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Jennifer R. Horton
Old Dominion University

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A STUDY TO DETERMINE THE EFFECTIVENESS OF INSTRUCTION IN A
NURSING CLASS AT SOUTHWEST VIRGINIA COMMUNITY COLLEGE
THROUGH DISTANCE LEARNING OR "LIVE" ON SITE INSTRUCTION

A Research Report Presented to the Graduate Faculty of the
Department of Occupational and Technical Studies at
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For Partial Fulfillment of the Requirements for the
Masters of Science in Occupational and Technical Studies Degree

By
Jennifer R. Horton
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APPROVAL PAGE

This research paper was prepared by Jennifer R. Horton under the guidance and direction of Dr. John M. Ritz in OTED 636, Problems in Occupational and Technical Studies. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Master of Science in Occupational and Technical Studies Degree.
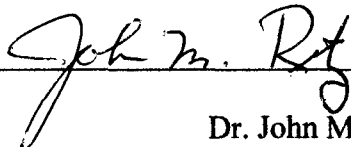
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Dr. John M. Ritz
Advisor and
Graduate Program Director

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CHAPTER I

INTRODUCTION

The importance of the use of distance learning, as an instructional delivery system, has interested many. There have been concerns among the Humanities Department, with administrators and faculty, at Southwest Virginia Community College, concerning the "finished product" of students who use distance learning as their primary means of instruction. "Live" instruction on the other hand has been viewed as the more traditional classroom. With "live" instruction, there appears to be a reduction in the concerns of the faculty and administrators with student outcomes. Distance learning is a tool now used to recruit students who would not otherwise be able to attend class. Using distance learning and live instruction, there are many advantages and disadvantages. It is often difficult to predict student's response in different instructional settings, including distance learning and live instruction. Several questions have been raised comparing distance learning to live instruction, and the positive or negative impacts on student's perception of the effectiveness of such instruction. With these two types of instruction, it is often difficult to predict which group would be better prepared in their field of study.

A main concern that administrators and faculty have concerning total distance learning instruction would be the fact that instead of an actual lecturer present in the classroom, there is only a site facilitator. A site facilitator is one who is not trained in the subject area being taught. They are placed at the site to oversee that all operates smoothly. Responsibilities include proctoring exams, collecting homework assignments,

and monitoring the learning environment. One thing to keep in mind is that although

there are concerns with distance learning instruction, students continue to enroll in its

programs.

Live instruction has been viewed as the more traditional type of instruction. This

type of classroom contains a lecturer (one who delivers the material in class). The

responsibilities of an in-class instructor portraying material to their students are almost

limitless. Lecturers have it within their means to make sure that their students are

retaining knowledge during class. Also, with in-class assignments, the instructor may

"see" for themselves the progress of their students.

Administrators and faculty feel that if equally integrated, distance learning and

live instruction could enhance educational standards. With distance learning instruction,

students are able to come to a class that would not ordinarily be offered at their

institution. This would account for an increase in student's knowledge.

Some of the advantages in distance learning education would be the fact that a

student could enroll to take a course at a distant site that otherwise would not be offered.

This could in fact enable the student to graduate earlier than expected. Another

advantage is that it saves the college money because the instructor can actually teach at

two different sites at the same time.

A disadvantage in distance learning instruction would be the fact that there is the

absence of an actual instructor in the classroom. Another possible disadvantage would be

the fact that a student would have to have Internet and fax access in order to get their

homework assignments in on time. (Students use of proper technology is not a drawback.

It would be the gaining of "free" access that could present a disadvantage.)

The primary advantage of "live" instruction is the fact that an instructor is present in the classroom. Students feel assurance in that they have the means to go to their instructor if they so desire. Another advantage would be that instructors can chart the progress of a student visually. An instructor can tell a lot by looking at facial expressions of their students.

A possible disadvantage would be that a student could become too dependent on the instructor. They feel unsure unless the instructor takes them through a step-by-step guide of homework assignments, etc. It should be an instructor's goal to aid the student in avoiding this dependency.

Investigating both distance learning and lecture-based instruction becomes a way to help the faculty better serve a variety of students. Equally integrating distance learning use and live instruction has interested many at Southwest Virginia Community College (SVCC). The opportunity to conduct this investigation was encouraged by SVCC administrators and faculty.

