DEEPENING DISCUSSION IN ONLINE LEARNING THROUGH HIGH-IMPACT PRACTICES

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A central component of online learning, asynchronous discussions have the potential to impact distance learners in myriad ways positively. For a discussion to be most impactful, best practices associated with online discussion should be implemented, yet discernment regarding such practices too often remains elusive or unimplemented. This study explores research-based, high-impact approaches to facilitating meaningful discussions through five strategies for deepening discussion in the online learning platform. Innovative guidance and support accompany each approach. Furthermore, each exploration into deepening discussion is meant to enhance student engagement and achievement to improve overall retention in online learning.

According to the National Center for Education Statistics, in the fall of 2018, in the United States alone, there were 20,008,434 students enrolled in distance education courses, with the percentage of students enrolling in online education increasing each year (U.S. Department of Education, 2019). Not surprisingly, with the COVID-19 pandemic and schools at the elementary, secondary, and higher education levels across the world being forced to go online, this figure grew astronomically in 2020. Despite online learning's growth and long-standing historical presence in higher education, it is worrisome that retention rates continue to trail traditional higher education institutions (Travers, 2016). However, online and blended instructors are uniquely positioned to impact retention rates in various ways positively. For instance, pedagogical best practices for online teaching continue to be determined, and many are routinely not implemented, further contributing to flagging retention rates.

Moreover, the top factors influencing retention under an instructor's control include factors "such as facilitation of student engagement and sense of belonging, facilitation of the instructions, and course design"

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(Muljana & Luo, 2019, p. 36). An area in online education directly intended to nurture a sense of community, engagement, and learning is discussion. In fact, "interaction via online discussion tools can increase student achievement" (Blackmon, 2012, p. 14). Using specific pedagogical theories and best practices, online instructors can encourage greater engagement and achievement to improve overall retention.

Background

A cornerstone of online classes, implementing asynchronous discussion across online learning platforms is positively perceived (Alshahrani & Walker, 2016; Parton, 2014). Discussion forums are excellent avenues for instructors to interact with students in a large class setting while engaging critical thinking (Crispin & Lane, 2004). Furthermore, participating in online discussions can improve learning outcomes while enhancing learning (Green et al., 2014; Hamann et al., 2012). In one study, students in an online communication course felt online discussions were more effective than traditional discussions in classrooms because a voice was afforded to everyone, conversation points could be revisited, and conversations rarely veered off-task (Jacobi, 2017). Concerns, however, do accompany the inclusion of asynchronous online discussions. For instance, in one study regarding the quality of online discussions, students reported that meaningful dialogue and interactions were often peripheral and lacked depth and meaning (Putman et al., 2012). Instead of being a mainstay of the classroom, in one study, discussion forums were considered only important occasionally instead of being a center of activity (Cramp, 2015).

In summary, one study posits, "Discussion posts have often remained linear, text-based, and cumbersome despite changes in technology that would allow for more natural interactions" (Parton, 2014, p. 11). Instructors, using research-based practices, are uniquely positioned and called upon to develop more productive spaces for online discussions. Researching pedagogically sound practices and including such best practices will provide deepened learning experiences associated with higher achievement. In combing through over 40 articles centered upon online discussion, five main approaches to deepening discussion emerged.

Deepening Discussion Through Bloom's Taxonomy

Frameworks are important to every infrastructure and are no less important to asynchronous online discussions. Thomas et al. (2019) note that "online instructors should provide Bloom's taxonomy instruction to students in online courses to assist students in displaying higher order thinking, leading to more effective and meaningful online discussions" (p. 1). Using the framework of Bloom's taxonomy, which is built upon six cognitive processes, instructors can introduce the taxonomy, model its use, and then require students to include such processes in their answers. Such implementation effectively increases higher order thinking in discussions (Thomas et al., 2019). However, requiring Bloom's taxonomy to be used by students is not the only recommended use. Instructors, too, should implement Bloom's taxonomy as a guide for creating discussion prompts. Bloom's taxonomy focuses on six domains: knowledge, comprehension, application, analysis, synthesis, and evaluation. By focusing on the higher level domains and including them in prompts, an instructor requires students to engage with and reflect on the content under study thoroughly. Facilitating discussion through higher level questions results in boosted learning and increased individual reflection in responses (Woods & Bliss, 2016). Using Bloom's taxonomy as a support to students and instructors ensures sound pedagogy guides discussion deepening from various angles.

