

A SURVEY OF STUDENT ATTITUDES TOWARD DISTANCE LEARNING IN MARKETING COURSES

James P. Beaghan, Central Washington University

ABSTRACT

At present the Central Washington University College of Business is delivering upper level accounting and business administration courses at the main campus in Ellensburg and five remote sites in the state of Washington. Most of these courses are delivered live using instruction from a professor present in the classroom. Approximating ten years ago (1994–1995) the COB began an experiment with distance learning whereby a few selected accounting and business administration courses were delivered electronically to remote sites via two way interactive television (ITV) in real time with the instructor physically present in a traditional classroom setting on the main campus. This approach to distance learning enabled the College of Business to cover multiple sections of a course with fewer teaching resources.

The purpose of this study was to look at distance learning from the marketing student's perspective and to determine whether students at live and remote sites are receiving similar perceived value with this mode of instruction. Research questions include differences in student expectations, as well as differences in comprehension, performance, and student satisfaction between live instructional and remote sites. Specific questions dealt with such issues as quality of instruction (live vs. remote) from the marketing student's perspective.

A research instrument (questionnaire) was developed, pre-tested and administered to students in marketing courses, which were delivered live at the main campus and electronically via ITV in real time to remote sites. The results of the survey were then analyzed for these two different student groups (live vs. remote) providing insight from the student's perspective of their distance learning experiences with implications for the electronic delivery of marketing courses through distance learning in the future.

INTRODUCTION

University administrators continue to struggle with the question of how to reach a growing and more diverse student population, many of which are non-traditional time and place bound older students with limited budgets. Increasingly university administrators are attempting to answer this question by offering more distance learning courses taught by instructors in traditional college classroom settings while at the same time making these courses available in real time via two way interactive television (ITV) to classrooms at remote sites.

With the increased use of two way interactive television instruction technology by universities during the past decade very little is known about student attitudes toward this mode of instruction, and whether students receiving course instruction at remote sites via ITV see the same value in these courses as do students receiving the same instruction live in a traditional college classroom setting.

Central Washington University (CWU) currently offers courses to students throughout Washington state. CWU course instruction is available on the main campus in Ellensburg (E) to typical college aged students in a traditional classroom setting. During the past several decades CWU has offered course instruction to time and

place bound non-traditional older students at five remote sites. Two remote sites at SeaTac (S) and Lynnwood (L) are located in the Seattle metro area, approximately 100 miles from the main campus. Most of the course instruction at these two remote sites is available from instructors presenting live instruction in a traditional classroom setting, with relatively few courses available to students via two way interactive television in real time.

Three additional remote sites at Wenatchee (W), Moses Lake (ML) and Yakima (Y) are located in rural areas of Washington state within 150 miles from the main campus. Most of the course instruction at these three remote sites is available through distance learning via two way interactive television in real time, with relatively few courses available from instructors presenting live instruction in the classroom.

All distance learning courses involve live instruction at one site while remote sites receive the same instruction via two way interactive television in real time. Each live and remote distance learning classroom is equipped with a projection screen and two television monitors at the front and rear of the classroom. Two directional television cameras and microphones are present at the front and rear of each distance learning classroom with each desk equipped with a microphone activated by the student.

Overhead projections and video are electronically transferred to all remote sites in real time.

This approach to distance learning enables the Central Washington University College of Business (CWU/COB) to cover multiple sections of the same course with one instructor, while simultaneously serving the educational needs of typical college aged students, as well as time and place bound non-traditional older students who would not otherwise have an opportunity to access upper-level university course instruction.

The purpose of this study was to look at marketing student attitudes toward distance learning involving two way interactive television instruction in real time from the perspective of two groups of students: typical college aged students receiving their course instruction live in a traditional college classroom setting, and non-traditional older students receiving the same course instruction in real time via two way interactive television at remote classroom sites.

LITERATURE REVIEW

Swift, Wilson, and Wayland (1997) provide an overview of distance learning issues and concerns in business courses. They report that interest in distant learning is increasing with the increased numbers of non-traditional adult students and that although off campus instruction to meet the needs of this student group involves commuting and other related expenses, distance learning can be a very costly alternative with technology and supplementary operating costs often exceeding \$75K/classroom. University concerns include the cost of additional administrative and technical infrastructures to assist DL faculty and students, faculty training, intellectual copyrights, faculty compensation and workload reduction. Faculty concerns include the need to redesign DL courses, additional prep time, technology failures, visits and office hours at remote sites, and the administration of exams.

