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## ABSTRACT

The West Suburban Post-Secondary Consortium (WSPSC) of Oak Brook, Illinois is a not-for-profit organization of collaborating educational institutions that offer courses, programs and degrees in the western suburbs of Chicago. Interactive video is a successful instructional delivery method in the WSPSC, according to the students who took video courses. This publication reports the results of two years of survey research. Survey responses were gathered from 554 students (41% response) at colleges, universities and high schools in the west suburban region of Chicago who took 42 courses at 80 interactive video classroom locations during the Fall 1996, Spring 1997, and Fall 1998 academic terms. Students (79%) were positive about their learning experience and the majority (67%) would take another interactive video course. In fact, 30% of the students who responded to the Fall 1998 survey had already taken at least one other interactive video course. Students generally preferred being at the site with the live instructor, but seemed to adapt well to the televised option. The convenience of taking a class at a location close to home or office was a great incentive to take an interactive video course. Recommendations for improvement were related to technical equipment rather than the instructor. Although significant efforts were made by the Consortium's technical staff to improve the video and audio equipment between the two survey periods, improvements are still needed. Students most often had problems with the audio systems; when it was difficult to hear or be heard, it interfered with student learning. Other technical problems should be resolved quickly without undue loss of class time. (AEF)

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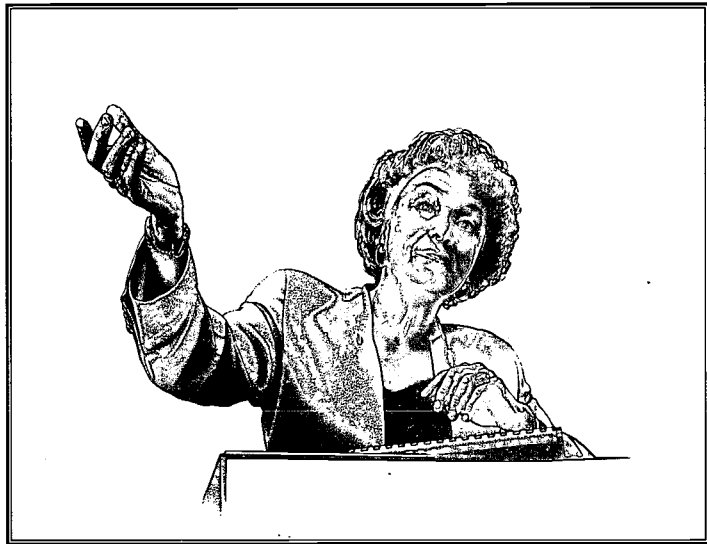
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# WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO INSTRUCTION

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# WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO INSTRUCTION

## Results of Two Surveys Conducted by the West Suburban Post-Secondary Consortium

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## ACKNOWLEDGMENTS

Funding for this research and its written reports was provided by the Illinois Board of Higher Education through grants under the Higher Education Cooperation Act (HECA).

In 1996, the Steering Committee of the West Suburban Post-Secondary Consortium (WSPSC) developed a plan for a formalized student assessment of interactive video instruction that was carried out in its HECA-funded video classrooms. WSPSC hired Kevin Owens, a doctoral student in education at Northern Illinois University, to develop a survey instrument with the advice of Gail Crawford, Director of Distance Learning at Northern Illinois University.

Student surveys were distributed through their instructors for all WSPSC interactive video courses at the end of Fall 1996 and Spring 1997 academic terms. Northern Illinois University's Academic Testing Service provided statistical data from the scanned response sheets. Narrative responses were transcribed verbatim by Nancy Dwyer except that names were deleted. Data interpretation and the final report were written by Marilyn Lester. Carol Pawlak, WSPSC Business and Office Manager, assisted in production and distribution. The report, *Assessment of 1996-97 Interactive Video Instruction: What Students Said*, was published by WSPSC in October 1997. Reprints are still available from the WSPSC Office.

In 1998, the same survey, with only one minor change, was distributed through instructors to students who took video courses during the Fall 1998 term. Northern Illinois University's Academic Testing Service provided the statistical data. Narrative responses were transcribed verbatim by Jennifer Butler except that names were deleted. Data interpretation and the final report were prepared by Marilyn Lester with writing assistance from Dianna Carlson. Graphic and printing services were provided by JAIS, Inc. of Lisle, Illinois.

Thanks are due to the students and instructors of WSPSC institutions who participated in our surveys, and everyone who assisted in the conceptualization, development, and implementation of this important research, and production of the research report.

Marilyn A. Lester  
July 2000

## EXECUTIVE SUMMARY

Interactive video is a successful instructional delivery method in the West Suburban Post-Secondary Consortium of Oak Brook, Illinois, according to the students who took video courses. This publication reports the results of two years of survey research. Survey responses were gathered from 554 students (41% response) at colleges, universities and high schools in the west suburban region of Chicago who took 42 courses at 80 interactive video classroom locations during Fall 1996, Spring 1997, and Fall 1998 academic terms.

Students (79%) were positive about their learning experience and the majority (67%) would take another interactive video course. In fact, 30% of the students who responded to the Fall 1998 survey had already taken at least one other interactive video course. Students generally preferred being at the site with the live instructor, but seemed to adapt well to the televised option. The convenience of taking a class at a location close to home or office was a great incentive to take an interactive video course.

Recommendations for improvement were related to technical equipment rather than the instructor. Although significant efforts were made by the consortium's technical staff to improve the video and audio equipment between the two survey periods, improvements are still needed. Students most often had problems with the audio systems; when it was hard to hear or be heard, it interferes with student learning. Other technical problems should be resolved quickly without undue loss of class time.

## INTRODUCTION

The West Suburban Post-Secondary Consortium (WSPSC) is a not-for-profit organization of collaborating educational institutions which offer courses, programs and degrees in the western suburbs of Chicago. Founded in 1984 as the West Suburban Regional Academic Consortium (WSRAC), it became one of ten regional higher education consortia established in 1992 by the Illinois Board of Higher Education, and was renamed the West Suburban Post-Secondary Consortium. Current membership includes nineteen colleges and universities, the Multi-University Center at Oak Brook, Central DuPage Health, Sci-Tech, and nineteen high school or unit school districts (see list on back cover). A major project of WSPSC is managing the interactive video network and classrooms for the delivery of instruction in its region.

On September 1, 2000, the consortium will be renamed the West Suburban Higher Education Consortium (WSHEC) for consistency with the other regional higher education consortia. The Consortium exists to develop and support collaborative initiatives that enhance the educational missions and improve the operational and cost effectiveness of its member institutions. The purposes of the Consortium are:

1. To advance and work toward developing, improving, and strengthening the quality of higher education and all other levels of education;
2. To encourage and support cooperative programs, services, and activities among the Consortium's institutions;
3. To make provisions for periodic collection, analysis, and use of educational needs assessments to identify unmet educational needs in underserved areas;
4. To facilitate resource sharing consistent with institutional missions and making effective use of facilities, laboratories, library materials, and academic staff of member institutions;
5. To utilize telecommunications-based instructional delivery systems effectively and to assure that these systems are linked at the local, regional and state levels.
6. To collect and disseminate information to the public about educational programs, activities and opportunities in the region; and
7. To support and implement the guidelines, recommendations and requirements of the Illinois Board of Higher Education regarding programmatic needs assessments, educational program priorities, resource sharing, requests for approval of new off-campus units of instruction, economic development, telecommunications networks, and other purposes as directed within the WSHEC region.



## INTERACTIVE VIDEO CLASSROOM LOCATIONS

By August 31, 2000, WSPSC will have thirty-eight (38) interactive video classrooms connected to its hub at College of DuPage in Glen Ellyn, Illinois. Of these, 36 were funded by the Illinois Board of Higher Education under the Higher Education Cooperation Act (HECA), and two were self-funded classrooms (indicated by asterisk). The WSPSC network hub is connected to all ten Illinois regional consortia hubs and can link to videoconferencing rooms worldwide.

