

TELEVISION TEACHING OF A MARKETING COURSE: NEGOTIATING A LEARNING CURVE IN DISTANCE EDUCATION

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ABSTRACT

A variety of television systems are now used to link classrooms with instructors, enabling delivery of courses to students in multiple distant locations simultaneously. In one such use of television in the state of Washington, an introductory agricultural marketing course was taught during three successive years. The Washington Higher Education Telecommunications System, a two-way audio and video communication medium was used to deliver the course. This article details and evaluates the adaptations to traditional teaching methods arising from television delivery of the course. Analysis suggests that teaching and televising are definitely compatible although instructors must remain sensitive to the long distance challenge and administrators need to recognize that there may be hidden costs in using these systems.

INTRODUCTION

Television is increasingly used as an instructional medium to teach students at multiple locations. Television spans time and distance barriers by delivering courses to place bound students in their own communities. The overall goal of educational institutions in reaching students at distant locations via television is to efficiently use limited faculty resources while fulfilling the basic teaching mission.

The Agricultural Satellite Corporation (AG*SAT) is a national agricultural education telecommunications service formed in 1989 to share educational programs via satellite distribution among land grant universities. AG*SAT is based on one-way television delivery of courses. Among other courses, AG*SAT has been used to simultaneously deliver a sustainable agriculture course to students at eleven universities across the nation, [Salvador et al., 1993]. Instructor and student interaction in this course was limited however. Interaction was accomplished via

students at the remote locations faxing questions to the instructor.

AG*SAT is one of several methods of overcoming distance in course delivery. The experience reported here was gained in Washington with a television system of instructional delivery using a different technology [Worley and Casavant, 1992]. An agribusiness marketing course focusing on the functions, institutions and managerial decision making involved in food marketing was delivered via TV. A live, fully interactive two-way television system was used to teach this class simultaneously at two campuses located 140 miles apart. The adjustments and outcomes concerning this case of distance teaching are specific to the course and instructor situation herein described. As such, caution is advised in making interpretations and generalizations of these outcomes to other teaching situations. The following section explains the technology employed followed by sections on the learning curve encountered and then evaluation.

STRUCTURE OF THE SYSTEM

The Washington Higher Education Telecommunications System (WHETS) employs line of sight microwave antenna towers positioned around the state to link various campus locations in Washington and the University of Idaho. These dedicated antennae, along with other equipment, make the system completely closed circuit and fully interactive among all locations. The Pullman campus is linked with its three branch campuses, the University of Idaho and the University of Washington.

Each location is equipped with a technical control room and at least one electronic classroom with seating for up to 40 students. Instruction can originate and be transmitted as well as received at all locations. The system's live, real time, two-way video and audio permits students in as many as four separate locations to participate as one class through interaction over the electronic network. The instructor and class members at the originating

location observe and interact with students at the off site locations via video monitors. Students converse with the instructor and off site students from all locations through individual microphones at each classroom seat and observe the instructor and distant students on television monitors.

THE LEARNING CURVE ENCOUNTERED

The WHETS system was used to deliver Introductory Agribusiness Marketing during fall semesters of three consecutive years, 1990-92. The two campuses that offered the class are 140 miles apart and the class meetings were scheduled in two weekly 75-minute sessions. The instructor taught from the branch location via the live telecommunications linkup with the Pullman campus one class day per week and travelled to the main campus for the second class session. Rotating the origination of the class between locations provided opportunity for the traditional instructor-student contact at least one day per week with all students and provided time to offer office hours on the main campus. This rotating arrangement between locations was employed during the entire three year period.

Overview of Years One and Two

During 1990 a traditional lecture format was employed throughout the course. The overhead camera was used similar to a blackboard to spontaneously write out and emphasize lecture points. Students remained very unresponsive to class discussion opportunities throughout the initial semester.