Anderson, Banks, and Leary (2002) cite a lack of research on student satisfaction with distance learning course instruction via live interactive television in real time. They report that existing research on ITV shows mixed results with Silvernail and Johnson (1990) and (1992) showing no significant difference in student satisfaction (live vs. remote), while other studies, Egan, Welch et al. (1992), Gunawardena (1992), Kochman (1998) show less student satisfaction at remote sites due to limited instructor interaction. Additional inconclusive research cited includes Thomerson (1995) and Zarghami (1998) finding remote site students more satisfied with distance learning due to convenience, while Clow (1999) reports that remote site students are less satisfied due to lack of instructor enthusiasm or awareness of student problems.

In their study of 3,282 graduate and undergraduate business students at Marshal University between fall 1997

and summer 1999, Anderson, Banks, and Leary report that remote site students were least satisfied due to problems with the ITV delivery system.

In the Seay and Milkman (1994) study of thirty-three upper division accounting students, although remote site students were less likely to participate in class due to cameras, etc., they achieved higher performance levels. Students at both sites felt that ITV was conducive to learning and were satisfied with the ITV system, but still preferred live instruction in traditional classroom settings.

Pouzurick, France, and Logar (2002) in their study of 143 graduate students in six marketing courses over a two-year period report that remote site students were less satisfied with course content, course format, course participation/course activities, and thought the DE mode of instruction to be less effective. Although remote site students accept distance learning instruction for convenience, they still prefer live instruction.

Bader and Ray (1999) in their study of 24 students in an MBA course during fall 1997, report that although performance and evaluation of instructors remained the same, on-campus students receiving live course instruction rate the learning environment of distance learning courses more negatively than do remote site students receiving their course instruction via interactive TV in real time.

And finally Heins and Hulse (1996) in their study of grade performance in an undergraduate Organization Theory and Behavior course at the University of Texas – Tyler over a three-year period (1993–1995) involving 119 students at three sites, found that there was no significant difference in grade performance due to DE technology. Their findings were consistent with the cited results of Arndt and Lafollette (1991) and Pirrong and Lathen (1990), but contrary to the results of Seay and Milkman (1994) which found that remote site students performed better. Heins and Hulse conclude that two way interactive television course instruction in real time is a viable way to meet the needs of a growing non-traditional, older, place bound business student population who may be unable to attend courses on campus in a traditional classroom setting.

RESEARCH METHOD

The Central Washington University College of Business (CWU/COB) currently offers live instruction to upper division accounting and business administration students on the main campus and at two remote sites in the Seattle metro area, while students located at three rural remote sites in Washington state access the same course instruction through distance learning via two way interactive television in real time.

One hundred fifty-four students in five principles of marketing courses (MKT. 360) taught between 1997 and 2005 were selected for this study. Each course was taught

EXHIBIT 1					
Please indicate the extent to which you agree/disagree with the following statements about this course by circling the number that most closely approximates your position (if applicable).					
Strongly 1	Agree 2	Neutral 3	Disagree 4	Strongly Disagree 5	
Lectures were informative.				1	2 3 4 5
Lectures were clearly understood.				1	2 3 4 5
Case discussions/analysis allowed for my full participation.				1	2 3 4 5
Interaction with my instructor was easily facilitated.				1	2 3 4 5
Interaction with classmates during class discussions was easily facilitated.				1	2 3 4 5
Classroom demonstrations by the instructor were easily observable.				1	2 3 4 5
Classroom overhead projections/films were easily observable.				1	2 3 4 5
Two-way oral communication with the instructor was easily facilitated.				1	2 3 4 5
Class/group projects/assignments were easily facilitated.				1	2 3 4 5
Taking exams was easily facilitated.				1	2 3 4 5
Communication with the instructor out of the classroom (i.e., during office hours) was easily facilitated.				1	2 3 4 5
Overall, the learning experience in this class met my prior expectations.				1	2 3 4 5
The learning experience in this class was not affected by the distance learning component.				1	2 3 4 5

to two student groups with one group receiving the course instruction live, while one or more groups of students received the same course instruction through distance learning via two way interactive television in real time at remote sites. All courses were taught in two-hour modules twice a week over a ten-week term. Students at each site in each marketing course were administered their exams simultaneously.

