

# ONLINE TEAM DISCUSSIONS: MAKING STUDENT ENGAGEMENT WORTH THE EFFORT

Sarah Wackerbarth, PhD
Corresponding author
University of Kentucky, Lexington, KY, USA
111B College of Public Health Building
111 Washington Avenue
Lexington, KY 40536
sbwack0@uky.edu
Orcid: 0000-0002-4019-2700

Madeline Aulisio Miller, DrPH University of Kentucky, Lexington, KY, USA 518E Margaret I. King Library 179 Funkhouser Drive Lexington, KY 40508

madeline.miller@uky.edu
Orcid: 0000-0003-3377-0389

# **ABSTRACT:**

Facilitating robust engagement in an online, asynchronous course can be difficult. Learning management system discussion boards are often recommended to promote interaction and learning. However, there are many concerns associated with discussion board use such as disengagement, time lags, and inappropriate use of artificial intelligence. The instructor of a required graduate public health course delivered asynchronously online developed and implemented an alternative to discussion boards that required small groups of students to record and submit their discussions. Team members prepared for the discussions by first reviewing course module content and completing an individual assignment. The group discussions required learners to utilize higher-order skills in responses to structured prompts and were graded for depth and participation rather than accuracy. Midsemester feedback survey data indicated that students accepted the recorded discussions and found them valuable. Survey data also enabled the instructor to make small adjustments as needed and recommend best practices for the implementation of this online discussion activity in other courses.

# **Background**

Educators continue to rely on a variety of course formats to meet learners' needs. Online, asynchronous classes can solve many logistical difficulties such as distance from a physical classroom and personal difficulties such as needing time to compose one's thoughts before participating (Morse, 2021; Clinton and Kelly, 2019; Dailey-Herbert, 2018; Hratsinki, 2008). However, facilitating robust engagement with course content and interaction among learners in these environments can prove challenging (Kaur et al, 2021; Su and Guo, 2021; Watts, 2016; Moallem, 2015; Gao, Zhang, & Franklin, 2013; Dahlstrom, Brooks, & Bichsel, 2014). Learning management system (LMS) discussion boards are often recommended to engage learners and promote interaction.

Discussion boards enable users to write/record and respond to posts consisting of text, images, videos, and links. Despite the convenience provided by discussion boards, several limitations have been noted (Sweetman, 2020; Aloni and Harrington, 2018; Al-Shalchi, 2009; Park and Bonk, 2007). The benefit of allowing students to participate asynchronously usually comes at the expense of a "true" exchange of ideas. Many instructors find that students create the specified number of posts and responses- engaging at a more superficial level- to fulfill an assignment's minimum requirement and then discontinue engagement with the discussion board (Champion & Gunnlaugson, 2018; Lamit et al, 2017; McCrory, Putnam & Jansen, 2008; Meyer, 2007). Instructors may also have concerns about students quickly generating content to post through artificial intelligence software such as ChatGPT and avoiding authentic engagement entirely (Cline, 2023). Some learners report that the potential time lag between their peers creating and answering posts creates a cumbersome wait and the hassle of frequent checking for new posts (Park and Bonk, 2007; De Freitas, Billy & Crain, 2023). This time lag may also disrupt instructors' ability to return feedback on posts or participate in the conversation themselves in a timely manner.

These issues are not unique to any one type of course and have been reported in the educational scholarship associated with several subjects and fields (De Freitas, Billy & Crain, 2023). Although the limitations of discussion board participation have been previously described, there is an opportunity to better document them within public health courses and offer a potential solution replicable to many diverse types of classes.



# **Course Description & Problem**

A required graduate-level management course within the college of public health of a large, midwestern R-1 university was adapted from a synchronous in-person format to an asynchronous online format to support distance learners. The course introduces public health students to theories and practice of administration. During the semester's progress, learners develop skillsets associated with the management functions of planning, organizing, leading, and controlling.