Statement of the Problem

The problem of this study was to determine the effectiveness of instruction in a Nursing class at Southwest Virginia Community College through distance learning or "live" on site instruction.

Research Goals

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This study analyzes how well students respond to distance learning instruction in the Nursing class at SVCC as the transmit site and Virginia Highlands Community College as the receive site. This study also analyzes the outcome of the effectiveness of staff training for distance learning instruction, and its impact on student development. Equally integrating distance learning and live instruction had several underlying problems in which few had the solutions. This research explores many factors that have profound effects on using distance learning or live instruction across the curriculum. These factors are:

1. Does a change in distance learning instruction to "live" instruction have a positive or negative impact on the effectiveness of instruction in relation to student development?

2. Does a change from distance learning instruction to "live" instruction provide for greater academic success?

3. Does a change from a "live" Nursing course to a distance learning course reduce attendance problems?

4. Does successful implementation, and technology used in program development, have an impact on student achievement in distance learning courses?

Background and Significance

Southwest Virginia Community College is located in Tazewell County, Virginia. Students at SVCC in a nursing class were studied over the course of one semester. Administrators and faculty members were interested to know if distance learning

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instruction had a positive or a negative impact on the overall effectiveness of instruction. SVCC was interested in the results of this research and using it to improve the quality of distance learning instruction. The impact that a "live" instructor would have on students in a classroom versus distance learning technology as an instructor were of concern.

The study was conducted in a Nursing class at SVCC as the transmit site. The distant site that was observed was at Virginia Highlands Community College (VHCC) located in Abingdon, Virginia, which was fifty miles from SVCC. The problem of this study was to determine if distance learning instruction or "live" instruction had a positive or negative impact on student development.

There have been many concerns with distance learning instruction on the part of some administrators, faculty, and students. Administrators were interested to know which type of instruction was an accurate indicator of future success. Faculty at SVCC were interested to learn if distance learning instruction versus "live" instruction were indicators of greater academic achievement. Faculty and administrators were interested to find if distance learning courses had a higher level in attendance reduction. Students concerns stemmed from reception not being held to high standards. Students found that it was difficult to see and hear the instructor at the receive site. This problem in reception caused students to miss parts of lecture and homework assignments.

The study displays a tentative framework of answers for the administrators and faculty at SVCC and VHCC. This study represents the importance of distance learning being structured to be as convenient and economical as possible for students. As a result from this type of structuring, both community colleges could see a rise in Full Time

Equivalent students.

Limitations

Several limitations must be considered when discussing the findings and suggestions of this study. These limitations were that:

1. This study was limited to one Nursing class.

2. This study was limited to SVCC as the transmitting site and to VHCC as the receiving site.

3. The effectiveness of instruction in all sections of Nursing at SVCC were not studied.

4. This study takes place over a period of one semester.

5. This particular Nursing class was only offered as a distance learning course in the summer of 2000.

6. This study was limited to one classroom instructor at the transmitting site, SVCC, and the site facilitator at VHCC.

Assumptions

Assuming several factors were in place, the researcher can then suggest several alternatives in studying the learning environment of distance learning and traditional live instruction classrooms. These assumption include:

1. The facilitator in the distance learning classroom was trained in the proper use of technology that he/she was attempting to use within the class.

2. The curriculum was designed for specific Nursing classes.

3. Distance learning classrooms and "live" instruction classrooms used personal

computer systems as a means of transmitting and receiving material learned in

class.

4. The Internet was accessible on the computers at both sites.

5. Students' primary reason for being in class at both sites was to learn

Nursing.

Procedures

Research data were collected from students at SVCC and at VHCC. Data were

also collected from the Nursing instructor at the Southwest site as well as the facilitator

at the Virginia Highlands site. The data were collected through the use of surveys that

were distributed to both sites. The respondents answered questions concerning their

perception of distance learning use and its impact on instructional effectiveness. The

surveys answered questions regarding attendance problems in the distance learning

classroom. This survey data provided an examination of the major differences in regard

to distance learning use versus live instruction. A review of these two major types of

instruction included informal observations of the classroom site at Southwest, the

equipment used to transmit the lecture, and an informal interview of both the instructor

at Southwest and the site facilitator at Virginia Highlands. This review took place in the

summer semester of 2000, at SVCC and VHCC.

