Student Participation in College Classrooms

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Background

One problem that many schools struggle with is the problem of student participation in class. Keeping students interested and engaged with the class is of utmost importance, as losing that focus leads to lower retention of information and a decrease in grades. Our focus in this project was to examine and produce ways that schools could more effectively invigorate students within the classroom, specifically by manipulating factors outside of the classroom, and found two separate ways to create a change.

Methods

We looked at how students are placed in classes versus the classes themselves.

With placement tests

- Student that have been placed into different classes have a harder time participating in class.[1]
- Placement tests divide students between two classes of different skill levels, but the region at which they look to gauge a student's proficiency in a class is too narrow.[1]

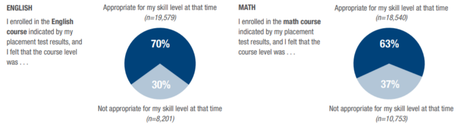

Fig. 1. Center for Community College Student Engagement. "Expectations Meet Reality: The Underprepared Student and Community Colleges." 2016, www.ccsse.org/docs/Underprepared_Student.pdf.

With online classes

- Online classes prove harder to keep students engaged and lowers participation.
- How classes are run has a large effect on this fact.
- Asynchronous classes prove to be the worst culprit of this, having little to no participation at all in them. [2]

Asynchronous Classes

Decide on new Online System

- Department heads choose from a variety of options.

Transition to new online system

- Redesign classes to be more participation orientated.
- Have IT department download software onto students' computers.

Find a time to transition

- Best time will be over Summer Break.
- Possible opportunities for students to help.

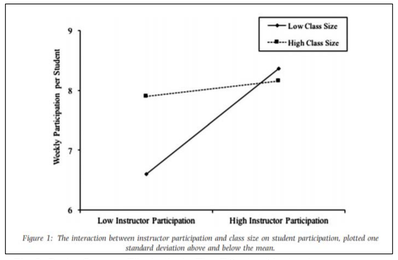

Figure 1: The interaction between instructor participation and class size on student participation, plotted one standard deviation above and below the mean.

Fig 2. Parks-Stamm, Elizabeth J. "The Effects of Instructor Participation and Class Size on Student Participation in an Online Class Discussion Forum."

References

1. Austin, Lori Ann. "Why Placement Based on Algebra Doesn't Add Up." *Emerging Issues in Mathematics Pathways: Case Studies, Scans of the Field, and Recommendations*, edited by Rebecca Hartzler and Richelle Blair, U Of Texas at Austin, 2019, pp. 115–124, dcmathpathways.org/sites/default/files/resources/2019-04/Emerging-Issues-in-Mathematics-Pathways_Chapter12.pdf.

2. Parks-Stamm, Elizabeth J., et al. "The Effects of Instructor Participation and Class Size on Student Participation in an Online Class Discussion Forum." *British Journal of Educational Technology*, vol. 48, no. 6, Nov. 2017, pp. 1250–1259.

Placement Tests

Placement tests do not sort students properly.

- We need to update the system to be more focused on a holistic scale.

Start by defining the new holistic placement procedure.

- Gather a group of department heads and academic advisors to design a new procedure.

Test the new placement procedure.

- Designate a certain percentage of incoming classes to test the new placement system.

Replace the current tests completely.

- Once the procedure has been perfected, switch from testing certain freshmen to all freshmen.

Conclusion

The participation of the students is largely determined by the relationship between the class and the student themselves. If the student doesn't enjoy the class, or the class does not effectively invoke feelings of enjoyment, then the participation of the students is harmed. This is the case in both placement tests and asynchronous classes, one by making the student feel disconnected from the class and the other by making the class less respondent to the students. By altering or removing these aspects of school, the participation of students, their ability to communicate and learn would increase, benefitting all in the class.