Recognizing that other, related managerial skills such as conflict resolution and group decision-making techniques develop more effectively and efficiently in situations where learners are face-to-face, a decision was made to alter plans for how learners would participate in the course. The decisions regarding course improvements were guided by quality enhancement and management theory such as Deming's "Plan-Do-Study-Act" Model. This model enables users to improve a process by identifying an opportunity for change (here, the need to improve assignments associated with discussion boards) and then creating an alternative plan. Once the plan is implemented, outcomes of the plan implementation are studied, and then contribute to a decision regarding whether to continue, adjust, or discontinue the current plans (W. Edwards Deming Institute, n.d.).

In addition to the guidance from quality enhancement and managerial theory, several other important considerations also impacted the decision to alter how learners would participate in the course. First, an engagement method or strategy was needed that was low hassle, making it more acceptable to students. The engagement method also needed to be perceived by students as value-added to the course, benefiting their efforts. Finally, the method needed to avoid creating additional burdens on the instructor for tasks such as course management and grading.

## **Innovation**

The course was divided into fifteen modules available on the university's LMS. Each module included several brief lecture videos and readings to provide a formative understanding of course concepts. Students were required to complete an individual assignment graded for accuracy. Most modules also required participation in a group discussion or team assignment. To enhance engagement and address considerations of student and instructor time and perceived benefit, the instructor required students to participate in synchronous team discussions rather than post on discussion boards.

These group activities were designed to utilize higher-order skills such as synthesis, and teams were provided with structured prompts for each meeting (Anderson, Krathwahl & Bloom, 2001). The team meetings were convened via Zoom, recorded, and then uploaded to the LMS. The students were instructed to limit the team discussion to one hour, even if they were unable to complete all components of the prompt. The instructor viewed the recordings and offered feedback to guide the students in their initial attempts to apply new concepts. Grading for team discussions was based on the depth of discussion and participation, and no points were deducted for mistakes. An example of the individual assignment and team discussion prompts is provided in Table 1.

Table 1. Individual and Discussion Prompt Example

	Module 8: Coaching & Mentoring Prompts	Bloom's Taxonomy Level
		,
Individual	What is the difference between mentoring and coaching? Remember,	
Assignment	As a new public health manager, how would you seek out a mentor or	Understand, Apply
	coach? What would you hope to gain from the relationship?	
Team	• Review the potential organizational benefits of effective	Analyze, Evaluate,
Discussion	coaching. Which do you think is most likely?	Create
	• With all the benefits, why is coaching (still) rare?	
	• Coaching takes time. Talk through the "business case" you would	
	present to your supervisor to request the time to devote to it.	
	• Every employee might not respond to mentoring and coaching.	
	Talk through how you'd decide whether to use it.	
	Give characteristics that you believe would signal that an	
	employee would benefit from coaching.	
	• What characteristics would cause you not to attempt coaching?	



#### Methods & Results

Students were surveyed at three points in the semester to provide timely feedback about the recorded discussion group activities. When practical, immediate adjustments were made to solve problems and better meet student needs based on student feedback. The survey's open-ended responses were categorized as ideas to "continue", "stop" or "start". Table 2 contains examples of actions taken in response to the feedback gained from the first survey. The second survey offered students an opportunity to rate their feelings toward discussion groups. Six of the seven students who responded indicated a positive reaction. The remaining student was neutral.

Table 2. Examples of Feedback Received and Actions Taken (Survey #1)

Category	Actions Taken	Feedback Received
Continue	Praise efforts made to expand beyond discussion prompts.	"Group meetings really helped me understand the topics we were going over. It was refreshing to meet with classmates despite this being an online course. These meetings often prompted thinking and reasoning beyond the weekly topics which I found to be helpful in connecting the course material."
Stop	Eliminate redundancy between individual and team discussion prompts.	"Too much redundant busy work - no reason to do a team discussion and then an individual assignment covering the same questions."
Start	Allow students to miss one team discussion without penalty.	"I would prefer if we were able to choose our groups based on availability. Scheduling has been very difficult."