A research instrument/questionnaire (see Exhibit 1) was developed, pre-tested and administered to students in each business administration course at all sites (live and remote) simultaneously. Research questions included differences in student expectations for distant learning courses, as well as differences in comprehension, performance, and student satisfaction between students receiving live course instruction in a traditional classroom setting, versus students receiving the same course instruction at

remote classroom sites in real time. A series of Likert questions on a five-point scale, ranging from (1) strongly agree to (5) strongly disagree were included in the questionnaire to assess student attitudes toward course lecture delivery, student/instructor interaction, exams, observable classroom demonstrations, and overhead projections/films, as well as the overall learning experience in distance learning courses involving two way interactive television in real time for the two student groups (live and remote).

The results of the survey were then analyzed for each question using one way analysis of variance (ANOVA) to determine whether any significant differences in student attitudes toward their learning experience in the distance learning courses existed for the two student groups (live vs. remote).

RESULTS

Student attitudes toward distance learning ITV course instruction in real time in five Principles of Marketing courses between 1997–2005 were analyzed. In three courses (1998, 2000, and 2002) students who received course instruction live in a traditional classroom setting tended to be more satisfied with various aspects of the course than students attending the same course via two way interactive television in real time at remote sites (Table 1). The most significant differences in levels of satisfaction involved communication issues such as interaction with the instructor, demonstrations by the instructor, observable overheads/films, and two way oral communication with the instructor during class, with students who received course instruction live indicating they were more satisfied, while students who received course instructions via distance learning at remote sites indicating they were less satisfied.

Students in the 1998 course received course instruction live on the main campus in Ellensburg (E) while students at two remote sites, Wenatchee (W) and SeaTac (S), received course instruction via distance learning (ITV) in real time. The students at (S) were less satisfied with course instruction via distance learning (ITV) than were students at (W). Students at (S) typically received

most of their course instruction live in a traditional college classroom prior to this distance learning (ITV) course, while students at (W) typically received most of their course instruction via distance learning (ITV) prior to this course.

Students in two courses (1997 and 2005) who received course instruction via distance learning (ITV) at one remote site (W) tended to be more satisfied than were students who received the same course instruction live in a traditional college classroom setting (Table 2).

The students at the Wenatchee (W) remote site typically received most of their course instruction via distance learning ITV prior to this distance learning course and were more satisfied both years. The most significant differences in levels of satisfaction (live vs. remote) in the 1997 course involved expectations and the learning experience in the course, as well as interaction with the instructor, observable overhead/film and administration of exams. The most significant differences in levels of satisfaction (live vs. remote) in the 2005 course involved informative lectures and observable overheads/films.

DISCUSSION

The results of this study on student satisfaction with distance learning course instruction via (ITV) in real time