Addison Trail High School (Addison)  
 Benedictine University (Lisle)  
 College of DuPage (2 rooms) (Glen Ellyn)  
 College of DuPage - Addison Center (shared with DAOES)  
 DePaul University - Naperville Campus  
 DeVry Institute of Technology - Chicago Campus  
 DeVry Institute of Technology - DuPage Campus (Addison)  
 Dominican University (River Forest)  
 Dominican University - Techny Campus (Northbrook)  
 Downers Grove North High School  
 \*Downers Grove South High School  
 DuPage Area Occupational Education System (shared with College of DuPage - Addison)  
 Elmhurst College (Elmhurst)  
 Elmwood Park High School  
 Hinsdale Central High School  
 Hinsdale South High School  
 Illinois Institute of Technology - Rice Campus (Wheaton)  
 Lewis University - Oak Brook Campus  
 Leyden East High School (Franklin Park)  
 Leyden West High School (Northlake)  
 Lisle Senior High School  
 Morton College (Cicero)  
 Multi-University Center at Oak Brook  
 Naperville Central High School  
 Naperville North High School  
 National College of Chiropractic (Lombard)  
 National-Louis University - Wheaton Campus  
 North Central College (Naperville)  
 Northern Illinois University (DeKalb)  
 Northern Illinois University at MUC (Oak Brook)  
 Proviso East High School (Maywood)  
 Proviso West High School (Hillside)  
 Ridgewood High School (Norridge)  
 Riverside-Brookfield High School  
 Robert Morris College - Naperville Campus  
 \*Rush University (Chicago)  
 University of Illinois at Chicago  
 Willowbrook High School (Villa Park)

## PURPOSE OF RESEARCH

The West Suburban Post-Secondary Consortium initiated a formal method of assessing student satisfaction with interactive video classes which were taught during the 1996/97 academic year, and extended the research project a second year for courses taught during Fall 1998. The purposes of the survey research were: 1) to determine students' attitudes about their interactive video experiences; 2) to assist WSPSC in improving its classrooms, equipment and support services; 3) to provide feedback to the Illinois Board of Higher Education on its instructional telecommunications initiative; and 4) to contribute to the research literature on distance learning. WSPSC wanted to determine the success or failure of interactive video as an effective instructional delivery methodology.

## SURVEY

### Survey Methodology

During Fall 1996, Spring 1997, and Fall 1998 academic terms, eighty-five (85) interactive (two-way) video courses were taught at two hundred (200) locations. Eighteen colleges, universities, and high schools delivered or received this instruction. All students at all locations were included as the survey population. Cover letters and printed questionnaires (Appendix A and B) were mailed to the primary instructors of each class a few weeks prior to the end of each term. The instructor was directed to administer the survey at all locations during a class period, although some instructors chose not to participate. Students conducted the survey and mailed the responses to the WSPSC office in the postage-paid envelope provided.

The survey instrument (Appendix C) consisted of two parts. The first was a Likert scale questionnaire adapted for machine scanning. Responses were scored so that "Strongly Agree" equals 5, "Agree" equals 4, "No Opinion" equals 3, "Disagree" equals 2, and "Strongly Disagree" equals 1. Completed questionnaires were scored by the Academic Testing Service at Northern Illinois University. Results of Part One of the questionnaire for all three terms and aggregate are included as Appendix D.

Part Two of the survey was a set of three open-ended questions (collapsed into one question in the second survey) which invited narrative responses. These were transcribed verbatim, except that any mention of a specific name, instructor, or location was substituted with "[name of person]" or "[name of location]," etc. The complete narrative responses from students are Appendix E.

### Survey Instrument

The evaluation was designed to assess the quality of the interactive video instructional experience for the student. The first question identified the site that student attended for coding

purposes only; no names, class titles, or sites were identified in the final report. Simple demographic data were asked in the next four questions so that the results could be analyzed in different ways if necessary: by age group, by disability, by native language, and by experience with interactive video classes. These analyses were not prepared for this report.

The remainder of the questions focused on each student's perceptions of the physical facilities and operation of interactive video equipment (Logistics), the ability to speak, hear and be heard over the interactive video system (Audio Quality), communications between students (Interaction with Students) that took place over the system, the teaching and learning experience (Instruction), and the student's general attitude toward the interactive video experience (Overall Impressions). The narrative question(s) asked for overall impressions and recommendations.

### Response to Survey

Table 1 shows that in aggregate 554 students (41%) who enrolled in WSPSC interactive video classes during three terms returned the surveys.

TABLE 1				
<i><b>SURVEY RESPONSE RATE</b></i>				
	<u>Survey 1</u> <u>Fall 96</u>	<u>Survey 1</u> <u>Spring 97</u>	<u>Survey 2</u> <u>Fall 98</u>	<u>3-Term</u> <u>Total</u>
Number of institutions which taught video courses	7	8	15	18 (undup)
Number of classes taught	9	24	52	85
Classes responding	7 78%	12 50%	23 44%	42 49%
Number of class locations	23	50	127	200
Locations responding	17 74%	24 48%	39 31%	80 40%
Number of students enrolled	224	360	762*	1346*
Students responding	136 61%	182 51%	236 31%	554 41%
*estimated				

## SURVEY RESULTS

### Demographics

Table 2 shows that the majority of students responding were between 25 and 39 years of age, had no visual or auditory disabilities, and American English was their native language. An increasing number of students, 115 (21%) of them, had taken at least one interactive video class before.

TABLE 2						
DEMOGRAPHICS						
	Survey 1		Survey 2		3-term	
	<u>96/97</u>		<u>Fall 98</u>		<u>Total</u>	
Question 2: Identify the category that best expresses your age:						n=533
24 or less	77	26%	76	32%	153	29%
25-39	133	44%	70	30%	203	38%
40-54	83	28%	42	18%	125	23%
55 and over	6	2%	44	19%	50	9%
Question 3: I have a visual or auditory disability.						n=527
Yes	23	8%	11	5%	34	6%
No	271	92%	223	95%	494	93%
Question 4: American English is my native language.						n=535
Yes	263	88%	213	90%	476	89%
No	36	12%	23	10%	59	11%
Question 5: This is my first experience in an interactive video class.						n=536
Yes	255	85%	166	70%	421	79%
No	45	15%	70	30%	115	21%

### Categories

The survey questions were grouped into five categories for analysis: logistics, audio quality, interaction with students, instruction, and overall impressions. Here are the aggregate summary results from both terms; strongly agree and agree are reported together, and disagree and strongly disagree are reported together.

### Logistics

Table 3 shows the results of questions relating to logistics of the interactive video classroom and its equipment. There was a substantial positive increase in all categories relating to the logistics, including size of the classroom, equipment in the classroom and the technical assistance provided to operate equipment. Many of the students indicated in their narrative responses that they would not have been able to take the class had it not been offered on interactive video. It saved students travel time and the class times were more convenient. Some students who were experiencing interactive video classes for the first time and were initially intimidated or apprehensive, came to enjoy the experience after a very short time and hoped to take more interactive video classes in the future. There were a few negative narrative responses regarding the room temperature and the initial problems with getting the equipment started and fine tuned.

Looking at both surveys in aggregate, responses to the logistics were very positive. Overall: 83% liked the class size, 92% could see monitors well, 85% said course materials were distributed effectively, and 83% said the equipment operator was helpful and effective. Smaller numbers agreed that the fax machine and other auxiliary devices (68% and 73% respectively) were useful classroom tools.

