WEB-ENHANCED, DIGITAL LECTURES, AND BLOGGING: WHAT STUDENTS THINK ABOUT TECHNOLOGY IN THE MARKETING CLASSROOM

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ABSTRACT

This paper presents student opinions of six technology applications used in the marketing classroom. Students appear to adapt to technology that are perceived to be helpful. Suggestions for faculty are provided.

INTRODUCTION

Faculty and students alike expect the "newest and fastest" technology on our campuses and in our personal lives. From cell phones to laptops to software, we desire ease of use, convenience, and quick response 24/7. However, using technology in teaching and learning is more than the current gadget. Malhotra (2002) defined instructional technology: "Instructional technology includes hardware and software, tools, and techniques that are used directly or indirectly in facilitating, enhancing, and improving the effectiveness and efficiency of teaching, learning, and practicing marketing knowledge."

Technology is not only expected but required of colleges and universities today. Accreditation bodies call for instructional technology in achievement of their standards. Advanced ED (a merger of North Central, Southern Association, and National Study of School Evaluation) accreditation standard 3.11 requires that an applicant "ensures that all students and staff members have regular and ready access to instructional technology and a comprehensive materials collection that supports the curricular and instructional program." Additional standard documentation indicates optimizing technology and multimedia learning tools is a Core Task in improving teaching and learning is to (NCACASI 2006). AACSB also expects its accredited schools to have financial support for technology. Interpretative information on the standards states, "Modern business is highly information dependent. Management scholarship, pedagogy, and learning require sufficient up-to-date technology hardware, software, assistance, and instruction" (AACSB 2006). Consequently, universities allocate large amounts of their budget to the creation and maintenance of networks, computer labs, hardware, and software for instructional technology.

Marketing faculty have been at the forefront of technology use in the classroom. Embracing technology and applying it to the marketing classroom have been researched since the early 1990's with the emergence of interactive video distance education technology and more recently with the integration of technology in the traditional classroom using internet based software and hardware. Evidence of the importance of technology in marketing education are the special issues dedicated to the topic of using the internet and integrating technology in the classroom by the *Journal of Marketing Education* (2001) and *Marketing Education Review* (2001 and 2002). Evans (2001) reviewed the evolution of technology and instruction from the traditional classroom education to technology-enhance classroom education to completed technology-based distance education. He recommended that colleges and universities should continue their commitment to continually introducing more technology enhancements in the classroom.

While most administrators and faculty understand the need for technology in the classroom, it is the correct use of technology in teaching and learning that is important. Faculty spend countless hours learning and applying new software and hardware to their teaching and assessing the use of these resources is prudent. This issue has been addressed by several authors. Peterson et al. (2002) suggests that a comprehensive framework be developed to combine what is known about instructional technology and provide guidance for future research. Ferrell and Ferrell (2002) call for a balance between traditional methods and the use of technology.

One challenge of the incorporation of technology in the classroom is the acceptance by students. Do students feel the technology was useful for them? In a study of student intention to use technology, Robinson (2006) suggests that for technology to maximize the return, students must intend to utilize the tools beyond the minimum requirement. He further notes that students choose technology that will allocate their time efficiently and in this process more likely to choose technologies that are easier to use.

This paper describes several types of instructional technology used in marketing classes over several different semesters and provides student opinions on the usefulness of the application. Suggestions for faculty implementing instructional technology are provided.

WEB-BASED COURSE MANAGEMENT

A website is an easy method to house and organize course materials for students. This can be done through a course website or web-based course management software such as Blackboard or WebCT. While considered a passive technology, this method is convenient for students and can be accessed from most anywhere at anytime. Faculty can provide syllabi, outlines, slideshows, projects, links and other material for use 24/7. Clark III, Flaherty, and Mottner (2001) suggests online syllabi, internet term projects, online homework assignments, online lecture outlines and technology lectures have the greatest overall effect for students. Other research indicates that students later in their program of studies tend to value web management practices in their courses more than students earlier in their program of studies (Taylor, Humphreys, Singley, and Hunter 2004).

A course website was created for a mass Principles of Marketing class and evaluated for three different semesters, one fall and two spring semester. Class materials including course calendar, polices, slideshows for lectures, study helps, exam study guides, and web links were posted for student use. WebCT was used for posting of grades for all semesters, timed quizzes during the Spring 1 semester and audio lectures during the Fall 1 semester. A survey using a seven-point Likert scale was administered at the end of each semester. Students were asked if the website was helpful in obtaining class materials, if it was easy to navigate, convenient, and if they were comfortable using the website. Students in all semesters used the website (over 95 percent in each semester) and were generally positive about the website. They felt it was helpful and easy to navigate. They also like the convenience of study guides, slideshows, and the ability to obtain their grades. See Table 1.