In planning for the second offering of the course emphasis was placed on making greater use of the visual versatility afforded by the system [Hanley, 1991]. Video tapes of the instructor's personal interviews with marketing firm managers and tours of their plants were made for use during the second term. Prepared tapes from other sources including the Washington Apple Commission and Produce Marketing Association were also used following McCrimmon's approach [JNRLSE, 1992]. These taped segments provided valuable breaks in the format of the class presentations which is necessary to prevent student boredom during TV lectures. All practical means to inject visual variety into a TV class should be considered by potential instructors.

A more polished and prepared on camera look than had been present the first year was accomplished by preparing laser printed graphic outlines to replace live hand writing on the screen. These outlines provided guidance to the instructor's presentation and assisted students with organization of their class notes. Guest lecturers were invited to present selected topics and add further variety to the class.

Further Adjustments: Year Three

Two significant changes were implemented during the third, 1992 session of the class. These were the substitution of a class project for a term paper assignment and implementation of group presentations during the class. These adjustments are not necessarily related to the use of the TV technology and are applicable modifications in a standard teaching situation. It is important to point out, however, that these adjustments were beneficial and satisfying to both students and instructor in this distance education mode and should not be overlooked as options for course components by potential television instructors.

The term project was designed to enhance student understanding of consumer preference and decision making. Each student analyzed his food purchase and expenditure patterns through individual research. Specific objectives of the assignment were to: gain insight into patterns of individual food expenditures; apply selected food marketing concepts in analyzing food expenditures; and gain experience in conveying information in a clearly written, technical style. A paper of three pages minimum length discussing and analyzing personal food expenditures was prepared. Interaction between the instructor and students over the TV medium during the entire course was heightened by this assignment. Many questions from students concerning the assignment were answered over the system avoiding a delay until the next class session. The overhead camera was used to show examples of the tables and charts which were expected to be included in the written analysis. Questions and answers concerning this assignment created a more open environment for student participation in class discussions of marketing concepts.

The second major adjustment in model three was the use of 15 minute student group presentations coupled with relevant discussion. This activity had a dual purpose: in-depth study in preparation for the

presentations and the experience of delivering the talk on the TV system. These presentations were scheduled for class days when the instructor was in the distant WHETS classroom thereby forcing the students to communicate with the instructor solely via the electronic medium. Each group typically consisted of four students who spent equal time at center stage before the TV camera. A noticeable benefit of this activity relevant to distance education was the increased willingness of students to ask questions and enter class discussions after doing their group presentation.

Colleague Aided Evaluation

Colleague aided evaluation of the course and instructor was employed in the course during 1991 and 1992. This technique involves an unannounced visit to the class by a faculty colleague about mid semester. The regular instructor turns the class session over to the colleague who then seeks student input concerning strengths and weaknesses in the course and instructor (Casavant, 1988). Feedback from this evaluation is subsequently provided to the instructor concerning perceptions of the class members.

Both major suggestions arising from the 1992 evaluation were related to the use of the prepared overhead outlines. Students urged the instructor to make use of the white board at the front of the classroom to add variety to lecture presentations rather than relying exclusively on the overhead camera to display information on transparencies. Secondly, it was suggested that copies of the outlines be provided to students prior to the class sessions when they were to be covered.

STUDENT EVALUATIONS OF ADAPTATIONS

A comparison of relevant ratings from student evaluations of the course for the three semesters is presented in Table 1. While it is widely understood that these evaluations are not complete measures of course quality and teaching effectiveness, they are the most objective measures available to gauge student perceptions of the course offerings.

Measures evaluating instructor preparation, presentation effectiveness and course organization increased 37, 28 and 22%, respectively, in 1991. Instructor preparation and course organization improvements are likely attributable to the

Table 1. Composite Ratings and Percentage Changes, Student Evaluations of Agricultural Economics 350, Fall Semesters 1990-1992.

