

WEB-BASED MBA INSTRUCTION: THE VALUE OF STUDENT INTERACTION REVISITED

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ABSTRACT

Qualitative and quantitative evidence from an MBA program at a large public urban university questions the common wisdom regarding the value of student interactions in online courses. Content analysis of student comments from a core business statistics course suggests that students do not place much value on interactions with other students in that course. We find no correlation between perceived learning or course satisfaction and student interaction in the online chatrooms and threaded discussions.

INTRODUCTION

Academic researchers are in near agreement that students in online courses benefit from student interaction. The authors of this paper have received different feedback from students, who mostly report indifference to or outright dissatisfaction with interactions with their peers. Those students perceive instead more value in self-study and in interactions with the faculty member. The MBA program studied serves part-time, working adults, most with families, earning above average salaries, seeking an MBA degree at a public, commuter, urban university. Students choose to take online courses for a variety of reasons: 23% indicated family commitments, 35% professional commitments, and 21% personal commitments. Almost none of the students opted to complete the MBA program fully online.

THE STUDENT-LEVEL QUALITATIVE EVIDENCE

We used the evaluations from the required MBA data analysis course completed by students in a systematic, qualitative, content analysis. This particular course offers a good mix of interactive and non-interactive learning activities. The instructor is experienced in teaching and leading case analyses and consistently gets above average course and instructor evaluations.

We performed content analysis on two of the open-ended questions in the midterm course evaluation: “What part of the course have you learned the most from so far?” and “What part of the course have you learned the least from so far?” Responses to these questions were configured so that there was one clear learning activity per response. This resulted in a total of 107 responses from 78 students that were categorized into activities that were interactive or not. For analysis we have 61 responses for the “learned most from” question and 46 responses from the “learned least from” question. Coding validity was verified with the instructor.

Summary results from the 107 responses are found in Table 1. Only two students articulated that it was the interaction itself that enhanced the learning: “The formation of groups has expanded the participatory aspects of the class for me...” and “Group cases have also provided much of the learning and getting critiques of the group work from the class.” One student identified the interaction with the instructor as providing the most learning: “Dr. X’s prompt email and online replies are timely and very

helpful.” Examples of non-interactive responses are: “I like how the professor forces the students to keep up with work by administering quizzes and having assignments due periodically...” One student identified independent learning as being most valuable: “I like the independency of the course as it forces me to learn the material myself.” It appears that interactive activities might actually hinder learning with comments such as: “The groups are difficult to work with at best. I believe that many people have a hard time understanding the concepts presented, and the group work simply provides a place for people to confuse each other on the subject,” and, “Working in a group is time consuming and is not teaching me much about data analysis.”

TABLE 1
Count and Percentage Responses by Interactive and Non-interactive Activities

	Interactive Activities	Non-Interactive Activities
“Learned most from”	9 (14.8%)	52 (85.2%)
“Learned least from”	31 (67.4%)	15 (32.6%)

Students generally do not perceive they learned from interactive activities, which are perceived to be excessively time consuming when compared to learning benefits. Coordination can be difficult and students question what they have learned from each other rather than from the ‘expert’ professor.

THE COURSE-LEVEL QUANTITATIVE EVIDENCE

The student-level content analysis suggests that interactivity is not strongly related to perceived student learning. We next conducted a quantitative study of all online MBA courses taught at the same university over several semesters. An audit was conducted using online MBA courses. This resulted in a total of 83 sections of 19 different courses with 17 individual faculty members. From the final course evaluations, we collected data on perceived student learning and course satisfaction: “[Rate] this course as a learning experience,” and “[Rate] this course, compared to all your other university courses.” (Both were scored on a scale: 1 = very poor, 4 = very good.) Three interaction variables were obtained from the course shell: Student Chat, Student Threaded Discussion, and Student Total Time. All were measured as course-level, trimmed means of the minutes spent in each area over the term. Two questions were used from the midterm course evaluations to measure aspects of instructor-to-student interaction. Averages by course were collected for the following: Timeliness Instructor Feedback (“I receive feedback from the instructor in a timely manner”) and Quality Instructor Feedback (“The instructor provides feedback that is helpful to my learning.”) Both were scored on a scale: 1=strongly agree, 4 =strongly disagree.

TABLE 2
Correlations of Perceived Learning and Course Satisfaction with Interaction Variables

Interaction Variables	Perceived Learning	Course Satisfaction
Student Chat (SC)	1.5% ($p = .933$)	2.7% ($p = .879$)
Student Threaded Discussion (STD)	16.5% ($p = .344$)	14.8% ($p = .397$)
Student Total Time (STT)	37.7% ($p = .025$)	29.4% ($p = .087$)
Timeliness Instructor Feedback*	-51.8% ($p = .0014$)	-55.0% ($p < .001$)
Quality Instructor Feedback*	-57.8% ($p < .001$)	-63.6% ($p < .001$)

*A negative correlation with Perceived Learning and Course Satisfaction means these variables move in the same direction.

Correlations (Table 2) were calculated. Perhaps the most telling outcome is those variables that are not associated with perceived learning or satisfaction. Student Chat and Student Threaded Discussion are not significantly associated with either of the response variables. However, Student Total Time is statistically correlated with perceived learning and course satisfaction (the latter at the 10% significance level). The strongest factors associated with perceived online learning experience and course satisfaction are the timeliness and quality of faculty feedback.

DISCUSSION

In analyzing both qualitative and quantitative data, we found no evidence to support the commonly held notion that student interaction leads to higher perceived learning in an online MBA program. On the other hand, we found evidence that quality and timeliness of feedback from faculty are associated with perceived learning and satisfaction with the course.

There may be evidence that instructors should enhance the student-to-content interactions [2] [3] [4]. Finding and/or creating engaging online material may be a better investment in time and effort than online interactive activities. We see some evidence that interaction between instructors and students plays a role in enhancing learning and satisfaction, which is consistent with other findings reported in the literature; e.g., [5]. Faculty may consider redirecting their time from interactive modalities to providing feedback on cases, assignments, exams, and other learning activities.

There are several possible reasons why we obtained these results. Part-time, employed students may have less of a need for student interaction. Our online students, who also take classes on-campus, may use the on-campus environment to interact with other students. Time-pressured students may find interaction technologies too cumbersome or limiting. Even so, we acknowledge that our findings differ markedly from those of Arbaugh [1]. There are other limitations to our research findings. This was exploratory research. More detailed measurement mechanisms and/or designed experimentation is needed and the recent work of Marks et al [3] is a good start in this direction. Because the online environment opens educational opportunities to many non-traditional students, more research is critical.

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