

Exploring the effects of lightweight social interventions on learner performance in MOOCs

Katherine Brady, Douglas Fisher & Gayathri Narasimham

Please check out our flipped poster at https://edge.edx.org/courses/course-v1:LAS+FLIPPED_CON+2016

Introduction

This poster investigates whether a lightweight intervention that prompts users to think of themselves as potential community leaders can increase course participation.

The goal is to find interventions that motivate learner engagement, while not requiring that the course be substantially redesigned.

Background

Studies by Kizilcec and Schneider (2015) and Yang et al. (2013) have shown that students taking massive open online courses are more likely to finish the course if they feel they are part of a network of learners.

Krause and Williams (2015) found that learner engagement can be increased by redesigning a course so learners can compete against each other.

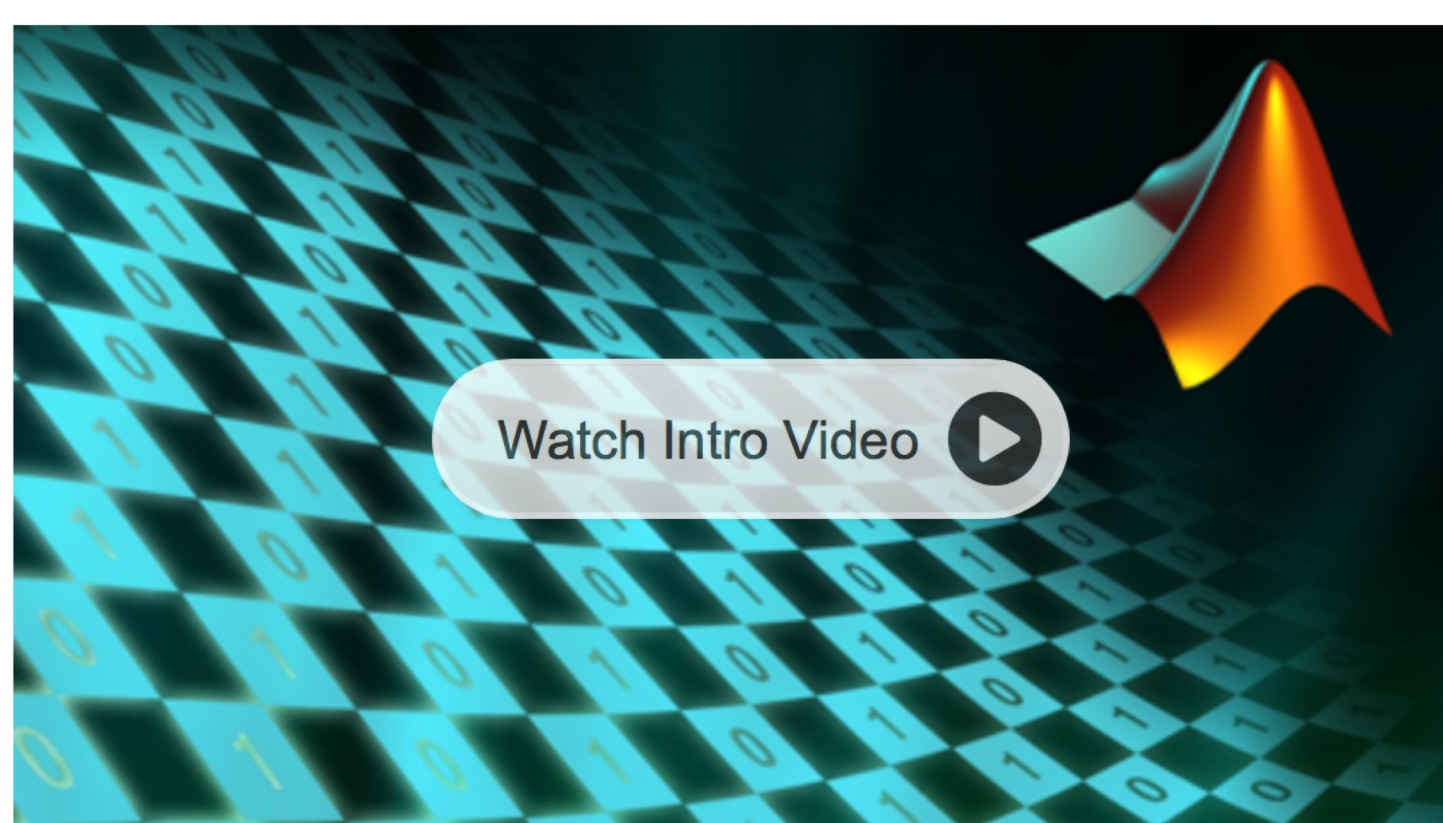
Research Question

Will thinking about the possibility of becoming a Community TA incentivize some students to increase their engagement in a course (e.g., by attempting more assignments)?

VANDERBILT UNIVERSITY

Introduction to Programming with MATLAB

This course teaches computer programming to those with little to no previous experience. It uses the programming system and language called MATLAB to do so because it is easy to learn, versatile and very useful for engineers and other professionals.



The Course

We tested this research question in the third session of a MOOC teaching the Matlab programming language, offered by Vanderbilt University through Coursera.

This was a popular course, with an enrollment of nearly 15,000 at the time our experiment started.

There was prestige in being a Community TA, as was apparent in the previous two sessions of the course.

Students who took the post course survey of earlier sessions expressed strong interest in becoming a community TA in future offerings.

Experimental Design

A day before the first assignment was due in the Matlab course, half of the enrolled learners received an email asking the following question

Question 1

If you complete this course in the top 20% of those who complete, would you like to be considered for a Community TAship in a subsequent offering of the course? Your response to this question is optional, and your response, if any, will have no effect on your score in the course.

- ☐ No
- ☐ Yes

These learners were the experimental group. The email contained a link to a survey on the course platform where they could answer the question. The other half of learners did not get this email.

For each assignment in the course we measured the number of learners in each group who attempted the assignment.

Results

The results were not significant in most cases. The one exception was the completion rate of the experimental group on the very last assignment of the course, which was higher than the control group.

We found this surprising because we had thought that learners might be more motivated to complete the assignments shortly after the intervention.

Conclusion

We plan to replicate the study, better understand the affect of the Community TA incentive, and investigate other lightweight interventions.

