

Assessing the Potential of Electronic Discussion Groups to Enhance Learning in a Classroom-based Course

John F. Bennett, Associate Professor of Marketing
School of Business and Professional Studies
Stephens College, Columbia, MO., USA
Jbennett@wc.stephens.edu

Abstract:

Internet communication tools like Web sites, listservs, e-mail, newsgroups, bulletin boards, and real-time chat programs have been embraced by many educators for their potential to enhance traditional classroom instruction. Specifically, the use of these tools is believed to enhance the three major activities of all teachers: to counsel students individually, to deliver information, and to encourage classroom discussion. This paper reviews the findings from a study conducted by the author that measures the effectiveness of using electronic discussion groups to enhance teaching and learning.

Survey

Convinced of the value of electronic discussion groups in enhancing traditional classroom instruction, the author has been requiring each of the students in an upper-level, undergraduate marketing course to subscribe to a listserv set up specifically for the class. Students used the listserv to argue pro and con positions on statements posted to the discussion list by the instructor. Half of the students on the list argue the pro position and the other half argue the con position. Their responses are then posted to the list and critiqued by other students. A different statement is sent to the list every two weeks and is often related to a current news event related to the concepts being studied. When possible, students are sent links to Web sites that provide additional information about the topic being discussed.

To assess whether the electronic discussion groups were producing the desired student outcomes, the author conducted a survey of all students that had participated in the electronic discussion groups over a two semester time period. A total of 52 students were included in the survey and all responded.

Data were gathered from the students by means of a questionnaire that was distributed both by e-mail and in class. The evaluation instrument measured 1) the extent to which students had used or participated in e-mail discussions; 2) their opinions on the effect that the listserv assignments had on their learning of course content; 3) a self-assessment of their level of computer experience prior to the course; 4) a self-assessment of their level computer experience after the course; 5) their assessment of the negative features of electronic discussion groups, and 6) their assessment of the positive features of electronic discussion groups.

The results indicated that approximately 67% of the students surveyed participated in e-mail discussions on a weekly basis, 13% on a daily basis, and 7% on a monthly basis. 13% of the respondents reported that they did not participate in the e-mail discussions at all. Among those that participated in the electronic discussion groups on a weekly, daily or monthly basis, the majority, 70%, reported that e-mail discussions had a moderate influence on learning the course content. 15% reported that the e-mail discussions had very little influence on learning the course content with the remaining 15% indicating that e-mail discussions had a substantial influence on learning.

Among those students who participated in the e-mail discussions on a weekly basis, the majority, 70%, reported that the discussions had a moderate influence on learning. 20% reported that the discussions had a substantial influence on learning with the remaining 10% indicating that the discussions had very little influence on learning.

Among those students who participated in e-mail discussions on a daily basis, 50% indicated that the discussions had a substantial influence on learning the course content. The remaining 50% indicated that the discussions had a moderate influence on learning. In other words, all of the students in this group indicated that the discussions had at least a moderate degree of influence on learning.

All of the students who participated on a monthly basis indicated that the discussions had a moderate influence on learning the course content.

The students were asked some open-ended questions to assess their perceptions of the advantages and disadvantages of electronic discussion groups in the classroom. Inconvenient access to computers with Internet connections was the least liked aspect of using e-mail. Students also indicated that they felt overwhelmed by the number of e-mail messages they were receiving each week. This was particularly true among those students who were on several class lists. Some students noted that there was too little discussion of the pedagogical benefits of electronic discussion groups. Consequently, at the beginning of the semester they failed to understand why in-class discussions were being supplemented with e-mail discussions. It was only after participating in the electronic discussions for a few weeks that the students began to understand and appreciate their value. Finally, some students lacked experience using a listserv and expressed a fear of this technology. The students noted that their participation in e-mail discussions would have been greater if they had received some remedial assistance with the technology being used.

One benefit mentioned by several of the students was that electronic discussions provided a convenient means of interacting with peers as well as the instructor. They appreciated being able to send and reply to an e-mail message at a time of their choosing. Students also noted that it was easier to collaborate with their peers on group projects. The frustration caused by trying to arrange convenient meeting times for a group of students to physically meet and work on a project are largely eliminated with electronic discussion groups.

A few of the students commented that they were more comfortable with written rather than oral discourse. They stated that they felt more willing to make provocative assertions during e-mail discussions and to challenge the views of their peers and the instructor. In short, they felt liberated by this new medium. However, a couple of students did indicate that had they been able to maintain their anonymity they would have been more willing to challenge the viewpoints of their peers. This is consistent with research showing that people are more daring and confrontational regarding the expression of ideas when allowed to remain anonymous (Lauzon, 1992).

Conclusion

Based on the survey results, electronic discussion groups do appear to enhance learning of course content. This is especially true among those students who reported that they participated in e-mail discussions on a daily basis. Therefore, instructors should consider incorporating electronic discussion groups in their classes and using strategies for encouraging students to participate in the discussions on a regular basis. To avoid the problem of students feeling overwhelmed by the number of postings made to the list, a limit should be placed on the size of the discussion group. In large classes, several discussion groups could be used.

Critical to getting students to be active participants in electronic discussions is to provide them with an understanding of the pedagogical benefits of this learning tool. A few of the students surveyed indicated that they did not understand the need for the listserv, which may have resulted in a lower level of participation.

Consideration should be given to the students' level of expertise with communication technologies. The survey found that several students were unfamiliar with listservs and would have appreciated some training in their use. Providing this training at the beginning of the course would help ease these students' fear of these technologies and increase their level of participation in the electronic discussions.

Those considering incorporating communication technologies in their courses should also be mindful of the difficulty students may have getting access to computers connected to the Internet. Ideally, all students would have their own computers that would provide access to the Internet. However, it is more realistic to assume that at least a few students will be wholly dependent on the institution's computer resources. Should access to computers on campus be a problem for students, it may not be possible to make participation in electronic discussions a requirement in the course.

Finally, in deciding whether to use electronic discussion groups it is important to: 1) identify the best teaching and learning strategies for the class, especially those that would not be feasible without electronic discussion groups, and 2) identify which technologies are best for supporting those strategies. It may be found that electronic discussion groups would be poorly suited to support the teaching strategies being used. There may be other technologies, even conventional ones, that would be better suited for carrying out a particular teaching task.