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Student Learning and Discussion Board Forums

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Abstract

This study examines the results of a student survey that asked participants how helpful discussion board forums were to their learning experience. Results show that while students find the use of discussion boards to be a helpful part of their online course experience, they are not as helpful as individual based course components such as assignments, quizzes, or tests. Findings suggest that online facilitators must question the structure and automatic inclusion of discussion board forums in each class, the impact of forums on student learning, and the necessity of community building within the online environment.

Introduction

Discussion board forums are increasingly being utilized as a means of building an online community in the academic setting. This increase in utilization has led to additional scrutiny of the process of designing appropriate discussion board forums, creation of strategies and best practices to aid faculty in building on the strengths of the use of the online community that is formed through discussion forums, and research on the appropriate use and design of this particular form of community. However, research asking students about the impact of discussion forums on their learning process is limited. This study addresses this limitation by creating discussion board forums as guided by literature, including multiple learning components within the online classroom and then asking students to list and rank the impact of these components on their learning experience.

Literature

Armstrong for example, states that when setting up an online discussion, faculty must design a task for students or devise a topic of instruction and provide students with a structure to respond (Armstrong 2010). David Baker argues that appropriately structured online forums can “transform mere course chatter into a cyber forum of student-centered learning through meticulous planning, designing, and orchestrating” (p 1) and that course facilitators must determine a strategic purpose for including online discussions, think critically about the placement, pacing, and extent of discussions, and set discussion parameters (Baker 2011). Baker also suggests offering group formats, grading rubrics for discussion board posts, maintaining online presence and guide discussions, a discussion of netiquette and viewing the forums from a continuous improvement approach through self reflection and critique (Baker 2011).

John Thomson builds upon this advice by providing ten suggested strategies and techniques to use within the online discussion forum. They are:

1. Have specific guidelines and questions.
2. Build community.
3. Make an obvious connection between the discussion and the course’s topics.

4. Require students to participate.
5. Give grades to online participation.
6. Faculty must participate at an appropriate level.
7. Use students to lead discussions.
8. Provide feedback to students on their involvement and behavior.
9. Strive to have discussions reflect higher order thinking skills.
10. Be aware of student participation patterns (Thompson 2006).

In an article authored by Bailey and Card (2009), these techniques were indeed deemed important by individuals that have been nationally recognized for their experiences of online pedagogy. Interviews with experienced online instructors resulted in eight effective practices and six directly apply to the use of community building through discussion forums: fostering relationships, engagement, timeliness of returning grades and feedback, communication, organization, and flexibility. Additional literature has shown that discussion boards that are student-centered, peer-facilitated, interactive, and mandated weekly are helpful and impactful to the educational experience, increase higher-order thinking skills and address student desire to communicate with others in the class (Wozniak and Silveira 2004, Harris and Sandor 2007, Ophus and Abbitt 2009, Rosenfeld, O'Connor-Petruso, Bletterman and Shorter 2011, Anderson 2014).

While literature on the pedagogical value of discussion forums is increasing and researchers are trying to create best practices for their use, research on the student perspective regarding the use, format, and impact of discussion boards has been rare. This study surveys students to assess the level of helpfulness they place with regards to student learning and the use of discussion board forums.

Methods

An Institutional Review Board approved survey was disseminated to all students enrolled within three fully online Introduction to Criminal Justice courses in the fall of 2011 (n=39). The courses required ten course modules each of which included a discussion board question in which students were asked to post an original comment and to respond to a colleagues post, a written exercise, and a ten question multiple choice or true/false quiz. Students also completed three tests (two tests throughout the semester and a final exam) and three short paper assignments.

Importantly, the course implemented a majority of the best practices discussed above. In conjunction with the guidance from Armstrong (2010), Thompson (2006), and Baker (2011), the course syllabus included sample posts that were weak/strong, included a section on netiquette, utilized continuous improvement reflection (and included a mid semester survey by an outside facilitator which focused on areas for improvement), had specific guidelines and expectations, focused on community building, was connected with course topics (even including outside weblinks which illustrated course concepts), required students to participate weekly, assigned grades within two days of a post, provided weekly feedback to individual students and the class as a whole, focused on developing critical thinking skills, and included broad, open-ended questions in which students were actively engaged in answering (participation was high and of good quality in each course section). Guidelines not included were the provision of a specific grading rubric for the discussion forums, utilizing students to lead discussions, and the inclusion or incorporation of group postings.

Students were asked seventeen questions about what they felt was helpful to their learning experience in the course, which course component they felt helped them learn the most, whether the course met their learning expectations, if they felt the course met the objectives as outlined in the syllabus, if they felt overall satisfaction with the course, and three open ended questions regarding what might be added or removed to make the course a better learning experience. This present study focuses on the questions which

asked students what was helpful to their learning experience and which course component that they felt helped them learn the most in the course.