However, one third (54) of the fall class were uncomfortable with the website and 25 percent (43) and 26.3% percent (26) of the students in the spring semesters were uncomfortable. This indicates that students have different levels of expertise with web use.

TABLE 1

Course Website	SP1 n=166	FA n=168	SP2 n=99
I found the website to be helpful in obtaining class materials.	6.20	6.10	6.02
The website was easy to navigate	6.07	6.04	5.94
I like the availability of the study guides at my convenience.	6.54	6.46	6.29
I like the availability of the slideshows at my convenience.	5.87	6.33	6.23
I am uncomfortable using the website for class materials.	2.94	3.24	3.06
I read the study help page on the website.	4.90	4.00	3.76

1 = strongly disagree and 7 = strongly agree

PRESENTATION TECHNOLOGY

As classrooms became equipped with computers and LCD projectors and the easy to use software such as Microsoft's PowerPoint and Corel's Presentations, many faculty switched to slideshow presentations as a preferred method to deliver content. Peterson et al. (2002) in a study 61 of marketing professors from 16 different countries report that the most frequently used technology was PowerPoint slides. Many textbooks come with prepared PowerPoint slides for students and faculty use. Ferrell and Ferrell (2002) discuss the possibility of over reliance on technology such as PowerPoint. They further note that some students comment that PowerPoint slideshows can lose their effectiveness while others like the framework the slideshows can provide for studying.

As noted above, students like the access of PowerPoint slides from the website. However, do they feel they are helpful in preparing for exams? This was asked of students in two different semesters. Students indicate that PowerPoint Slides helped them prepare for exams; however, they also indicated that study guides also assisted them. Study guides were basically the slideshows information in outline form. See Table 1.

A variation of the PowerPoint slideshow was Quick Quizzes. These were added in Spring 2 as a method to prepare students for exams. Historically students struggle with application questions more often than definitions or descriptive questions on exams. Example application questions were formulated in a slideshow by chapter. Used as a review, the Quick Quiz questions were shown on PowerPoint, students were allowed to think about the answer, and then the instructor would ask for the answer. While these questions were very similar to questions on the exam, students did not find the Quick Quizzes as helpful but agreed they should be continued in future sections. Students did request that these be added to the course website.

To provide additional assistance in learning the course material, lectures were recorded and placed on the web after each class. The purpose was to assist the student in clarifying material at anytime and especially when the instructor was not available and when students missed class. Lectures were recorded as they were presented on a small digital recorder. Because of the size of the room, the instructor wore a microphone and the recording filtered through the microphone for clarity. The recording was downloaded after class and a WAV file was created to use in Real Producer. The audio Real File was loaded onto WebCT for students to access. To decrease time for the instructor, the file was not edited. Real Media was chosen because of the free Real Media player available to all students. Because WebCt tracks student usage, only students that accessed the audio lectures were surveyed (14.6% of enrolled students). Students accessed the lectures from their off campus home or dorm room with only eight students using on campus computer labs. Six students used the audio lectures when they were absent and to verify information they didn't understand, five students used audio lectures only when they were absent, and six students used the audio lectures only when they didn't understand information. Students that used the lectures were generally positive about the usefulness with only three students feeling it was a waste of their time. Students felt they were also useful in preparing for exams. Over 40 percent of the students felt they would be more helpful if attached to a slideshow.

While the number of students participating in this technology was small, most felt it was useful. After the initial learning curve of the process and software, time to upload the lectures was minimal for the instructor. The purpose of providing additional assistance 24/7 was met; however, most students enrolled in the course did not access the lectures.

INTERACTIVE TECHNOLOGY

Course management and presentation techniques are passive uses of technology. Students' interaction using technology can be accomplished through avenues such as discussion boards, e-mail, and web searches. Interaction technology was implemented in the fall semester course using the WebCT quiz module. The learning objective was to assist students in applying concepts to marketing situations. The on-line structure allowed the professor to easily administer quizzes without using valuable class time. A paper quiz in a class of 166 takes time to administer, grade, and post the grade. WebCT allows for the quiz to be completed outside of class, it is automatically graded by the system and the grade is assigned to the student.