Deepening Discussion Through Case-Based Discussions

Deepened discussion is also achieved using a case study style approach. In one study, students were presented with a hypothetical case study to be examined for a discussion response. Doing so improved engagement by providing students with the opportunity for practical application of knowledge through the examination of case studies (Crispin & Lane, 2004). Furthermore, posing case-based discussion prompts that include or combine social events, life experiences, or reality-based experiences "enhance the students' level of knowledge construction" (Liu & Yang, 2014, p. 327). Interestingly, in one study, student satisfaction was highest with simplified discussions on basic concepts. In contrast, student satisfaction was lowest with case-based prompts, yet regardless of satisfaction, student performance correlated the highest with case-based discussions (Richardson & Ice, 2010).

It should be noted, however, that with intentional adjustments, satisfaction could be improved through variances in the discussion prompt. For instance, providing a variety of case studies from which the students might select a preferred case would allow for individual interest and investment, possibly improving engagement and satisfaction. Case-based discussions have great promise to add rigor and depth to discussions.

Deepening Discussion Through Text-Based Answers

However, another approach to deepening discussion includes adding audio or visual elements to enrich the online learning environment. Using this approach, instructors can include videos or graphics in discussion prompts or ask students to answer using videos or graphics as an alternative to drafting a text-based answer. Importantly, video-based materials correspond with increased retention rates for at-risk students (Brecht, 2012). Greenberg and Zanetis (2012) also note that "video supports cognitive development and improves academic performance" (p. 19). Additionally, videos enhance the learning environment by lending authenticity, memorability, realism, and differentiation to the classroom (Kellam et al., 2012). While video inclusion provides many benefits in online classrooms, infographics offer similar advantages. For instance, infographics require synthesizing graphic and textual information, which engages higher order thinking skills (Lindblom et al., 2016). Through infographics, learner engagement and concept memorability is also improved (Bellato, 2013). As an added benefit, audio and visual elements collectively appeal to learner dual-coding needs while enhancing understanding (Clark & Mayer, 2011). Creating a community within the online classroom is also supported by audio and visual elements, serving to personalize and humanize classrooms (Covelli, 2017). Clearly, there are many research-based reasons to include audio or visual elements in one's classroom, further validating this alternative way to deepen discussion practices.

Deepening Discussion Through Unique Perspectives

Another best practice grounded in research involves providing students with the opportunity to generate a unique discussion response. In studying nine different approaches to discussion, Dennen (2005) reported that the liveliest discussions essentially encouraged diverse and personal perspectives. For instance, instructors encouraged personal stories or hypothetical answers. Additionally, discussion topics should prompt students to "explore the tasks, appreciate diverse perspectives, create solutions, and apply solutions to their life" (Kilis & Yildirim, 2019, p. 190). Providing the chance for students to construct personal meaning and reflect uniquely on content also ensures the instructor does not inhibit discussion by being assumed to be the sole purveyor of knowledge, as students themselves are instead encouraged to coconstruct

knowledge (Blackmon, 2012). Furthermore, students appreciate intentionally designed and pertinent prompts, which upon reflection, are more readily applied to their real-life experiences (Jacobi, 2017). The active construction of unique and distinctive discussion posts encourages students to engage more deeply with peers and content in more powerful ways.

Deepening Discussion Through Small Groups

A final approach to boosting participation and engaging students in deeper conversations involves incorporating small groups into discussion. Because repetition, when contributing to conversations, irritates online students (Phirangee, 2016), one way to reduce repetition is to split classes into smaller groups. Six to eight participants are the optimal number for small groups (Seifert et al., 2020). Other benefits of using a smaller group setting are that the conversation is more manageable due to fewer posts and students appreciate how a smaller setting is more conducive to fostering closer connections between peers (Jacobi, 2017). Because student isolation and disconnection are a concern and contributing factor to low retention rates in the online environment (Phirangee, 2016; Rath et al., 2019), smaller groups advantageously work to address this concern. Finally, smaller groups provide more significant opportunities for nurturing higher order critical thinking (Hamann et al., 2012). Given the many advantages of implementing smaller groups into discussion, it is evident that the practice is beneficial for deepening discussion and learning.