TABLE 3

*LOGISTICS*

	<u>Survey 1</u> <u>96/97</u>	<u>Survey 2</u> <u>Fall 98</u>	<u>3-term</u> <u>Total</u>	
Question 6: The size of the class was appropriate to the use of interactive video.				n=533
Agree	79%	87%	83%	
Disagree	14%	8%	11%	
Question 7: I could clearly see the monitors.				n=552
Agree	92%	93%	92%	
Disagree	5%	4%	5%	
Question 11: Course materials were collected and distributed in a timely manner to facilitate my learning.				n=542
Agree	79%	91%	85%	
Disagree	13%	6%	10%	
Question 12: The use of the fax machine and/or the external telephone in the interactive video classroom was helpful (if these items were never used, do not answer).				n=353
Agree	57%	82%	68%	
Disagree	9%	3%	6%	
Question 13: The use of the auxiliary resources was helpful (such as the document camera, videotaped or computer-based presentations, etc.).				n=527
Agree	67%	81%	73%	
Disagree	7%	4%	6%	
Question 14: The person who operated the interactive video system at my site was helpful and effective (if the instructor was always present at your site, do not answer).				n=477
Agree	82%	85%	83%	
Disagree	8%	4%	6%	

### Audio Quality

The consortium upgraded all codecs with the newest model (VTEL LC 3000/5000 series) which provided greatly enhanced audio capabilities, and students noticed. Questions relating to the sound system in the interactive video classrooms all significantly increased between 1997 and 1998, some by 20% or more, as shown in Table 4. Still, students rated audio quality as the least position aspect of the interactive video experience overall, with aggregate satisfaction ranging from 48% to 66%.

The narrative responses indicated that getting the bugs worked out of the audio system at the beginning of class was distracting. However, the students narrative responses indicated that they felt the instructor's knowledge of the system greatly enhanced the presentation and any difficulties that arose.

**TABLE 4**  
***AUDIO QUALITY***

	<b><u>Survey 1</u></b> <b><u>96/97</u></b>	<b><u>Survey 2</u></b> <b><u>Fall 98</u></b>	<b><u>3-term</u></b> <b><u>Total</u></b>	
Question 8: I could easily hear and understand the instructor over the system (if the instructor was always present at your site, do not answer).				n=486
Agree	56%	77%	65%	
Disagree	39%	19%	31%	
Question 9: I could easily hear and understand the students from the other site(s).				n=550
Agree	37%	62%	48%	
Disagree	56%	29%	44%	
Question 10: I could be heard through the microphone if I wished to speak to the other site(s).				n=550
Agree	57%	78%	66%	
Disagree	24%	10%	18%	

### Interaction with Students

Table 5 shows that interactions between students were generally positive. In their narrative responses, some students said they experienced more participation and group interaction in video classes than in a traditional classroom setting. Some missed the in-person contact with all the students, but rated it as a good experience which brought difference and change to the normal classroom. Some students felt they had to be more disciplined for this format which then created a more effective learning experience for the students. The results of student interaction questions indicated an overall satisfaction between 51% and 83% in this aspect of interactive video instruction.

TABLE 5

***INTERACTION WITH STUDENTS***

	<b><u>Survey 1</u></b> <b><u>96/97</u></b>	<b><u>Survey 2</u></b> <b><u>Fall 98</u></b>	<b><u>3-term</u></b> <b><u>Total</u></b>
Question 17: The quality of interaction among students at my site did not vary significantly, whether the instructor was present or not (if the instructor was always present at your site, do not answer). <span style="float: right;">n=484</span>			
Agree	62%	75%	68%
Disagree	24%	17%	21%
Question 18: The quality of interaction among students at my site was sufficient to facilitate my learning. <span style="float: right;">n=546</span>			
Agree	80%	86%	83%
Disagree	7%	6%	7%
Question 19: The quality of interaction between students at my site and the students at the other site(s) was sufficient to facilitate my learning. <span style="float: right;">n=545</span>			
Agree	49%	68%	57%
Disagree	31%	19%	26%
Question 20: The interactive video system made it possible for me to experience a greater diversity of students than I might have interacted with otherwise. <span style="float: right;">n=546</span>			
Agree	47%	59%	51%
Disagree	32%	26%	30%



### Instruction

Table 6 shows the results of questions relating to instruction and communication with the instructor. The quality of interaction between teacher and student was positive according 77% of respondents. Results to this question increased from 71% in Survey 1 to 85% in Survey 2. Overall, 83% felt the course content was presented in an effective manner. Most students had ample opportunity in class to respond to the instructor, and most received feedback in a timely manner. Individualized communication with the instructor increased significantly between 1997 and 1998, with an overall satisfaction rate of 63%. Narrative responses indicated that the instructors were knowledgeable and effective, and instructors were very helpful to those who were experiencing interactive video classes for the first time.

TABLE 6

#### *INSTRUCTION*

	<u>Survey 1</u> <u>96/97</u>	<u>Survey 2</u> <u>Fall 98</u>	<u>3-term</u> <u>Total</u>
Question 16: The quality of interaction between myself and the instructor was sufficient to facilitate my learning. <span style="float: right;">n=545</span>			
Agree	71%	85%	77%
Disagree	18%	8%	13%
Question 21: I had the opportunity in every class session to respond individually to the instructor, if I wished. <span style="float: right;">n=545</span>			
Agree	83%	81%	82%
Disagree	10%	11%	10%
Question 22: Individualized communication with the instructor outside the classroom (through regularly scheduled telephone availability, e-mail, etc.) was helpful. <span style="float: right;">n=534</span>			
Agree	53%	77%	63%
Disagree	8%	5%	6%
Question 23: Feed back from the instructor was provided in a timely manner to facilitate my learning. <span style="float: right;">n=547</span>			
Agree	74%	91%	81%
Disagree	12%	4%	9%
Question 24: I believe that the course material was presented in an effective manner. <span style="float: right;">n=544</span>			
Agree	81%	86%	83%
Disagree	11%	7%	9%

### Overall Impressions

Eight of ten respondents (79%) who took interactive video classes said they had a positive learning experience in this class. Most students (73%) felt at ease with the interactive video system by the end of the course. In Fall 1998, 77% said they learned as much with this technology as in a traditional class, a significant increase from 59% in 1996/97. Students (67%) said they would take another interactive video course. The results from Fall 1998 showed that 76% said they would do so, and only 16% said they would not.

The narrative responses indicated that many students were excited by the new technology and felt that learning *about* the technology was an important supplement to the course content. The narrative responses from the Fall 1998 indicated a mostly positive view of interactive video instruction. Technical problems caused the most dissatisfaction with the classes, but in general students were willing to put up with occasional technical glitches for the convenience of taking a course at a location close to home or work. Overall, two of three students felt they learned as much in the video course as they would have in a traditional classroom.

TABLE 7

#### OVERALL IMPRESSIONS

	Survey 1 <u>96/97</u>	Survey 2 <u>Fall 98</u>	3-term <u>Total</u>	
Question 15: By the end of the course, I was at ease with speaking and being seen over the system.				n=545
Agree	70%	76%	73%	
Disagree	18%	14%	17%	
Question 25: I believe I learned as much in this course as I would have in a more traditional classroom setting.				n=544
Agree	59%	77%	67%	
Disagree	32%	17%	25%	
Question 26: I would take another class delivered through interactive video.				n=542
Agree	60%	76%	67%	
Disagree	24%	16%	21%	
Question 27: Overall, I had a positive learning experience in this course.				n=538
Agree	77%	83%	79%	
Disagree	13%	9%	11%	

## INTERPRETATION AND RECOMMENDATIONS

Instruction delivered via interactive video technology in the West Suburban Post-Secondary Consortium is definitely successful, according to the students who took college, university or high school courses in Fall 1996, Spring 1997, and Fall 1998 academic terms. Eight of ten students had a positive learning experience in the class, and two-thirds believed they learned as much in an interactive video classroom as in a traditional classroom. Two-thirds would like to take another video class.

Many students liked the technology, liked learning about it, liked taking classes at locations that were convenient to them, and liked the greater number classes made available. A number of students praised their instructors for their knowledge and ability to effectively teach the interactive video class and also their academic institution for moving forward with this technology. In general, students appreciated the greater access to educational opportunities that interactive video allowed.