TABLE 1

	360/98 MEANS			ANOVA	360/00 MEANS			ANOVA	360/02 MEANS			ANOVA
	E	W	S		E	W	Y		Y	W	ML	
<u>QUESTION</u>												
INFORMATIVE	2.73	3.36	2.95	1.93	1.68	1.57	1.33	0.47	1.50	2.00	2.14	2.08
UNDERSTOOD	2.91	3.64	3.58	2.83	1.68	1.71	1.83	0.10	1.50	2.00	1.71	0.94
CASES	2.90	3.64	2.95	2.46	1.74	2.14	1.67	0.75	1.40	2.00	1.86	1.43
INTERACTION W/INSTRUCTOR	2.45	3.73	3.53	3.94	1.68	2.14	2.00	0.98	1.20	2.33	1.43	3.42
INTERACTION W/CLASSMATES	2.91	2.91	3.05	0.05	2.15	2.14	2.08	0.02	1.40	2.33	1.71	1.71
DEMONSTRATIONS	2.18	3.00	3.58	5.80	1.41	1.86	2.25	3.46	1.20	2.17	1.57	2.17
OVERHEADS/ FILMS	2.55	2.36	3.05	1.49	1.44	2.00	2.08	2.42	1.20	1.83	1.86	1.37
COMMUNICATION-ALL	1.82	3.45	3.42	8.98	1.68	2.29	2.00	1.52	1.20	2.33	1.71	3.93
PARTICIPATION	3.00	3.18	3.21	0.19	1.85	2.14	1.83	0.26	1.30	2.17	1.57	2.66
EXAMS	3.09	2.55	2.95	0.98	1.44	1.86	1.33	0.82	1.20	1.83	1.14	1.26
COMMUNICATION-OUT	2.91	3.00	3.47	1.10	1.88	2.43	2.50	1.84	1.80	2.33	1.86	0.59
EXPECTATIONS	2.73	3.73	3.84	4.04	1.74	1.71	2.17	1.01	1.40	2.33	2.00	2.60
LEARNING EXPERIENCE	2.73	3.27	3.68	1.75	2.15	2.43	2.33	0.20	1.60	2.83	1.86	3.27
(E) Ellensburg (W) Wenatchee (S) SeaTac(Y) Yakima(ML) Moses Lake												

TABLE 2								
	360/97 MEANS		ANOVA		360/05 MEANS			ANOVA
	E	W		W	E	Y	ML	
<u>QUESTION</u>								
INFORMATIVE	2.64	2.00	2.57	2.00	2.60	3.33	2.33	2.52
UNDERSTOOD	2.40	1.86	1.87	1.75	2.40	2.50	2.33	0.42
CASES	2.71	1.93	3.53	3.00	2.40	3.00	2.66	0.20
INTERACTION W/INSTRUCTOR	2.71	1.64	5.49	2.25	2.40	2.83	2.00	0.45
INTERACTION W/CLASSMATES	2.29	1.93	0.78	2.75	2.40	3.00	2.33	0.39
DEMONSTRATIONS	2.43	1.71	3.82	1.75	2.20	2.16	2.33	0.80
OVERHEADS/FILMS	2.86	1.79	6.95	1.75	2.60	2.16	1.66	2.69
COMMUNICATION-ALL	2.71	2.00	2.52	3.00	3.00	2.83	2.33	0.30
PARTICIPATION	2.64	2.07	2.11	2.50	2.40	2.83	2.33	0.66
EXAMS	2.64	1.71	4.89	1.75	2.00	2.16	2.33	0.76
COMMUNICATION-OUT	3.00	2.29	2.33	1.50	2.60	2.66	2.00	1.26
EXPECTATIONS	3.00	2.00	6.50	2.25	3.00	2.83	2.66	0.42
LEARNING EXPERIENCE	3.00	2.07	4.03	2.25	3.20	2.83	3.00	0.39
(E) Ellensburg (W) Wenatchee(S) SeaTac(Y) Yakima (ML) Moses Lake								

are mixed. Non-traditional older students in three marketing courses reported a lower degree of satisfaction with course instruction via distance learning (ITV) at remote sites consistent with the findings of Egan, Welch et al. (1992), Gunawardena (1992), Kochman (1998) and Clow (1999). Time and place bound non-traditional older students in two other marketing courses reported a higher degree of satisfaction with course instruction via distance learning (ITV) at remote sites, consistent with the findings of Thomerson (1995) and Zarghami (1998) who found a higher degree of student satisfaction with distance learning (ITV) at remote sites due to convenience.

Non-traditional older students in one principles of marketing course at a remote site who typically receive most of their course instruction live, reported less satisfaction with course instruction via distant learning (ITV) and preferred live instruction, consistent with the findings of Seay and Milkman (1994), and Bader and Roy (1999), but accept course instruction through distant learning for convenience, consistent with the findings of Pouzarich, France, and Logar (2002).

Non-traditional older students at remote sites who typically receive most of their course instruction via distance learning (ITV) tend to rate distance learning (ITV) courses more satisfactorily than do traditional col-

lege aged students who typically receive most of their course instruction live in a traditional classroom setting, unless the students are non-traditional older students attending class at a remote site where most of the course instruction is typically presented live by an instructor in the classroom.