Challenges

Challenges may be associated with the implementation of alternative discussion practices. While instructor involvement in course design is paramount, instructor presence and regulation emerge as a primary source of concern related to deepening discussion practices. To explain, dominant and overly involved instructors can negatively impact student interaction by causing "students to default to the student-instructor relationship" (Blackmon, 2012, p. 15). The overinvolvement of an instructor can thereby reduce meaningful interactions between students, as illustrated in a study where a teacher minimally facilitated discussion and required students to respond to each other, resulting in conversations that were more fluid and reflective of greater social presence (An et al., 2009). A subtler and more removed moderator style within the discussion forum in conjunction with meaningful and individualized feedback also was recommended as being most effective for an instructor's role to address such concerns (Jacobi, 2017). Dennen (2005), in her analysis of nine different approaches to discussion in the online classroom, noted that the most preferred instructor presence was one where students felt their discussion contributions were acknowledged yet only conversationally rather than the instructor taking on the "expert" role (p. 145). Less formal discussion interactions with instructors are therefore highly valued by students, while personalized and expert feedback is anticipated and appreciated through the more private mode of personalized feedback. Intentional designs and plans can circumvent such discussion challenges, thereby ensuring students a more enriching learning experience.

Conclusion

Specific high-impact practices, such as the ones explored here, can encourage superior engagement and achievement to improve retention rates in online education. Such approaches optimize discussion while meeting the learning needs of today's online learners. Research indicates that participation and dialogue in the online classroom increase "by showing curiosity, recognizing multiple perspectives, and by illustrating that knowledge is ambiguous and equivocal" (Gonzales et al., 2019, p. 38). The approaches outlined here encourage inquisitiveness, value various viewpoints, and emphasize openness to interpreta-

tion regarding knowledge. In diving deeply into such practices when facilitating online instruction, instructors enrich the online learning world, which has become a mainstay of education not only because of its benefits but also due to the circumstances of unprecedented times such as those encountered in 2020 and 2021. Because online learning is here to stay, educators must embrace tools and approaches to deepening discussion, learning, and connections for all students.

REFERENCES

Alshahrani, H. A., & Walker, D. A. (2016). An exploratory, descriptive study of the attitudes of instructors and students toward the use of asynchronous online discussion at a female university in Saudi Arabia. *Mid-Western Educational Researcher, 28*(3), 232–246.

An, H., Shin, S., & Lim, K. (2009). The effects of different instructor facilitation approaches on students' interactions during asynchronous online discussions. *Computers & Education, 53*(3), 749–760. https://doi.org/10.1016/j.compedu.2009.04.015

Bellato, N. (2013). Infographics: A visual link to learning. *Learn, 2013*(12), 1. https://doi.org/10.1145/2556598.2556269

Blackmon, S. J. (2012). Outcomes of chat and discussion board use in online learning: A research synthesis. *Journal of Educators Online, 9*(2). http://search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=eric&AN=EJ985399&site=eds-live&scope=site

Brecht, H. D. (2012). Learning from online video lectures. *Journal of Information Technology Education: Innovations in Practice, 11*, 227–250.

Clark, R. C., & Mayer, R. E. (2011). *e-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning* (3rd ed.). Pfeiffer.

Covelli, B. J. (2017). Online discussion boards: The practice of building community for adult learners. *Journal of Continuing Higher Education, 65*(2), 139–145. https://doi.org/10.1080/07377363.2017.1274616

Cramp, A. (2015). Meaningful dialogue in digitally mediated learning for in-service teacher development. *Technology, Pedagogy and Education* 24, 1–16.

Crispin D., & Lane, A. M. (2004). "Carry on talking": Developing ways to enhance students' use of online discussion forums. *Journal of Hospitality, Leisure, Sport & Tourism Education, 3*(1), 53–59.

Dennen, V. P. (2005). From message posting to learning dialogues: Factors affecting learner participation in asynchronous discussion. *Distance Education, 26*(1), 127–148. https://doi.org/10.1080/01587910500081376

Gonzales, E. K., Long-Raymond, L., & Kehler, D. (2019). From monologue to dialogue: Creating a community of inquiry in online ecological restoration courses. *Ecological Restoration, 37*(1), 34–42. https://doi.org/10.3368/er.37.1.34

Green, R. A., Farchione, D., Hughes, D. L., & Chan, S.P. (2014). Participation in asynchronous online discussion forums does improve student learning of gross anatomy. *Anatomical Sciences Education, 7*(1), 71–76. https://doi.org/10.1002/ase.1376