It was clear from both surveys that students have a love-hate relationship with interactive video classes. The narrative responses indicated a small but very vocal minority of students disliked the whole idea, and resented not having the traditional classroom instruction. However, the majority of the students saw interactive video instruction as a positive teaching tool of the future. Many students gave interactive video instruction an A+ and hoped to take more classes by interactive video. Many students who liked the class and had a positive response to the teaching method made legitimate recommendations for improvement.

There were technical problems which must be solved to enhance student learning. Audio problems were most troublesome to the students. Some recommendations were to use larger screens (monitors) to enable those in the back rows to see more clearly, and to have better volume control and a way to lessen background noises the microphones pickup. One student suggested individual microphones for each student; placement of existing microphones may be a source of the problem in some rooms. It was suggested that instructors teach the class and have an experienced technical person on hand to run the video equipment.

Technical problems at the beginning of class and instructor time spent with keeping the system operational were frustrating and distracting to students. The real cost of technical difficulties is reflected in the negative student attitude toward the technology, toward the course, and toward the institution which is offering the course. It is obvious that equipment should be kept fully operational at all sites by qualified technical staff.

Classroom monitors and cameras were mentioned by students as somewhat problematic, especially if students could not see all the other students at other sites. The clarity of the monitors and the room layout with better camera placement were suggestions for increased student satisfaction with interactive video instruction. Care should be taken with classroom arrangements to make sure that all students can be on camera at the same time to facilitate class discussion and encourage face-to-face discussion through the monitors.

Students wanted to feel more “connected” with the instructor and other students. One student suggested that discussion groups, or teams, contain members from both locations. Another suggestion was to have class group assignments and projects either during class or out of class to facilitate connections between students. Students reported that oral reports by students and student-led class discussions via interactive video seemed to be two excellent ways of fostering students connectivity. If access to computers and e-mail is readily available to all students, e-mail communication is an excellent way to connect students with each other and the instructor. Handouts, updates, and ongoing dialogues on specific topics are handled well via e-mail.

Many students mentioned that having the live instructor at their site was strongly preferred. Overall, students indicated that their instructor was effective in making the interactive video setting work. Having a knowledgeable person running the video equipment to eliminate some technical problems and enable the instructor to move about the room and teach more freely was recommended by several students.

## SUMMARY

Interactive video is a successful instructional delivery method in the West Suburban Post-Secondary Consortium of Oak Brook, Illinois, according to the students who took video courses. This publication reports the results of two years of survey research. Survey responses were gathered from 554 students (41% response) at colleges, universities and high schools in the west suburban region of Chicago who took 42 courses at 80 interactive video classroom locations during Fall 1996, Spring 1997, and Fall 1998 academic terms.

Students (79%) were positive about their learning experience and the majority (67%) would take another interactive video course. In fact, 30% of the students who responded to the Fall 1998 survey had already taken at least one other interactive video course. Students generally preferred being at the site with the live instructor, but seemed to adapt well to the televised option. The convenience of taking a class at a location close to home or office was a great incentive to take an interactive video course.

Recommendations for improvement were related to technical equipment rather than the instructor. Although significant efforts were made by the consortium’s technical staff to improve the video and audio equipment between the two survey periods, improvements are still needed. Students most often had problems with the audio systems; when it was hard to hear or be heard, it interferes with student learning. Other technical problems should be resolved quickly without undue loss of class time.

## APPENDICES



*Members*

Aurora University  
Benedictine University  
College of DuPage  
DePaul University  
DeVry Institute of  
Technology  
Dominican University  
Elmhurst College  
Illinois Institute of  
Technology  
Illinois State University  
Lewis University  
Midwestern University  
Morton College  
The National College of  
Chiropractic  
National-Louis University  
North Central College  
Northeastern Illinois  
University  
Northern Illinois University  
Robert Morris College  
Triton College  
University of Illinois at  
Chicago

*Affiliates*

Central DuPage Health  
System  
Community High School  
Dist. 94 (West Chicago)  
Community High School  
Dist. 99 (Downers Grove)  
DuPage High School  
Dist. 88 (Villa Park)  
Glenbard Twp. High School  
Dist. 87 (Glen Ellyn)  
Indian Prairie C. U. School  
Dist. 204 (Naperville)  
Leyden Comm. High School  
Dist. 212 (Franklin Park)  
Lyons Twp. High School  
Dist. 204 (La Grange)  
J. S. Morton High School  
Dist. 201 (Cicero)  
Multi-University Center at  
Oak Brook  
Naperville Comm. Unit  
Dist. 203  
Ridgewood Comm. High  
School Dist. 234 (Norridge)  
Riverside-Brookfield Twp.  
High School Dist. 208

*Administrative Director*

Marilyn A. Lester, Ph.D.  
Office: 630.510.0957  
Fax: 630.510.1067  
wspscad@aol.com

DATE: November 2, 1998  
TO: Faculty Teaching Interactive Video Classes  
FROM: Marilyn A. Lester, Administrative Director  
SUBJECT: FALL 98 STUDENT SURVEYS

As part of its continuing research process, the West Suburban Post-Secondary Consortium (WSPSC) is surveying students who are taking interactive video classes. Please help us distribute, collect, and return the enclosed surveys before the end of the Fall 1998 term. Responses are confidential and are coded for receipt purposes only.

Note that there are TWO different surveys in each packet, one from WSPSC and one from a doctoral student at Loyola University studying distance education teaching and learning. Your cooperation with both surveys is greatly appreciated.

This package contains two survey forms for every student at all sites in the interactive video class you are teaching this term. Please deliver or mail the packets to each class site so that you can administer the surveys at all sites simultaneously during one class period. It will take about 10 minutes.

- **WSPSC survey. Do this one first.** Take about 10 minutes of class time to fill out the questionnaire using the machine-readable scoring sheet provided. You must tell student the 5-digit Code Number to fill in - it is located on the printed label on each envelope sent to you. Collect and return the WSPSC survey only to the WSPSC Office using the large postage-paid envelope provided. Do not attach or staple the forms in any way.
- **Loyola University doctoral student survey.** Give each student one survey and one return envelope. You may choose to use class time or have the students complete later and mail it directly to Loyola University using the enclosed postage-paid envelope by **December 15, 1998** (do not return cover letter).

If you have questions or need more copies, call Carol Pawlak at 630-572-1522. The WSPSC survey will be published in Fall 1999; copies will be available upon request. Thank you for your cooperation.

Thank you for taking the time to participate in this student survey.  
Your opinions are important to help us improve student learning experiences.

**INSTRUCTIONS:** Use the enclosed machine-readable form to record answers to questions 1-27. Use a No. 2 pencil and blacken ovals completely.

LAST NAME: Enter WSPSC FALL 98

**ID NUMBER:** Enter the course code number your instructor will give you.

DEPT.: Leave blank

COURSE: Leave blank

**DATE:** Leave blank

**MISC.:** Leave blank

1. The instructor rotated his/her teaching from site to site during the term. T/F
2. Identify your age category:  
A) 24 years old or less B) 25 through 34 C) 35 through 43  
D) 44 through 54 E) 55 or older
3. I have a visual or auditory disability. T/F
4. American English is my first language. T/F
5. This is my first experience in an interactive video class. T/F

**For questions 6-27 indicate the extent of your agreement or disagreement.**

(A) Strongly Agree    (B) Agree    (C) No Opinion    (D) Disagree    (E) Strongly Disagree

6. The size of the class was appropriate to the use of interactive video.
7. I could clearly see the monitors.
8. I could easily hear and understand the instructor over the system (if the instructor was always present at your site, do not answer).
9. I could easily hear and understand the students from the other site(s).
10. I could be heard through the microphone if I wished to speak to the other site(s).
11. Course materials were collected and distributed in a timely manner to facilitate my learning.
12. The use of the fax machine and/or the external telephone in the interactive video classroom was helpful (if these items were never used, do not answer).
13. The use of the auxiliary resources was helpful (such as the document camera, videotaped or computer-based presentations).
14. The person who managed the interactive video system at my site was helpful and effective (if the instructor was always present at your site, do not answer).
15. By the end of the course, I was at ease with speaking and being seen over the system.
16. The quality of interaction between myself and the instructor was sufficient to facilitate my learning.