	INCREASE					
	1990	1991	1992	1990-1991-1992		
				91	92	92
	0 - 5 Scale [†]			Percent		
Instructor interest	3.3	3.8	4.2	14	10	26
Instructor preparation	2.8	3.9	4.1	37	7	46
Course organization	2.8	3.4	3.5	22	3	26
Presentation	2.2	2.9	3.2	28	13	44
Attitude to student	3.9	4.1	4.6	4	13	17
Learning emphasis	2.6	3.0	3.9	15	31	51
Examinations	2.5	2.8	3.6	13	25	41
Grading	3.3	3.3	4.0	1	22	23
Overall course	2.6	3.1	3.6	20	16	38
Overall instructor	2.8	3.1	3.7	12	20	34

[†]Student ratings on each item were based on a 0 - 5 scale with 5 as the highest rating.

preparation of the graphic overheads for each session. According to student comments, the use of graphic overheads were a sign of instructor preparedness and lecture organization in semester two whereas the use of live outline writing was considered a sign of unpreparedness in session one. Video taped segments were cited by students as a good way to break up the class periods into segments.

Although the group presentations slowed the pace of the class considerably during year three, the presentations were well prepared and interesting to the class members. The question and answer periods frequently continued for 15 to 20 minutes after the formal presentation. Less time was available to cover syllabus topics. However, since topics were originally chosen to coincide with scheduled course topics, this seems a reasonable tradeoff of class time.

The term project was also well received by the students and instructor. The students responded positively to the chance to study their own behaviors regarding food expenditures and realized through this activity that the course concepts were evident in their own behavior. This project was deemed a better learning exercise than the term paper which had been seen as somewhat of a stand alone appendage to the balance of the class assignments in prior sessions. An improvement of 31% increase in

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learning emphasis indicated by the student evaluations in year 3 over year 2 is likely linked to the institution of this term project and the aforementioned group presentations.

Instructor perceptions of the adjustments introduced during years two and three were positive. Significant and steady increases in student evaluations of the course were achieved during the latter 2 years. An overall increase of 35% in results of the student evaluation occurred under the reorganizations in the second and third models (Table 1). These results provide the quantitative basis for continuance of the changes and adaptations introduced during years two and three.

Efficiency Issues for Administrators

There are hidden costs (particularly from administrators) of using a television system. These hidden costs include the added faculty time required to make adaptations to effectively use these systems. In the second year faculty time spent on this course averaged an estimated 35 hours per week. In addition, the time used during the previous summer (40-50 hours) preparing the videotaped interviews and tours was spent at the expense of extension and research activity.

These interviews and plant tours were prepared with the assistance of a videographer using home video equipment. Clips of these tapes were subsequently selected for showing at various times during the 1991 and 1992 course sessions. Several hours of instructor time were spent in review of the tapes to select the most appropriate material for use during particular class sessions. These indirect costs for camera assistance and tape review should be factored into the decision making process of using these systems.

SUMMARY AND CONCLUSIONS

An overview of the technology and a dynamic adjustment process for using television links to teach an agribusiness marketing class from a distant location has been presented using a case study approach. The long distance learning curve for the instructor and results for the students indicate success in making improvements although goals remain to be achieved. The importance of advanced planning is heightened by the use of

cameras and monitors which tend to magnify flaws in hand written notes. The medium's greatest asset is its visual versatility and this feature should be used to inject as much variety of presentation as possible. Videotaped interviews and industry tours along with guest speakers allowed for variety in the presentations. Group presentations and an innovative term project were successfully introduced into the course.

Use of these systems is accompanied by hidden costs, however. In addition to the visible costs for equipment and technical personnel, less obvious overhead costs are incurred. Increased faculty time and technical assistance need to be factored into the efficiency considerations when college and university administrators evaluate the desirability of using of these systems. This evaluation will vary depending upon circumstances of each particular institution. Availability of distance education facilities and location of off campus faculty relative to the main campus are variables which must be considered in such evaluations.

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