Greenberg, A., & Zanetis, J. (2012). The impact of broadcast and streaming video in education. Report Commissioned by Cisco Systems Inc. to Wainhouse Research. http://www.cisco.com/web/strategy/docs/education/ciscovideowp.pdf

Hamann, K., Pollock, P., & Wilson, B. (2012). Assessing student perceptions of the benefits of discussions in small-group, large-class, and online learning contexts. *College Teaching, 60*(2), 65. https://doi.org/10.1080/87567555.2011.633407

Jacobi, L. (2017). The structure of discussions in an online communication course: What do students find most effective? *Journal of University Teaching & Learning Practice, 14*(1), 1–16.

Kellam, H., MacDonald, C. J., Archibald, D., & Puddester, D. (2012). Designing digital video to support learner outcomes: A study in an online learning resource for healthcare professionals and students. *International Journal of Online Pedagogy and Course Design, 3*(2), 45–66.

Kilis, S., & Yildirim, Z. (2019). Posting patterns of students' social presence, cognitive presence, and teaching presence in online learning. *Online Learning, 23*(2), 179–195. https://doi.org/10.24059/olj.v23i2.1460

Lindblom, K., Galante, N., Grabow, S., & Wilson, B. (2016). Composing infographics to synthesize informational and literary texts. *English Journal, 105*(6), 37–45.

Liu, C.-J., & Yang, S. C. (2014). Using the community of inquiry model to investigate students' knowledge construction in asynchronous online discussions. *Journal of Educational Computing Research, 51*(3), 327–354. https://doi.org/10.2190/EC.51.3.d

Muljana, P. S., & Luo, T. (2019). Factors contributing to student retention in online learning and recommended strategies for improvement: A systematic literature review. *Journal of Information Technology Education: Research, 18*, 19–57. http://search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=eric&AN=EJ1204794&site=eds-live&scope=site

Parton, B. S. (2014). Using standard and custom mobile apps to enhance social presence for online learning. *Journal of Applied Learning Technology, 4*(1), 11–14.

Phirangee, K. (2016). Students' perceptions of learner-learner interactions that weaken a sense of community in an online learning environment. *Online Learning, 20*(4), 13–33.

Putman, S. M., Ford, K., & Tancock, S. (2012). Redefining online discussions: using participant stances to promote collaboration and cognitive engagement. *International Journal of Teaching and Learning in Higher Education, 24*(2), 151–167. http://search.ebscohost.com/login.aspx?direct=true&AuthType=shib&db=eric&AN=EJ996262&site=eds-live&scope=site

Seifert, T., Feliks, O., & Kritz, M. (2020). Optimal teaching and learning practices in online multi-participant courses. *Journal of Educators Online, 17*(1), 1–22.

Rath, L., Olmstead, K., Zhang, J., & Beach, P. (2019). Hearing students' voices: Understanding student perspectives of online learning. *Online Journal of Distance Learning Administration, 22*(4), 1–12.

Richardson, J. C., & Ice, P. (2010). Investigating students' level of critical thinking across instructional strategies in online discussions. *Internet and Higher Education, 13*(1–2), 52–59.

Thomas, M., Wieser, M., & Fittipaldi, D. (2019). Utilizing Bloom's taxonomy for facilitating effective and meaningful online classroom discussions. *Marketing Management Association Annual Conference Proceedings*, 1–9.

Travers, S. (2016). Supporting online student retention in community colleges: What data is most relevant? *Quarterly Review of Distance Education, 17*(4), 49–61.

U.S. Department of Education. (2019). National Center for Education Statistics. *Fall Enrollment component (provisional data).* https://nces.ed.gov/ipeds/search/ViewTable?tableId=26394&returnUrl=%2Fipeds%2Fsearch%2FView%3FresultType%3Dtable%26page%3D1%26sortBy%3Drelevance%26surveyComponents%3DFall%2520Enrollment%2520%28EF%29%26surveyComponents%3DFinance%2520%28F%29%26surveyComponents%3DAcademic%2520Libraries%2520%28AL%29%26surveyComponents%3DHuman%2520Resources%2520%28HR%29%26collectionYears%3D2018-19%26sources%3DTables%2BLibrary%26sc-source%3Dspring#

Woods, K., & Bliss, K. (2016). Facilitating successful online discussions. *Journal of Effective Teaching, 16*(2), 76–92.