Increasing Informal Student Interactions to Support Mental Health and Increase Class Engagement during the COVID pandemic

Heather Walker

University of Arkansas, Ralph E. Martin Department of Chemical Engineering

Keywords

COVID-19, mental health, student-faculty interaction, socialization, engineering

Abstract

During the COVID pandemic, increased isolation was one of the factors that caused many university students to experience increased stress, anxiety, and depression. This negative impact on the mental health of students also contributed to decreased engagement in the classroom and learning overall. The benefit of connections between students and the university community has been well-established in literature. Therefore, for students in the chemical engineering thermodynamics course at the University of Arkansas during 2020, an attempt was made to increase student-student and student-faculty connections through a variety of means. The primary goal was to support the mental health of vulnerable students and increase classroom engagement and learning.

In the fall of 2020, the thermodynamics course was being taught as a synchronous hybrid course using Zoom technology. Attempts were made to increase both student-student connections and student-faculty connections using a variety of methods. Student-student connections were fostered through breakout rooms during class, a class GroupMe account, a virtual study lounge, and group project assignments. These provided for increased student peer interactions inside and outside of class. Student-faculty connections were developed through opportunities to participate in socialization and wellness events. These were informal remote gatherings that were a mix of substantive and social events to attract a varied range of interests. Students were polled at the beginning of the semester regarding the types of events that would be offered, and it was made clear that participation was voluntary and would not impact grades in any way. The remote events were hosted roughly every other week and included gaming nights, a book club, a cooking demonstration, a virtual Bingo night, a guest speaker from within the field, a pet night, a watch party for a space launch, and speed-friending sessions.

All of the student-student connection strategies were implemented but no attempts were made to quantify their usage. Of the 48 students in the fall 2020 course, 100% participated in the class GroupMe. The average attendance for the socialization and wellness events was 7 students or 15%. The event with the highest attendance was the cooking demonstration followed by the virtual Bingo night. Overall, social events were better attended than the substantive ones. Even though participation was low, the students expressed appreciation for the opportunity to participate. Sample comments from the students include:

"Honestly, I have not been doing great these past couple of months, and it's been hard to cope with everything being virtual and disconnected ... the gaming night really cheered me up and helped me"

"She didn't just let our class be another online class. She actively tried to host events (online of course) to help us feel less alone during this time."

Class engagement stayed relatively high as evidenced by the synchronous attendance never dropping below 73%.

Several strategies were used to increase informal remote interactions between student-student and student-faculty in a chemical engineering thermodynamics course during the COVID pandemic (Fall 2020 semester). The informal student-faculty events did not have high participation but, from student comments, were meaningful to those who participated. Several students mentioned the increased connections being beneficial to their mental health. Also, I believe the increased emphasis on establishing student connections contributed to the relatively high attendance throughout the semester. The higher attendance could then lead to higher engagement and increased learning. Further study would be needed to quantify this conclusion.

References

- C. Son, S. Hegde, A. Smith, X. Wang and F Sasangohar, "Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study," in J Med Internet Res, March 2020, e21279.
- [2] M. A. Lamport, "Student-Faculty Informal Interaction and the Effect on College Student Outcomes: A Review of the Literature", in Adolescence, Winter 1993, pp. 971-990.
- [3] G. D. Kuh and S. Hu, "The Effects of Student-Faculty Interaction in the 1990s", in Review of Higher Education, April 2001, pp. 309-332.
- [4] T. L. Trolian, E. A. Jach, J. M. Hanosn and E. T. Pascarella, "Influencing Academic Motivation: The Effects of Student-Faculty Interaction," in Journal of College Student Development, October 2016, pp. 810-826.
- [5] R. E. Maunder "Students' Peer Relationships and their Contribution to University Adjustment: The Need to Belong in the University Community" in Journal of Further and Higher Education, June 2017, pp. 756-768.

Heather Walker

Dr. Walker is a Teaching Assistant Professor and the Associate Department Head for the Undergraduate Program in the Ralph E. Martin Department of Chemical Engineering at the University of Arkansas. Her research interests include engineering education, increasing student engagement, and student advising.