**Over  $\Rightarrow$**

17. The quality of interaction among the students at my site did not vary significantly, whether the instructor was present or not (if the instructor was always present at your site, do not answer).
18. The quality of interaction among students at my site was sufficient to facilitate my learning.
19. The quality of interaction between the students at my site and the students at the other site(s) was sufficient to facilitate my learning.
20. The interactive video system made it possible for me to experience a greater diversity of students than I might have interacted with otherwise.
21. I had the opportunity in every class session to respond individually to the instructor, if I wished.
22. Individualized communication with the instructor outside the classroom (through regularly scheduled telephone availability, E-mail, etc.) was helpful.
23. Feedback from the instructor was provided in a timely manner to facilitate my learning.
24. I believe that the course material was presented in an effective manner.
25. I believe I learned as much in this course as I would have in a more traditional classroom setting.
26. I would take another class delivered through interactive video.
27. Overall, I had a positive learning experience in this class.
28. What is your overall reaction to participating in a course delivered via interactive video technology and what improvements do you suggest? (Write your answer here.)



WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO  
INSTRUCTION: Results of Two Surveys

Demographic Questions	Term	n=	YES		NO		AGE	AGE	AGE	AGE				
							>25	25-39	40-54	55+				
1 Identify which site you attended most often.														
2 Identify the category that expresses your age.	Fall 96	129					40	31%	59	46%	28	22%	2	2%
	Spr 97	170					37	22%	74	44%	55	32%	4	2%
	Two-term Total	299					77	26%	133	44%	83	28%	6	2%
	Three-term Total	533					76	32%	70	30%	42	18%	44	19%
							153	29%	203	38%	125	23%	50	9%
3 I have a visual or auditory disability.	Fall 96	127	10	8%	117	92%								
	Spr 97	167	13	8%	154	92%								
	Two-term Total	294	23	8%	271	92%								
	Fall 98	235	11	5%	223	95%								
	Three-term Total	529	34	6%	494	93%								
4 American English is my native language.	Fall 96	130	113	87%	17	13%								
	Spr 97	169	150	89%	19	11%								
	Two-term Total	299	263	88%	36	12%								
	Fall 98	236	213	90%	23	10%								
	Three-term Total	535	476	89%	59	11%								
5 This is my first experience in an interactive video class.	Fall 96	131	122	93%	9	7%								
	Spr 97	169	133	79%	36	21%								
	Two-term Total	300	255	85%	45	15%								
	Fall 98	236	166	70%	70	30%								
	Three-term Total	536	421	79%	115	21%								

# WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO INSTRUCTION: Results of Two Surveys

APPENDIX C  
7/1/2000

Survey Questions	Term	n=	Mean	S.D. Median	AGREE		No Opinion 3	DISAGREE		SUMMARY								
					Strongly 5	4		2	Strongly 1	SA + A 5 + 4	D + SD 2 + 1							
6 The size of the class was appropriate to the use of interactive video.	Fall 96	135	3.86	4.02	0.97	32	24%	74	55%	9	7%	18	13%	2	1%	79.4% 13.7%		
	Spr 97	180	3.89	4.02	0.91	41	23%	103	57%	13	7%	22	12%	1	1%			
	Two-term Total		315	3.88			73	23%	177	56%	22	7%	40	13%	3		1%	
	Fall 98	236	4.33	4.61	0.97	132	56%	73	31%	13	6%	12	5%	6	3%		87.0% 8.0%	
Three-term Total		551	4.03			205	37%	250	45%	35	6%	52	9%	9	2%	82.6% 11.1%		
7 I could clearly see the monitors.	Fall 96	135	4.22	4.24	0.74	48	36%	76	56%	4	3%	7	5%	0	0%	91.7% 5.1%		
	Spr 97	180	4.20	4.22	0.75	61	34%	104	58%	6	3%	8	4%	1	1%			
	Two-term Total		315	4.21			109	35%	180	57%	10	3%	15	5%	1		0%	93.0% 4.0%
	Fall 98	237	4.57	4.76	0.73	161	68%	60	25%	7	3%	9	4%	0	0%		92.4% 4.5%	
Three-term Total		552	4.33			270	49%	240	43%	17	3%	24	4%	1	0%			
8 I could easily hear and understand the instructor over the system.	Fall 96	114	3.61	3.88	1.01	15	13%	68	60%	5	4%	24	21%	2	2%	56.2% 39.1%		
	Spr 97	162	2.88	2.48	1.19	8	5%	64	40%	8	5%	64	40%	18	11%			
	Two-term Total		276	3.25			23	8%	132	48%	13	5%	88	32%	20		7%	77.0% 19.0%
	Fall 98	210	3.93	4.17	1.11	76	36%	87	41%	7	3%	37	18%	3	1%		65.4% 30.5%	
Three-term Total		486	3.47			99	20%	219	45%	20	4%	125	26%	23	5%			
9 I could easily hear and understand the students from the other site(s).	Fall 96	133	2.98	3.29	1.12	4	3%	61	46%	7	5%	51	38%	10	8%	37.4% 55.9%		
	Spr 97	180	2.52	2.23	1.07	1	1%	51	28%	14	8%	88	49%	26	14%			
	Two-term Total		313	2.75			5	2%	112	36%	21	7%	139	44%	36		12%	62.0% 29.0%
	Fall 98	237	3.49	3.79	1.21	50	21%	96	41%	22	9%	57	24%	12	5%		47.8% 44.4%	
Three-term Total		550	3.00			55	10%	208	38%	43	8%	196	36%	48	9%			
10 I could be heard through the microphone if I wished to speak to the other site(s).	Fall 96	133	3.53	3.69	0.85	10	8%	70	53%	35	26%	16	12%	2	2%	57.3% 23.6%		
	Spr 97	181	3.29	3.61	1.01	12	7%	88	49%	25	14%	53	29%	3	2%			
	Two-term Total		314	3.41			22	7%	158	50%	60	19%	69	22%	5		2%	78.0% 10.2%
	Fall 98	236	4.02	4.18	1.01	87	37%	96	41%	29	12%	18	8%	6	3%		66.0% 17.8%	
Three-term Total		550	3.61			109	20%	254	46%	89	16%	87	16%	11	2%			

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# WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO INSTRUCTION: Results of Two Surveys

APPENDIX C  
7/1/2000

Survey Questions	Term	n=	Mean	S.D. Median	AGREE		No Opinion 3	DISAGREE		SUMMARY							
					Strongly 5	4		2	Strongly 1	SA + A	D + SD 5 + 4 2 + 1						
15 By the end of the course, I was at ease with speaking and being seen over the system.	Fall 96	130	3.67	3.87	1.03	26	20%	62	48%	17	13%	23	18%	2	2%		
	Spr 97	180	3.68	3.91	1.08	36	20%	92	51%	20	11%	23	13%	9	5%		
	Two-term Total	310	3.68			62	20%	154	50%	37	12%	46	15%	11	4%	69.7%	18.4%
	Three-term Total	Fall 98	235	4.06	4.41	1.15	111	47%	69	29%	22	9%	24	10%	9	4%	76.0%
		545	3.80			173	32%	223	41%	59	11%	70	13%	20	4%	72.7%	16.5%
16 The quality of interaction between myself and the instructor was sufficient to facilitate my learning.	Fall 96	133	3.58	3.80	1.04	21	16%	65	49%	22	17%	20	15%	5	4%		
	Spr 97	176	3.82	4.02	1.06	47	27%	85	48%	15	9%	24	14%	5	3%		
	Two-term Total	309	3.70			68	22%	150	49%	37	12%	44	14%	10	3%	70.6%	17.5%
	Three-term Total	Fall 98	236	4.29	4.59	0.99	129	55%	72	31%	16	7%	13	6%	6	3%	85.2%
		545	3.90			197	36%	222	41%	53	10%	57	10%	16	3%	76.9%	13.4%
17 The quality of interaction among the students at my site did not vary significantly whether the instructor was present or not.	Fall 96	118	3.53	3.78	1.05	17	14%	58	49%	18	15%	21	18%	4	3%		
	Spr 97	152	3.38	3.74	1.21	21	14%	72	47%	18	12%	25	16%	16	11%		
	Two-term Total	270	3.46			38	14%	130	48%	36	13%	46	17%	20	7%	62.2%	24.4%
	Three-term Total	Fall 98	214	3.88	4.13	1.17	76	36%	84	39%	18	8%	24	11%	12	6%	74.8%
		484	3.60			114	24%	214	44%	54	11%	70	14%	32	7%	67.8%	21.1%
18 The quality of interaction among the students at my site was sufficient to facilitate my learning.	Fall 96	134	3.87	3.95	0.74	20	15%	85	63%	20	15%	9	7%	0	0%		
	Spr 97	179	3.92	4.01	0.84	36	20%	109	61%	20	11%	11	6%	3	2%		
	Two-term Total	313	3.90			56	18%	194	62%	40	13%	20	6%	3	1%	79.9%	7.3%
	Three-term Total	Fall 98	233	4.25	4.41	0.88	108	46%	93	40%	18	8%	11	5%	3	1%	86.3%
		546	4.01			164	30%	287	53%	58	11%	31	6%	6	1%	82.6%	6.8%

# WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO INSTRUCTION: Results of Two Surveys

APPENDIX C  
7/1/2000

Survey Questions		Term	n=	Mean	S.D. Median	AGREE		No Opinion	DISAGREE		SUMMARY	
						Strongly 5	4	3	2	Strongly 1	SA + A 5 + 4	D + SD 2 + 1
19	The quality of interaction between the students at my site and the students at the other was sufficient to facilitate my learning.	Fall 96	133	3.08	3.12	8	46	33	41	5	49.4%	31.4%
		Spr 97	179	3.29	3.62	15	85	27	41	11		
		Two-term Total	312	3.19		23	131	60	82	16		
		Three-term Total	545	3.38		71	88	31	35	8		
						94	219	91	117	24	68.2%	18.5%
											57.4%	25.9%
20	The interactive video system made it possible for me to experience greater diversity of students than I might have otherwise.	Fall 96	133	3.12	3.16	14	41	34	35	9	46.5%	32.2%
		Spr 97	181	3.25	3.51	23	68	33	45	12		
		Two-term Total	314	3.19		37	109	67	80	21		
		Three-term Total	546	3.30		61	73	37	47	14		
						98	182	104	127	35	57.8%	26.3%
											51.3%	29.7%
21	I had the opportunity in every class session to respond individually to the instructor if I wished.	Fall 96	131	4.00	4.07	32	78	11	9	1	82.7%	9.6%
		Spr 97	181	3.96	4.09	50	98	13	16	4		
		Two-term Total	312	3.98		82	176	24	25	5		
		Three-term Total	545	4.07		132	57	19	19	6		
						214	233	43	44	11	81.1%	10.7%
											82.0%	10.1%
22	Individualized communication with the instructor outside the classroom (through regularly scheduled telephone availability, e-mail, etc) was helpful.	Fall 96	127	3.35	3.29	10	40	63	12	2	52.5%	7.6%
		Spr 97	176	3.73	3.77	32	77	58	5	4		
		Two-term Total	303	3.54		42	117	121	17	6		
		Three-term Total	534	3.76		110	67	43	11	0		
						152	184	164	28	6	76.6%	4.8%
											62.9%	6.4%

# WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO INSTRUCTION: Results of Two Surveys

Survey Questions	Term	n=	Mean	S.D. Median	AGREE		No Opinion 3	DISAGREE		SUMMARY SA + A D + SD 5 + 4 2 + 1					
					Strongly 5	4		2	Strongly 1						
23 Feedback from the instructor was provide in a timely manner to facilitate my learning	Fall 96	134	3.55	3.78 1.03	18	13%	68	51%	25	19%	16	12%	7	5%	74.2% 12.1%
	Spr 97	180	3.97	4.06 0.88	46	26%	101	56%	18	10%	12	7%	3	2%	
	Two-term Total	314	3.76		64	20%	169	54%	43	14%	28	9%	10	3%	
	Three-term Total	547	3.98		132	57%	79	34%	12	5%	9	4%	1	0%	
					196	36%	248	45%	55	10%	37	7%	11	2%	81.2% 8.8%
24 I believe the course material was pre-sented in an effective manner.	Fall 96	134	3.84	3.95 0.81	22	16%	82	61%	17	13%	13	10%	0	0%	80.5% 10.5%
	Spr 97	179	3.93	4.06 0.96	44	25%	104	58%	11	6%	14	8%	6	3%	
	Two-term Total	313	3.89		66	21%	186	59%	28	9%	27	9%	6	2%	
	Three-term Total	544	4.04		134	58%	65	28%	15	6%	11	5%	6	3%	
					200	37%	251	46%	43	8%	38	7%	12	2%	82.9% 9.2%
25 I believe I learned as much in this course as I would have in a more traditional classroom setting.	Fall 96	133	3.22	3.57 1.21	17	13%	53	40%	16	12%	36	27%	11	8%	58.8% 31.6%
	Spr 97	180	3.49	3.85 1.31	45	25%	69	38%	14	8%	34	19%	18	10%	
	Two-term Total	313	3.36		62	20%	122	39%	30	10%	70	22%	29	9%	
	Three-term Total	544	3.59		116	50%	62	27%	14	6%	27	12%	12	5%	
					178	33%	184	34%	44	8%	97	18%	41	8%	66.5% 25.4%
26 I would take another class delivered through interactive video.	Fall 96	134	3.39	3.70 1.16	18	13%	61	46%	21	16%	23	17%	11	8%	60.2% 23.6%
	Spr 97	180	3.48	3.78 1.27	38	21%	72	40%	30	17%	18	10%	22	12%	
	Two-term Total	314	3.44		56	18%	133	42%	51	16%	41	13%	33	11%	
	Three-term Total	542	3.63		119	52%	54	24%	18	8%	17	7%	20	9%	
					175	32%	187	35%	69	13%	58	11%	53	10%	66.8% 20.5%
27 Overall, I had a positive learning experience in this course.	Fall 96	134	3.69	3.89 0.99	21	16%	76	57%	18	13%	13	10%	6	4%	76.7% 12.8%
	Spr 97	179	3.91	4.07 1.03	49	27%	94	53%	15	8%	12	7%	9	5%	
	Two-term Total	313	3.80		70	22%	170	54%	33	11%	25	8%	15	5%	
	Three-term Total	538	3.95		122	54%	64	28%	18	8%	13	6%	8	4%	
					192	36%	234	43%	51	9%	38	7%	23	4%	79.2% 11.3%

**WHAT STUDENTS SAID ABOUT INTERACTIVE VIDEO**  
**INSTRUCTION: Results of Two Surveys**

Survey Questions	Term	n=	Mean	S.D. Median	AGREE Strongly 5	4	No Opinion 3	DISAGREE Strongly 2	SUMMARY SA + A D + SD 5 + 4 2 + 1
<b>AGGREGATE RESULTS - All questions overall score</b>									
Fall 96 and Spring 97		318	3.62						77.0% 13.0%
Fall 98		236	4.13						80.0% 11.0%



**Question 28: What is your overall reaction to participating in a course delivered via interactive video technology and what improvements do you suggest?**

983481

8. At first I was uneasy, but it worked out well and we learned the material presented and met the objectives of the program.
9. I really think it is an unpleasant experience. I did not enjoy it at all - I always felt as though someone was looking over my shoulder. Only because this is a required course (and I did not know it was interactive video beforehand) did I take it. The time was also very inconvenient.