## Discussion, Limitations, & Lessons Learned

Although the surveys were somewhat limited by a modest response rate (41.2%) and data from only a single semester, student data indicates that the course's use of recorded team meetings achieved several outcomes. In support of previous findings, the recorded team meetings appeared to allow students to better construct social presence and get to know one another, becoming a more cohesive small group in the process (Milovic and Dingus, 2021). The use of recorded team meetings also facilitated skill development and the students having a more authentic exchange of ideas and questions than a discussion board could facilitate while maintaining the course's basic format. Beyond immediate adjustment, feedback was also used to improve the design of subsequent iterations of the course. These efforts have produced a series of recommendations for implementing recorded group discussions in other classes. These recommendations are summarized in Figure 1.

# Figure 1. Recommendations for Implementing Recorded Team Discussions

- 1. Require an individual assignment designed to assist students in gathering and organizing thoughts (e.g., basic understanding of concepts) be completed *prior* to the team discussion.
- 2. This pre-work will be a safeguard to minimize opportunities for disengagement that may arise from students coming to group meetings unprepared.
- 3. Use team discussions only for modules with topics which benefit from engagement (e.g., value-add for students).
- 4. Make the connection between individual and team assignments transparent. Focus on how the assignments relate rather than duplicate.
- 5. Offer an alternative path for students unable to participate in team discussions.
- 6. Assign team membership based on student availability.
- 7. Provide a time limit for discussion (rather than require the completion of tasks).
- 8. Provide feedback to foster interaction and engagement.
- 9. Allow each student to miss one team discussion without penalty.



#### Conclusion

How best to engage students continues to be a topic of frequent discussion and research. Although voices from a variety of fields have provided viable solutions and suggestions, there continues to be no singular "best" method to engage students and no one recommended strategy to inspire participation and an exchange of ideas. This paper adds to this growing body of research with a successful strategy inspired by quality enhancement and management theory that was implemented in an online, asynchronous public health course. The use of recorded discussion groups to replace traditional LMS discussion boards is ongoing in this course and will be utilized in other public health courses at the institution based on positive feedback received from learners.