Results

The first ten questions asked students to respond with a five point Likert scale, with 1 = strongly agree and 5= strongly disagree when asked if the course component was helpful to their learning experience in the course. For example, question one stated “The course textbook was helpful to my learning experience in this course.” The remaining questions asked about the following: individual activities, group activities, discussion board in general, posting an original comment in the discussion board, classmates responses posted within the discussion board, paper assignments, online quizzes, tests, and instructor feedback. Table One below reports the percentage of students that agreed and/or disagreed with the level of helpfulness of each course component.

Table One: Percentage of Student Responses on Level of Helpfulness within the Online Classroom

	Agree	Neither Agree or Disagree	Disagree
Textbook	87.2	5.1	0
Individual Activities	76.9	7.7	5.1
Group Activities	25.7	20.5	38.4
Discussion Board in General	64.1	15.4	10.3
Original Comment	61.5	10.3	7.7
Comment Posted by Classmates	56.4	20.5	7.7
Paper Assignments	76.9	5.1	2.6
Quizzes	84.7	5.1	7.7
Tests	79.4	10.3	2.6
Instructor Feedback	79.5	5.1	7.7

N=39

Table One identifies the course components that students feel help them within the classroom. Of the eighty-seven percent of survey respondents that agreed the textbook was helpful to their learning experience in the course, fifty-six percent strongly agreed that the textbook was helpful. With regards to individual activities, fifty-six percent agreed that they were helpful and twenty percent strongly agreed that they were helpful.

Students also reported the discussion boards in general, their original comments on the discussion board, and the comments posted by classmates were helpful. Forty-eight percent of survey respondents agreed that the discussion board in general was helpful (fifteen percent strongly agreed), forty-three percent agreed posting an original comment was helpful (eighteen percent strongly agreed) and lastly, thirty-six percent agreed that the comments posted by their classmates were also helpful to their learning experience (twenty percent strongly agreed).

Paper assignments, quizzes, tests, and instructor feedback also proved to be helpful to students. Fifty-nine percent of students agreed that the paper assignments were helpful (eighteen percent strongly agreed), thirty- eight percent strongly agreed that the quizzes were helpful (forty-six percent agreed), fifty-four percent felt the tests were helpful (twenty-six percent strongly agreed) and forty-nine percent reported strongly agreeing that the instructor feedback was helpful (thirty-one percent agreed).

When students reported strongly disagreeing about the helpfulness of particular course components, it included group activities (18%), the discussion board in general (3%), comments posted by their classmates (5%), quizzes (3%), and instructor feedback (5%). While the percentage of those reporting dissatisfaction with these course components was small, it is important to note that there was a high proportion of students that

reported group activities were not helpful in the classroom. Twenty-one percent of survey respondents disagreed that the group activities were helpful, and eighteen percent strongly disagreed that they were helpful to their learning experience within the course. These percentages clearly show that students were not satisfied with the inclusion of the group activities in their online classroom.

The next question asked students to choose which of the ten components listed above helped them learn within the course. Students were only able to choose one course component within the response categories, which would help make participants clarify and narrow down which course component was the most helpful, and therefore, the most important course component that made the course successful for them.

Table Two: Percentage listing Course Component as What Helped them learn the Most (In Descending Order)

Course Component	Percentage
Textbook	43.6
Individual Activities	12.8
Quizzes	10.3
Instructor Feedback	7.7
Discussion Board in General	5.1
Tests	5.1
Group Activities	2.6
Comments Posted by Classmates	2.6
Paper Assignments	2.6
Original Comment	0

N=39

Table Two shows that students rely on and learn from their course textbook the most within the online learning environment. Forty-four percent of participants report that the textbook helped them learn the most in the course. The course components that students next identified as helping them learn the most were the individual activities (13%), the online quizzes (10%) and the instructor feedback (8%).

Interestingly, despite the fact that over half of the survey respondents agreed that posting an original comment was helpful to their experience, no student reported that it was the most helpful (0%). Along those same lines, students previously reported the discussion boards in general, the comments posted by other students, the paper assignments, and the tests were helpful, yet less than five percent of respondents felt they were the most helpful component in the course. As to be expected because of the previous findings, a low percentage (3%) of the respondents felt that the group activities were the most important. In comparison to a traditional face to face class where it can be assumed that the faculty member is the main form of knowledge dissemination, it is interesting to note that only eight percent (7.7%) of the students felt as if the instructor feedback was the most helpful. While instructor feedback was reported to be more helpful than learning from other students, it was still less helpful than the course textbook.

Discussion

Faculty which are new to online course facilitation often are told that there needs to be dialogue between students and their colleagues, between students and the course facilitator, and that group work is an important component of the online community. Based on the face to face traditional component of student engagement, faculty will then try to translate the use of that community into an online forum such as the discussion board forum. However, even given the utilization of best practices and

strategies to deploy this form of interaction, it is clear that faculty must strongly consider the purpose, utilization, and need for this form of community based learning within their courses.