IMPLICATIONS AND RECOMMENDATIONS

Current research on student satisfaction with distance learning course instruction via ITV in real time is limited with mixed results. It appears that the degree of satisfaction and perception of value with distance learning ITV courses may be related to the level of student experience with distance learning course instruction, with students who typically receive most of their course instruction live rating distance learning courses less satisfactorily than do time and place bound non-traditional older students who typically receive most of their course instruction via distance learning at remote sites due to convenience.

More research on student satisfaction (live vs. remote) with distance learning ITV courses is needed with more focus on factors that may affect the degree of student satisfaction and perceived value with distance learning, including the level of student experience with distance

learning courses, as well as the level of training and technical support available to instructors who may not be familiar with this mode of instruction.

It appears that distance learning course instruction via ITV may be a viable way of reaching a more diverse student population in the future, including non-traditional time and place bound older students living and working in remote areas who are unable to commute to traditional

college campuses, provided we understand the factors that lead to a higher level of student satisfaction and instructor competence with this relatively new mode of course instruction. It remains unclear, however, whether live and remove student groups in distance learning courses via ITV perceive the same level of value in these courses.

REFERENCES

- Anderson, L., S. Banks, and P. Leary (2002), "The Effect of Interactive Television Courses on Student Satisfaction," *Journal of Education for Business*, (January/February), 164–68.
- Arndt, T.L. and W.R. LaFollette (1991), "Interactive Television and the Nontraditional Student," *Journal of Education for Business*, (January/February), 181–85.
- Bader, M.B. and S. Ray (1999), "Using Technology to Enhance Relationships in Interactive Television Classrooms," *Journal of Education for Business*, (July/August), 357–62.
- Clow, K.E. (1999), "Interactive Distant Learning: Impact on Student Course Evaluation," *Journal of Marketing Education*, 21 (2), 97–106.
- Egan M.W., M. Welch, B. Page, and J. Sebastian (1992), "Learning Perception of Instructional Delivery Systems: Conventional and Television," *The American Journal of Distance Education*, 6 (2), 47–55.
- Gunawardena, C.N. (1992), "Changing Faculty Roles for Audiographics and, Online Teaching," *The American Journal of Distance Education*, 6 (3), 58–71.
- Heins R.A. and D.B. Hulse (1996), "Two Way Interactive Television: An Emerging Technology for University Level Business School Instruction," *Journal of Education for Business*, (November/December), 74–77.
- Kochman, A.F. (1998), "An Investigation of Differences in Participant Outcomes Resulting from the Use of Interactive Televised Distance Learning," *UMI Microform*, 9907752.
- Pirrong, G.D. and W.C. Lathen (1990), "The Use of Interactive Television in Business Education," *Educational Technology*, (May), 49–54.
- Pouzurick, T., K.R. France, and C.M. Logar (2000), "Delivering Marketing Education: An Analysis of Face-to-Face versus Distance Education," *Journal of Marketing Education*, (December), 80–87.
- Seay, R.A. and M.I. Milkman (1994), "Interactive Television Instruction: An Assessment of Student Performance and Attitude in an Upper Division Accounting Course," *Issues in Accounting Education*, (Spring), 80–90.
- Silvernail, D. and J. Johnson (1990), "The Impact of Television Instruction on College Student Achievement and Attitudes: A Controlled Experiment," *International Journal of Instructional Media*, 17 (1), 1–8.
- _____ and _____ (1992), "The Impact of Interactive Televised Instruction on Student Evaluation of Their Instructors," *Educational Technology*, 32 (6), 47–50.
- Swift, C.O., J.N. Wilson, and J.P. Wayland (1997), "Interactive Distance Education in Business: Is the New Technology Right for You?" *Journal of Education for Business*, (November/December), 85–90.
- Thomerson, J.D. (1995), "Student Perception of the Affective Experience Encountered in Distance Learning Courses," *UMI Microform*, 9531182.
- Zarghami, F. (1998), "Constructs that Contribute to Student Satisfaction for Participating in Graduate Level Courses Delivered by Full Motion Interactive Fiber Optic Communication Network," *UMI Microform* 9911661.