983151

1. I think that there is more participation and that you become more disciplined by this format. You pay attention more and overall it's a great experience, bringing difference and change to the normal classroom.
2. It was interesting. It's just like regular classroom except t.v. replaces flesh.
3. I Think the experience was very similar to a regular classroom. There is nothing that I would change.

983332

1. I truly enjoy having this available. I would not have been able to enroll in this class if I would have had to drive to [location]. The change that I would make would be that students be able to suggest or request a class to be I.T.V. That would help me personally.

983071

1. I missed the in person contact with all the students. Adjusted to the camera better than I thought I would. Learning equal to regular classroom.
2. Not my first choice but will take if it's the only option for the course I want to take.
3. When it was working, the interactive video technology was an effective method for conducting a course. However, in the few occasions that there were either video or audio difficulties, it was frustrating that it took so long to get underway.

983311

1. I had a lot of fun in this class. It was my favorite class all quarter. [Name of instructor] is a very knowledgeable instructor and he made the class a blast!

983701

1. Room at [location] needs to be set up better for the video classes.
2. Audio system needs improvement - we often had a feedback loop that caused a "static" sound. I thought that I would not like the interactive video course, I was pleasantly surprised by its effectiveness. The two shorter sessions each week rather than one 3 hour class added to my acceptance of this class.
3. Allow viewing of either local or remote site on all monitors.
- 4.



**Question 28: What is your overall reaction to participating in a course delivered via interactive video technology and what improvements do you suggest?**

5. I'm not crazy about interactive video courses, but I guess that's the future. More speakers and microphones!

983482

1. I think it is great, if it saves me travel time + makes class more convenient.
2. I enjoyed the class very much.

983143

1. Actually, I can honestly say that this class was the best class I have experienced in my college career. Nothing should be changed, except if heat cold classrooms.
2. I love it! It is totally my style. I purposely dropped an over crowded ("regular") class to be here. Kudos. A+.
3. No improvements as of yet. Teacher taught effectively and I enjoyed the class.
4. A positive one. There is no need for improvement.

983141

1. Individual microphones.
2. This course was an excellent way to take a class. A lot of it was due to presentation by the instructor. A previous class, biology, was not productive because the instructor was not very good at presenting the material or interacting with the students where he wasn't present at the site.
3. Sounded interesting, different. Liked being able to complete a course more quickly.

983072

1. My overall reaction is a positive one. Any technical difficulties were overshadowed by the convenience of this format.
2. I have a very positive impression of such technology. No suggestions for improvement.

983162

1. The experience was very positive - I learned a lot. The only possible improvement would be to have better knowledge of the use of the Elmo.
2. The technology really didn't have any bugs. Teacher was great. I loved the class.

983432

1. Overall, it was a surprisingly good experience. Perhaps the instructor could be a bit more aware of the off-site students answering questions- there is a time delay in the audio - both ways + allowances need to be made to allow the site hear the question - then at other for the student's response.
2. I liked the class + can see no improvements that need to be made. However, the clarity of sound can always be improved.
3. Any opinions I would have for improvement have nothing to do w/ interactive video. It would be nice if the instructor had the freedom to move about freely.
4. It was a truly unique and eye opening experience, I would, however, dissuade any

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acquaintances of mine from taking a course in this style.

983262

1. I did not know the class was going to be interactive, so when I walked in I was immediately disappointed. Eventually, I got used to it. [Name of instructor] did a great job communication with the remote site, and using the equipment.
2. Larger screens -> Can't see all the time (unless in front row)
3. Larger screens would be helpful!
4. Did not like this type of class environment. Hard to interact when [instructor] is not in classroom.
5. Generally, positive, I found the monitor of my class to be distractive [sic].
6. Teams that contained members of both classes would be interesting.
7. I'll always avoid it if possible – but will take an interactive video class if no others available.

983162

1. I like the people here & I love [name of instructor], but I really don't like the video format.
2. I did not like it and, if possible, will avoid taking a course with interactive video. This opinion has nothing to do with the effectiveness of the instructor and had everything to do with the "inter-active" video setting.

983212

1. Good course overall. Would have liked to experience other form of DE delivery more frequently ( ie - web-based, audio conferencing)
2. I learned new technologies; the experience was enjoyable + made me more enthusiastic about distance education.
3. The room layout was poor.

983211

1. I found the setting to emulate being in the classroom with the other people. The only difficulty was when work groups were assembled and used the video equipment it felt unnatural and pressured.
2. Compressed video requires quite a bit of expertise in lighting and other video techniques in order to make the people at the other site seem real. That isn't something that every instructor can be expected to pick up. Making effective video is a profession!
3. Better camera placement. Better layout of the rooms especially at [name of location]. Improvements to the room lighting. Involve the students more in the operations of the system to free the instructor to teach.
4. Do not have the instructor run the system. Always have a student do it. This would free up the instructor to teach.
5. Generally, it's not bad although it's new to me. I like the instructor's variety of ways to present materials.
6. Overall, I found this to be a positive experience for me. But, I believe that what level of

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interest and commitment also can have an effect on any learning experience. This is the second class I've taken by this method, and it is definitely improved by the technical qualities.

983081

1. It was interesting and gave me a better grasp on the effectiveness and capabilities of technology.
2. I think it's a great idea. It's not your typical classroom environment so it makes the class interesting. I really have no suggestions because as of now there is nothing to improve.
3. It was something new that I have never experienced before.
4. I thought it was a good learning experience and a refreshing change from everyday classrooms.

983222

1. Is ok for certain classes that the book is a good resource. Classes that require interactive dialogue to facilitate learning would be poor choices. i.e. stick to basic courses or have instructor teach at both sites every other time.
2. The program has to be very structured (pass out overheads or handouts in advance). The instructor not coming to one of the sites is a huge factor. The interaction is important during onsite lectures.

983081

1. It was o.k., It wasn't anything exoroducy [sic]. Every once in awhile we would have some technical difficulties.
2. This course was different than all the others that I have taken.

983261

1. Overall, I do not like video technology. There are too many problems that happen during the class; such as not being able to understand the instructor at the other site (poor volume) and the extra noise the microphones pick up. I have 3 classes with video technology and there were the same problems with each class.
2. I believe that having an interactive class via video is a very helpful way to learn but the clarity over the T.V. was not very good. However, having the videotapes to refer back to or substitute for a live class sitting when needed did help my grade.
3. I personally felt uncomfortable. I was not used to the new environment. Class interaction was limited. It's a new concept that is going to take some time to get used to.

983283

1. Enjoy it to prevent me from having to travel. Provide more microphones.
2. Any technical problems experienced are trivial in comparison with the convenience of saving an hour's drive.

983061

1. I will never take another class by interactive video again, if there's any possible way to avoid it. Seeing our class on the monitor was distracting, the sound quality was not

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satisfactory for my needs, repeated technical difficulties were burdensome, there were far too many people in this small room, it was always stuffy (& usually too warm), and not having the instructor presented problems with getting materials and assignments. This classroom provided a most unsatisfactory experience.