This present study for example, shows that students find community components helpful to the online environment (general discussion boards, an original comment posted by them, and comments posted by their classmates), but not as helpful as individually directed course components such as individual activities, self-directed quizzes, and interestingly, their course textbook. When asked to identify which of the course components was most helpful to their learning, the course textbook was reported to be most helpful, while the self-directed quizzes were reported to be the second most helpful, and thirdly, instructor feedback. Reported as least helpful were all community based course components; the group activities, the original comment posted by themselves in the discussion board and comments posted by classmates. Even course tests were reported as more helpful than student engagement in the discussion board!

These findings are surprising for multiple reasons. Faculty sometimes operate under the general assumption that students do not read their course textbook. In the online environment, this was not reported to be the case. These findings would lead to the understanding that choosing a strong and appropriate course text for the online environment is vital to successful student learning in the online environment. It also provides an impetus for faculty that receive emails from students asking if the course text is really necessary or if supplemental information is provided, that the course textbook is absolutely critical to student learning and development.

Another interesting finding is the reported lack of helpfulness of group work. While not included in this present study, open ended comments provided on this survey reiterated the quantitative findings above that students show a general disdain for the inclusion of group work in the online environment. In a face to face course, group work often appears as a general break from the monotony of individual student responsibility. Students seem to enjoy breaking into groups and assigning each other tasks, peer reviewing their colleagues work, and working with the colleagues they enjoy talking to. While some students generally dislike group work, it wasn't met with the strength of dislike apparent in this study. Students commented that they took the class because it afforded flexibility, they like doing their work when they want to, and they reported disgust for students they tried to reach that would not return emails because it inhibited this flexibility. This finding suggests that the inclusion of group work in the online environment must also be additionally researched, and that if group work is necessary in the online classroom, assignments must be carefully, rigorously, and appropriately applied. Similarly, faculty must strongly consider that student reception of group activities may be largely negative in the online environment.

Additionally, no student reported that their original comment was the most helpful to them in the course. Ideally, students go through the course, and their faculty's hope for them is that they become generators of knowledge, open minded thinkers, and adept at critical thinking. Yet students reported that the discussion board in general and comments posted by classmates were least helpful, and that the critical piece of knowledge creation, their original post, no one found to be the most helpful. As a graded course component, that would lead one to wonder what purpose the students felt the discussion board forum serves, if that purpose needs clarified, or if it simply appears as one of those components that is important to the faculty, but not the student.

So the question then becomes, if students do not find the community based components as helpful to learning in the online learning community as individually driven course components, why do faculty feel the need to include them? Why are new faculty told to include community based work in online learning? Why do students report it as a

helpful component, but as less helpful as course components that are self-directed? Do we include it because it is one way that this generation of learners are able to adapt to quickly because of their experience with blogs, texting, or instant communication? Or is it that community building has an indirect effect on learning, and not a direct effect? For example, are faculty content with improving writing skills, professional development, and online communication skills as the purpose of their forums instead of focusing on knowledge creation and learning? If so, any grading rubric or parameters should include those indirect components as well as the main focus on learning.

Answers to these questions will clearly vary by individual. One explanation is that faculty and designers simply and inherently feel the need to include student to student and student to faculty interaction. Another explanation is that because online learning has had its feet held to the fire, it has included this particular form of interaction to show that we are similar to the traditional, face to face environment, and that yes, we can have important and valuable conversations to, albeit asynchronously. In addition, one explanation of the strength of community building may not be where traditional academics think it is, not as much a part of learning itself, but as an actual part of the learning process. It may not necessarily be viewed as helpful to learning by students, but it may provide support within the online environment (which in turn will lead to more productive learning). It may not have to be a rigorous and highly structured course component, but it might have the purpose of uniting anonymous students which may aimlessly wander though the course. Lastly, it may help students process others thoughts and opinions while carefully formulating their own. Knowing and understanding these questions and answers will aid the direction of research studies and better enable faculty to utilize this form of technology effectively in the online environment.

This study clearly has multiple limitations. The sample size is small, thus limiting generalizability. The sample only included 100 level students from one discipline which also decreases the ability to generalize to college students, particularly in upper-division courses. The sample only focused on the helpfulness of the course components and did not include students in a hybrid course or a face to face course as a reference point. Despite these limitations, it served to call to light important questions regarding inclusion of community in the online environment as well as a clear call to re-think the purpose of the community in the course. Additionally, it calls for more research that assesses how to effectively use the discussion board forum in the online environment and examine the learning impact of community on distance learning students. Researchers and academics should consider this information while constructively creating the new standards, techniques and best practices which will govern the use of online community.

Conclusion

The purpose of this study was to examine how students felt that the utilization of discussion board forums impacted their learning experience. Findings show that while they find them somewhat helpful, individual based course components such as reading the textbook, working on assignments, and taking quizzes proved to be more helpful to their learning experience. These findings are contrary to the common thought that communication and interaction are critical to student learning and suggest that even when forums are carefully constructed and guided by literature, there is more to be learned about their necessity, impact, and utility.

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