Cases were posted for the student to read. After reading the case, students activated the timed quiz module. There were three cases and combined equaled 20 percent of the total course grade. Student opinions on the on-line quizzes were not as positive but there was no indication the quizzes were too difficult. The timed technology was a problem for some students. Almost 60 percent of the students agreed that the timed quizzes made them nervous. Over 27 percent of the students agreed or strongly agreed that the cases helped them in understanding the material. Students had a window of time to complete the quizzes which included a point past the exam. Students preferred to have the quizzes due before the exam covering the material. WebCt would allow students to take the quiz and provide feedback before the exam so it is interesting that students expected the professor to create a restriction which was in their control. Students did not want to switch to an in class quiz format and most didn't work together on the quizzes. Quizzes were not in a controlled environment and 16 percent of the students worked with other students. While students were encouraged to work on their own, there was no way to control this. Students could have copied the case for reference during the quiz. Creating narrower time allowances curtailed referencing the case again but did not prevent it.

The learning objective was minimally achieved. A third of the class disagreed the cases were helpful. Student did not make the connection between the cases and the material or were perhaps intimidated by the technology. See Table 2.

Another interactive technology is the blog. Answers.com (2005) defines a blog as a website that contains dated entries in reverse chronological order (most recent first) about a particular topic. In July of 2006, there were an estimated 70 million blogs worldwide with 90 percent of the blogs being hosted on eight leading blog hosting sites (Duncan 2006). While blogs have been around since the emergence of the Internet (Jensen 2003), the rapid growth of blogs occurred after blog development applications such as Pitas and Blogger were released in 1999. The template-based software makes it easy to create an online blog and continuously add entries without having to write the pages in HTML. In addition, hosting services do not usually require software downloads to create a blog.

TABLE 2

	SP1 n=166	FA n=168	SP2 n=99
Use of Slideshows			
The study guides were helpful in preparing exams.	-	5.22	5.13
The slideshows were helpful in preparing exams.	-	5.59	5.24
Use of Quick Quizzes			
The Quick Quiz after each chapter was helpful in preparing for exams.	-	-	4.93
I suggest the Quick Quiz format be continued.	-	-	5.20
Use of Audio Lectures			
Audio lectures were a waste of my time.	2.65	-	-
Audio lectures took too long to download.	4.63	-	-
I found the audio lectures useful in my study.	5.09	-	-
I found the audio lectures difficult to listen to.	2.86	-	-
I would use the audio lectures more often if they were attached to the slideshow.	5.50	-	-
On-line Case Quizzes			
The cases were difficult.	4.82	-	-
The timed quizzes made me nervous.	4.95	-	-
The cases helped me understand the material better	4.38	-	-
I would rather be quizzed before the exam covering the material.	5.07	-	-
I would rather take the quiz in class.	2.98	-	-
I usually worked with other students when taking the quiz.	3.30	-	-

1 = strongly disagree and 7 = strongly agree

A course blog for the services marketing course was developed using Blogger.com. The purpose of the blog was to (1) compel students to read assigned material before responding (2) provide additional opportunities for students to apply concepts discussed in class (3) learn from other student comments (4) foster additional discussion during the class period and (5) assist in preparing students for exams and written individual and team cases. Students were asked to sign on to the blog at the beginning of each chapter and respond to a critical incident case written by the instructor. At the beginning of the semester each comment was worth five points and students were allowed to earn up to 50 points (12 percent of the total grade) for the semester.

The instructor felt that most students were familiar with blogging and wanted to capture the students' attention by using the technique for learning instead of the discussion board in WebCT. Unfortunately, no students in the class were familiar with web blogging. In the beginning, students were uncomfortable with the software, felt they didn't have time to answer before another student answered with "their idea," and were afraid the experience would negatively impact their grades. Students also felt that the cases would make more sense if they had heard the lecture and completed class exercises before reading the blog cases. In response to the student's concern, the instructor changed the 50 points to 25 blog points and 25 points for in-class exercises, posted cases after the lecture on the material, posted more than one case on a topic, and worked with individual students on the software. Discussion in class of the blog comments and use of the grading rubric continued as planned.

A student opinion survey was administered at the end of the semester to determine if students felt the blog was effective. Overall students felt that the course blog enhanced their learning and provide useful applications beyond the textbook. They also felt the software was easy to use – a change in their opinions at the beginning of the semester. However, students were more ambivalent regarding the blog's usefulness in preparing for exams and cases or that it provided useful information. In addition, they didn't necessarily enjoy the blog. See Table 3 for student responses.

