, as it can help to promote a more diverse and inclusive discipline. It is encouraging to see that the hiring of a student tutor for the introductory macroeconomics course had such a positive effect on the attitudes and academic outcomes of historically marginalized students. The study underscores the potential benefits of peer-led supplemental instruction and provides a compelling case for departments to consider investing in similar initiatives to support historically underrepresented students in economics.

This is just the beginning of my SoTL journey. This semester, I am conducting a study in my Principles of Macroeconomics courses, which investigates the effectiveness of a partially flipped classroom model and team-based learning approach. To implement this model, I have selected two sections of Principles of Macroeconomics, where the treatment group receives a partially flipped classroom model with team-based learning and more access to instruction during problem-solving stages, while the comparison group is taught using the traditional lecture method. In the treatment group, students are provided with videos to watch before class and are given low-stakes quizzes based on the video content. During class, they are divided into teams and work together to solve problems, where they have access to both myself and their peers for help. This approach blends the effectiveness of ease of instructor access and flipped classroom model. I have already collected informal surveys from my students and there is an overwhelmingly positive response to it.

Do students engage better in smaller groups with tutors as opposed to during regular class hours?

Can supplemental instruction be used as a tool to increase historically underrepresented students' sense of belongingness in economics? Does the access to supplemental instruction affect their willingness to pursue economics as a major?

Innovations

- 1. Addition of a Tutor for homework and exam-related assistance
- 2. Weekly Supplemental/Recitation Session to facilitate reinforcement of the concepts learned over the week
- Promotion of team-based learning and peer engagement during 3. the recitation session

- Students also reported reduced anxiety as a result of the availability of tutoring session.
- Multiple students reported that they were more comfortable opening up to peers in recitation session than during regular lectures.
- Merely knowing that help is available can significantly reduce student anxiety and have a positive impact on learning outcomes.
- Immediate feedback is important in boosting student success.
- 100% of the students recommended this initiative in other courses.

I am utilizing the insights of how innovative and research-based approaches can significantly enhance students' learning outcomes. As an educator, I am committed to continually improving my teaching methods and incorporating the latest research-based pedagogical approaches to create a dynamic and inclusive learning environment that benefits all my students.

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