**Acknowledgements:** The authors thank the students of the Spring 2023 offering of CPH 654 for their feedback.

# References

- Aloni, M. & Harrington, C. (2018). Research based practices for improving the effectiveness of asynchronous online discussion boards. *Scholarship of Teaching and Learning in Psychology*, 4(4), 271. <a href="https://doi.org/10.1037/stl0000121">https://doi.org/10.1037/stl0000121</a>
- Al-Shalchi, O.N. (2009). The effectiveness and development of online discussions. *Journal of Online Learning and Teaching*, *5*(1), 104-108. https://doi.org/10.2139/ssrn.2103352
- Anderson, L.W., Krathwohl, D.R., & Bloom, B.S. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of Educational Objectives (Complete ed.). Longman.
- Champion K. & Gunnlaugson, O. (2018). Fostering generative conversation in higher education course discussion boards. *Innovations in Education and Teaching International*, *55*(6), 704–712. https://doi.org/10.1080/14703237.2017.1279069.
- Cline, S. (2023, July 20). *How ChatGPT killed my discussion boards and prompted new prompts*. Times Higher Education. <a href="https://www.timeshighereducation.com/campus/how-chatgpt-killed-my-discussion-boards-and-prompted-new-prompts">https://www.timeshighereducation.com/campus/how-chatgpt-killed-my-discussion-boards-and-prompted-new-prompts</a>.
- Clinton, V. & Kelly, A. E. (2020). Improving student attitudes toward discussion boards using a brief motivational intervention. *Scholarship of Teaching and Learning in Psychology*, 6(4), 301-315. https://doi.org/10.1037/stl0000160
- Dahlstrom, E., Brooks, D. & Bichsel, J. (2014). The current ecosystem of learning systems in higher education: Student, faculty, and IT perspectives. *Educause*. <a href="https://doi.org/10.13140/RG.2.1.3751.6005">https://doi.org/10.13140/RG.2.1.3751.6005</a>
- Dailey-Hebert, A. (2018). Maximizing interactivity in online learning: Moving beyond discussion boards. *Journal of Educators Online*, 15(3), n3. <a href="https://doi.org/10.9743/jeo.2018.15.3.8">https://doi.org/10.9743/jeo.2018.15.3.8</a>
- De Freitas, G., Billy, I. & Crain, C. (2023). Text-based versus video discussion boards to promote a sense of community with graduate online students: A student perspective. *International Journal of Higher Education Management*, 9(2),38-49. <a href="https://doi.org/10.24052/IJHEM/V09N02/ART-3">https://doi.org/10.24052/IJHEM/V09N02/ART-3</a>
- Gao, F., Zhang, T. & Franklin, T. (2013). Designing asynchronous online discussion environments: Recent progress and possible future directions. *British Journal of Educational Technology*, *44*(3), 46983. https://doi.org/10.1111/j.1467-8535.2012.01330.x
- Hrastinski, S. (2008). Asynchronous and synchronous e-learning. *Educause Quarterly*, 31(4), 51-55.
- Kaur, S., Bir, M., Chandran, D. S., & Deepak, K. K. (2021). *Advances in Physiology Education*, 45(1), 37-43. https://doi.org/10.1152/advan.00136.2020
- Lamit, W. A., Matzin, R., Jawawi, R., Sharill, M, Jaidin, J. H., & Mundia, L. (2017).
- Utilizing an online discussion tool in teaching and learning sociology. *The International Journal of Humanities Education*, 15(2), 1-16. <a href="https://doi.org/10.18848/2327-0063/CGP/v15i02/1-16">https://doi.org/10.18848/2327-0063/CGP/v15i02/1-16</a>
- McCrory, R., Putnam, R., & Jansen, A. (2008). Interaction in online courses for teacher education: Subject matter and pedagogy. *Journal of Technology and Teacher Education*, 16(2), 155-180.
- Meyer, K.A. (2007). Student perceptions of face-to-face and online discussions: The advantage goes to ... *Journal of Asynchronous Learning Networks*, 11(4), 53-69. https://doi.org/10.24059/olj.v11i4.1715
- Milovic, A., & Dingus, R. (2021). How not to disappear completely: Using video-based discussions to enhance student social presence in an online course. *Marketing Education Review*, 31(4), 311-321. https://doi.org/10.1080/10528008.2021.1943447
- Moallem, M. (2015). The impact of synchronous and asynchronous communication tools on learner self-regulation, social presence, immediacy, intimacy and satisfaction in collaborative online learning. *The Online Journal of Distance Education and e-Learning*, *3*(3), 55-77. http://tojdel.net/journals/tojdel/articles/v03i03/v03i03-08.pdf
- Morse, M. L. (2021). Increase engaged student learning using Google Docs as a discussion platform. *Teaching and Learning Inquiry*, 9(2), 1-18. http://dx.doi.org/10.20343/teachlearninqu.9.2.20.
- Su, C.-Y. & Guo, Y. (2021). Factors impacting university students' online learning experiences during the COVID-19 epidemic. *Journal of Computer Assisted Learning*, *37*(6), 1578-1590. http://doi.org/10.1111/jcal.12555



- Sweetman, D. S. (2020). Making virtual learning engaging and interactive. *FASEB BioAdvances*, *3*(1), 11-19. https://doi.org/10.1096/fba.2020-00084
- Park, Y.J. & Bonk, C.J. (2007). Synchronous learning experiences: Distance and residential learners' perspectives in a blended graduate course. *Journal of Interactive Online Learning*, 6(3), 245-264. <a href="https://www.researchgate.net/publication/279618745">https://www.researchgate.net/publication/279618745</a>
- W. Edward Demings Institute. (n.d.) The PDSA Cycle. https://deming.org/explore/pdsa/
- Watts, L. (2016). Synchronous and asynchronous communication in distance learning: A review of the literature. *Quarterly Review of Distance Education*, 17(1), 23-32.