Students felt the blog was manageable in terms of the requirements and most checked in once a week when they were posting their responses. Only eight students (32 percent) checked the blog to read other student comments. Most students (88.5 percent) felt they would have no reason to blog again.

Several learning objectives of the course blog were met. It appeared the blog assisted in providing additional opportunities to apply concepts and it fostered discussion in class. However, students were uncomfortable commenting on the cases without lecture and they also did not feel it assisted them in preparing for exams and written cases.

TABLE 3

1 = strongly disagree and 5 = strongly agree	Mean n=26
The Blog site enhanced my learning experience for Services Marketing.	4.00
The Blog site brought useful applications beyond the textbook.	4.20
The Blog site made the classroom more current.	3.88
I received lots of useful information from the Blog site.	3.58
The Blog site helped me in preparing for exams.	3.46
The Blog site helped me in writing my individual case.	3.50
The Blog site helped my term in writing the group case.	3.23
It was easy to use the Blog website.	4.04
I enjoy using Blog technology to share information with the instructor and my classmates.	3.65

DISCUSSION

Instructional technology is only useful if it improves the teaching learning environment for the students. The six applications provide some indication of what students feel about a particular type of technology. It appears that students will adapt to a technology if they perceive it will benefit them such as the course website for organization and PowerPoint presentations. Students were not particularly comfortable with the on-line quizzes and the blog. It is interesting to note that these two applications had a direct impact on their course grades. Most students did not even attempt the audio lectures and the quick quizzes were not perceived as very helpful.

Robinson (2006) suggests that "efforts must be made to improve student perceptions about the effort required for full use." The instructor, therefore, must illustrate the benefit of the technology to the students if they feel the technology achieves learning objectives. Once the efficacy of the instructional technology has been determined as appropriate; the instructor should create an organized plan to demonstrate how and why the technology is being used. Suggestions include:

- Clearly list the learning goals met by the technology so students understand the "why" of using the application.
- Provide easy to understand written directions. It would be helpful to ask a student to critique directions for clarity.
- Allow time for a "trial run" if the instructional technology will be used in the computation of student grades. This will help lower the stress in learning a technology for the first time.
- Create guidelines for students in case the technology doesn't work to alleviate fears of reprisal and ease the stress of technology failure.
- Provide discussions of how learning and using technology will benefit students beyond the classroom and into their professional careers.
- Provide additional office hours at the beginning of the semester to assist students who are having difficulty with the technology. Schedule a lab or demonstrate the technology in the classroom.
- Remember students will have different level of expertise and do not assume all students are computer experts.
- Don't be afraid to make changes if learning objectives are not being accomplished; reassure students that the change will not negatively impact them.

- Understand the technology and learn to trouble-shoot. Technology support staff or graduate assistants will not always be available when needed. Students will not see the value of technology if they don't see the instructor using it.

LIMITATIONS AND FUTURE RESEARCH

The experiences provided are from one university over several semesters and cannot be compared or generalized to other student populations. Because the surveys were anonymous there was no method to objectively compute the impact of the technology on the student's content knowledge or course grade. While perception of usefulness may influence the student's use, the student may not realize the technology actually assisted their learning. Future research should include direct measurements of the impact of the student on learning both content and skills.

Additional research on blogging is warranted. Will Richardson (2006) believes individuals using the internet are no longer simply independent readers or consumers of information but collaborators in the creation of content. He states that the "Read/Write Web is changing our relationship to technology and rewriting the age old paradigms of how things work." Richardson also suggests that education has been slow in adopting the techniques necessary for the "Read/Write" transformation. A blog is an example of the "Read/Write" web. As a powerful technology tool, blogs assist in building communication and collaboration in and out of the classroom. Lankshear and Knobel (2003) argue that blogging is the new major technology integration in schools, following teacher websites and PowerPoint presentation in every subject area.

Many studies have been published on technology in the classroom. Close, Dixit, and Malhotra (2005) provide an excellent review of the literature on the Internet and marketing education. However, it is a dynamic environment with instructional technology evolving exponentially. Susan Metros, Executive Director for E-learning at Ohio State, insists that institutions that fail to embrace technology risk being left behind (McNamee 2006). Continued research of all types of instructional technology applications is necessary to determine best practices for teaching and learning for students.

References Available on Request