

AN EXPLORATORY STUDY ON IMPROVING THE ONLINE COURSE EXPERIENCE

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ABSTRACT

In the rush to create new educational opportunities through online courses, universities and instructors alike may overlook some of the pedagogical elements involved in the process. One critical element lost in online instruction is the real time question and answer session. This study compares an online course session using an asynchronous discussion board against a session using an alternative online chat session to determine if the question and answer component of face-to-face lecture can be adequately captured in the online environment. The results indicate that the session using a chat session was more successful for students than the asynchronous approach.

INTRODUCTION

Distance learning, especially online education, is rapidly becoming a popular option for delivery of course content. Distance education availability, course offerings, and enrollments increased rapidly during the 1990's [1]. This acceleration appears to be continuing as the National Center for Education Statistics has recently reported that 56 percent of all 2-year and 4-year Title IV-eligible, degree-granting institutions offered distance education courses in 2000–2001 and another twelve percent of all institutions indicated that they planned to start offering distance education courses in the next 3 years [4]. By the year 2020, the learning industry will have overtaken tourism as the world's largest economic sector. It is predicted that by 2020 learning and training via distance education courses will encompass 60% of the economic activity in this area [2]. Thus, online education appears destined to become more frequent and commonplace and has the potential to overtake traditional classroom offerings in years to come.

The appeal of online instruction is easily understood, as it offers several opportunities to augment the traditional classroom delivery including better organization and access to information, student discussion can extend beyond the finite restrictions of the traditional classroom, and improved student-instructor communication with more opportunities for interaction. Given these advantages, it is easy to understand the popularity and migration of instruction from the face-to-face traditional classroom to online course development.

A popular method of student-to-student and instructor-to-student interaction in online courses is in online communication which occurs in two modes: synchronous or asynchronous. Synchronous communication involves the parties being online at the same time and communicating in real-time. Asynchronous interaction involves the parties communicating over elapsed time, not real time. [5] Each

structure has strengths and weaknesses when used for online education environments. For example, synchronous communications strengths include immediate learning and feedback. However, a weakness is that it requires all participants to be online at the same time, reducing the benefits of flexible scheduling for the online participant. Depending on the audience size and availability, it can also be difficult to schedule times when such sessions can happen. Further, synchronous environments allow the instructor to better control the discussion of ideas. [5]

Asynchronous communication strengths include its flexibility and ability to fit into everyone's day. Participants engage with the system when it suits them, and information of all kinds including documents and file attachments can be shared, not just text in discussions. For groups spread across multiple geographies and time zones, or even those who have very different study patterns, it is an ideal delivery mode. All participants have an equal opportunity to contribute; they are not relegated to "the back of the class" by a more talkative participant. Additionally, those who have trouble speaking can take their time crafting a written reply. This mode of communication allows time for everyone to think about a given subject. Another advantage of the asynchronous environment is that the learning does not have to be geared to the average student. [3] The weakness of asynchronous learning is that it occurs over longer elapsed times. Often it means that it is difficult to come to group decisions, or for rapid and controlled discussion of ideas to take place.

EXPERIMENTAL STUDY

Two separate online course sessions were created and offered with two different delivery mechanisms. The first course only contained a discussion board posting while the second session offered both a discussion board and an alternative online chat session opportunity. Students in the second course offering were allowed to self-select into the online chat session. Those that opted not to participate were not penalized. The first course section contained 24 students and the second course section contained 12, and both had the same distribution of males and females. Both course offerings were part of a two-year online master degree program and were one of the last classes taken before completion of the program. The duration of the entire class offering was three weeks. Student participation rate was measured by the number of hits, items read and postings on the discussion board. A course evaluation was taken at the end of the semester to determine if the chat participants enjoyed significantly higher class satisfaction. Assessment scores were used to compare knowledge retention. The scores were tested using the t-test for significance in differences.

RESULTS AND NEXT STEPS

Student participation rates for chat and asynchronous communication are available upon request. Overall, the students participating in the chat sessions seem to benefit the students, with the students enjoying more engagement and higher class performance than the bulletin board participants. Even more importantly, the chat sessions showed that the female students out-participated their male counterparts regardless of mode of delivery, suggesting that online courses, regardless of mode provides a better opportunity for females to participate in class discussions. However, the participation was higher when the students were engaged in the online chat. The chat results could be explained by higher engagement due to the synchronicity of the sessions [5]. The students that participated in the chat version of the sessions reported a higher satisfaction with the class than those who participated using the bulletin board. However, there was no significant increase in overall course evaluation based on t-tests. Students in the chat session also felt more engaged in the learning process.

However, the results of this study are exploratory. Further research needs to be conducted to determine if the results are a one-time occurrence or if the synchronous mode of online course delivery is the optimal model for increasing female participation in classes. Consideration also needs to be taken regarding type of online environment software, size of class, and class mix.

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