2. If the quality and reliability of interactive video technology for this course were balanced against tuition rates - I and my classmates would deserve a refund. Interactive video may enhance the reach of [Name of school] , but it does not, in my opinion, embrace the "interactive" communication which is so important to classroom dynamics. Given the choice, I choose to never take another interactive tv course at [Name of school]. The "interactiveness" [sic], like the screen, is flat.
3. Small classes are imperative for distance learning. Limit to 10 or 12 per site. Suggest fixing technical problems before future classes are offered.
4. Very good. There were some minor glitches due to using a new sight. I would have like to have more discussions with/between students.
5. I will avoid taking one of these classes again if at all possible. I do not even recognize all of my classmates because I've been looking at the backs of their heads for 14 weeks. I hated looking at a sheet of paper on the overhead on the monitor for hours on end. There was definite friction between the 2 classes. We presented earlier "just in case" the system went down. I resented not seeing the other teacher each week, I feel cheated. The course content was great - the rest was awful. The classroom was hot and cramped and uncomfortable!
6. I did not like it. There was way too time wasted determining if there was sound or picture. We could not clearly hear students on the other side. It was not interactive - it was watching fuzzy people and sound on t.v. for 3 hours! When the instructor was not in our class there was no interaction between our class and the instructor. I feel that I only received ½ of the course that I paid for. I will go out of my way to avoid taking another distance learning class. When the instructor used the "Elmo" we saw no instructor, no human contact, just stared out an overhead- very boring!
7. There should have been more testing and perfecting before this system was used in classrooms. Before sucking the \$ out of as many students as possible [Name of school] should have taken into consideration that the "unperfected" technical problems can be very distracting and not worth [amount] a class, I had 2 classes this way and if I can help it, I will NEVER take another.
8. They were 2 separate classes, not one. It would be better if we didn't have to look at the monitor of ourselves. Put a small monitor on the techie's [sic] table.
9. I think that the interactive video class leads itself well to a class which is based on discussion, provided the bugs we eliminated. An improvement could be in the seating arrangement. Rather than having us sit in rows, discussion might be more forthcoming if we sat around a table so we could face each other while also having us be on camera. It might be better if we did not have a monitor showing our site, because it can be very distracting. We should probably have that monitor turned off, so that we can only see the

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other site.

10. I enjoyed the class. I wish our presentations were video taped (I.e. when we gave our oral presentations). By video taping we could hopefully improve our oral presentation skills, that is, if we watched the tape we could see what was good and what needed improvement.
11. I feel it is acceptable, but I would prefer to have the teacher present at each class session. In the class I took, there were LOTS of problems with transmission and it was very frustrating.

983202

1. It was fine but I would have preferred being in same class. Would have liked more interaction with other site students. We did get together twice though and felt comfortable.
2. It was ok , it did not bother me by the middle of the class. I really was not excited about it in the beginning.
3. I thought it was great! An excellent experience.
4. I liked the fact that I could go to [location] not [location]. But I didn't really like the distance ed. I was never very comfortable speaking in class.

983201

1. Other site did not have good microphones.
2. Some what slower then conventional classroom instruction. Not able to hear and understand speakers from remote site at times. Single full time facilitations [sic] at local not having the instructor present would be helpful.
3. Speaker system at other site [location] was very inadequate. Speed of getting attention when speaking, and getting focused on was slow.
4. Some mike problems on [location] Activity level of students always higher when instructor present at site.

983273

1. It is difficult to engage in class discussion because there can be confusion when other students try to speak, when live tried to speak. Also, the audio can be a problem. Overall, video distance learning is not effective for engaging in class interaction and discussion.

983272

1. Very pleased and will continue to take classes this way.
2. We had 2 nights the system was down and we used a phone. A third night we used a different site.

983271

1. If the equipment is working properly, interactive video is efficient.
2. I enjoyed it except for a few technological difficulties. Seeing myself on video was hard at first but became more normal.
3. I don't think the fact that this course was given via interactive video helped or hurt the

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course. The only drawback was in occasional variations in sound quality. For instance, one night anyone speaking from [location] seemed incredibly loud, while we could barely hear [sic] our instructor from [location] (We in [location] couldn't hear [instructor], that is)

983062

1. Please make sure that the technology is working. The [location] was a joke. How many technical problem were there? The [location] site was far superior. And the chairs were comfortable. [smiley face]
2. Bring the course to [location]! We loved the convenience of the location even better than [home location]!
3. When the technology works it's great- However, many kinks need to still be worked out at the [location].
4. Became more comfortable with it throughout the term. Just unfortunate we had to keep switching sites.

983361

1. Overall, the [name of class] was very good. I did not realize at first that I was getting into an interactive course and was intimidated by the video equipment. Yet over time, I found it to be in fact, very helpful for such a course. I did find one problem. One of the other small classes did not have a proctor. They abused use of their equipment by muting themselves frequently which took away from the participating atmosphere.
2. Class was well organized and I learned a lot. Confusing when answering instructor's question - should we look at monitor or teacher. Overall, a great experience.
3. That everyone was as nervous as I was. We all had the same fears of speaking and how to present a speech without memorization. [Name of instructor] helped us out a lot. This was a more impersonal class. More relaxing - more tentative. I would do it again. Thank you.
4. Participating in this course gave me the opportunity to feel comfortable when presenting material. The only thing that made me a little nervous was that I was seeing myself on tv. Overall I believe the course was good.
5. I liked very much this type of class. I had an opportunity to experience a greater diversity of students there in traditional classroom, without feeling overcrowded. At the same time I had a lot of individual time I could spend with my instructor, during class or through the e-mail during a week. It's really a good idea to have courses via interactive video technology.
6. The surround sound had to be improved.
7. The clarity of the sound from the other schools could be improved. When the students speak, their voices break a lot. Other than that I enjoyed the class greatly. It really helped me overcome being uncomfortable speaking in front of others.
8. I actually enjoyed the new experience of being taught this way. Hopefully I can experience it again sometime.



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983363

1. The class was very enjoyable for me. However, I enjoy speaking publicly, so the fear that some students feel was not a factor for me.

983362

1. I was surprised by the format- this was my first experience. It was very well done and the equipment was well handled and operated. The structure of the course was very good and, for me better than the traditional scheduling as far as timing in [unreadable] time in class. I enjoyed it immensely and look forward to future offerings.
2. I believe the class was taught in a slower pace, which was toward my benefit. I also believe that for a [name of class] this is less nerve wrecking than if I was just in front of a class reading. I would definitely take an interactive video class again.
3. Everything is ok! It was a nice experience . I loved this class! The instructure [sic] was great!
4. There were a few instances of equipment failures, audio or visual outages, but communication was restored quickly. I felt as if the instructor was present and the class at my site was orderly and professional, I would consider taking another telecourse.
5. It's great, but I would have preferred that the instructor had come to our site more than once. The lighting at our site needs to be addressed.
6. Currently, I have taken three courses via interactive video. Of these courses, the only problems that I have encountered have been relatively small. The problems are as follows: Technical problems (few and far), audio problems, Inconsiderate classmates, least amount of info in class [Name of class]
7. Offer more courses in this manner (distance learning)
8. Offer more distant learning classes.

983322

1. It was an acceptable experience. It all depends on the quality and teaching methods of the teacher.
2. More timely turn on. That way we don't loose so much class time.
3. No other than being in a regular classroom.

983321

1. Only audio improvements @ this point; certainly DVD is in your future.
2. Less control of class as a WHOLE. Otherwise, everything else was fine.
3. It was terrible! Time was wasted every class period. The sound, visual everything gave me a headache. The instructor and helper were great but the system is very distracting and did not allow for good learning.

983434

1. Quality of sound definately [sic] needs work. Almost every pd., approx. 20-30 min. at the beginning of class was devoted to audio problems. This didn't improve as the quarter progressed. 3 ½ hrs. of static every night is very unpleasant. This is my 1<sup>st</sup> interactive

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class and I definatly [sic] won't take another. I feel like I learn more from the hands- on interaction w/ instructor and other students. I felt very detached from the class every week, and found it difficult to stay focused while staring at a blurry screen. And all of that static is really not conducive to a good learning environment.

2. I like the via interactive video technology. However, the difficult time with hearing what was being said kind of made things irratible [sic]. But I able [sic] to get through though times.

983451

1. Sound is rather bad and students forget we can hear.
2. Always make sure the equipment.
3. It was annoying when things would go wrong and we had to get through all the material.
4. A lot of time was wasted trying to fine tune the video technology. However, the teacher was wonderful and made up for these little annoyances and irritations. Yeah! For [Name of teacher]
5. If I had to watch the instructor via video I don't think I would have learned as much.

983111

1. There weren't enough students at the other site. The schedules conflicted between schools.
2. It was good!
3. Coo foo! [sic]
4. Good times. Things were great! I learned a lot.
5. The class was extremely help. [sic] The other school could of had more students but the technology was very impressive.



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