Definitions

The following terms are provided to assist the reader:

1. Distance learning - -Televised classroom instruction provided at a distant site.

2. Instructor- - One who is qualified through education or training to teach in a certain subject.

3. Facilitator- - One who is trained in the appropriate use of the distance learning classroom.

4. Student Development- - Progress of students at both the transmitting and receiving sites.

5. Integrating- - Refers to the process of including both distance learning and lecture-based instruction equally in education.

6. Virginia Highlands Community College- - VHCC, a college located in Abingdon, Virginia; they are the receive site for this study.

7. Distance Learning Classroom- - A classroom equipped with the necessary technology to transmit lectures to a receiving site.

Overview

Chapter I addresses the issue of whether or not distance learning produces effective student development. This issue is important at SVCC because of the concerns by administrators and faculty. The survey response and observation data were compared to illustrate how distance learning use impacted students who were traditionally accustomed to "live" instruction.

In Chapter II, other source material and research are reviewed. This subject raises a variety of different opinions. The review of existing literature is imperative for this study. Chapter III ventures into outlining the procedures used to accumulate data, while Chapter IV interprets the new information and data discovered. Finally, Chapter V summarizes the research study and considers recommendations.

CHAPTER II

REVIEW OF LITERATURE

One of the most significant trends in the educational marketplace is the rapid growth in distance education programs (Mowen and Parks, 1997). Findings from various studies have shown that distance education students perform as well or better than the more traditionally taught students. Advances in telecommunications are making possible an expansion of educational offerings beyond the traditional campus (Gatliff and Wendal, 1998). Distance education and the technology that supports it can be a feature that faculty and students either adopt or reject. Technology is a very important part of distance education. However, the emphasis must be placed on the students instructional needs rather than the technology.

"Student satisfaction is critical to the success of tele-education programs because positive attitudes directly influence a variety of important student-and-program related variables" (Biner et. al, 1997). These variables include the learners life circumstances and institutional factors. Student attitudes will vary regardless of distance education or traditional live lecture, because of their individual learning needs.

The problem of this study was to determine the effectiveness of instruction in a Nursing class at Southwest Virginia Community College through distance learning or "live," on site instruction. The literature reviewed for this chapter includes: (1) Research into the effectiveness of distance education instruction, (2) Attendance problems between distance education students and traditionally taught students, (3) Successful

implementation of distance education programs, (4) and Summary.

Research Into the Effectiveness of Distance Education Instruction

Successful distance learning programs are not meant to be isolated in nature or as means of replacement for the classroom teacher. The two, together, are meant to further enhance the curriculum (Larson and Bruning, 1996). Researchers have challenged the designers of satellite-based, distance learning courses to go beyond the usual "tele-lecture" format. The instructional medium should be used to make the instruction more interactive and interesting to students (Larson and Bruning, 1996).

According to Larson and Bruning (1996), the findings from a study concerning instruction in a distance learning and traditional live lecture math course were both effective in nature. In the distance learning classroom the students found that the visual projection of the course, practical applications, the opportunity to work together, and the fact that this type of classroom instruction broke up the monotony of a typical classroom, all contributed to student interest and achievement. A traditional math course did not have this level of variety. On the other hand, students, if given a choice, would prefer regular classroom instruction as compared to satellite. A main reason of why students prefer regular classroom instruction is based on the lack of flexibility and spontaneity that characterizes satellite-based instruction. The findings from this study indicate that the collaborative satellite distance learning format is an effective instructional delivery method for mathematics. This same type of instruction is also effective for teaching foreign language at a distance (Larson and Bruning, 1996).

Another feature that would facilitate the effectiveness of distance education is educators being concerned with providing a high quality educational experience that would result in independent and self-reliant learners. Communication should be carefully integrated into the distance program to provide for quality assurance. "The philosophy behind this technique is that developing the learner's ability to question the very pedagogy and the very system of communication will promote learner confidence and independence as well as maximize the student's time with the teacher" (Vaughan, 1996).

Problems in Distance Learning and Traditional Lecture Classrooms

Instructional materials and the technology used to deliver lectures are contributing factors to attendance problems and drop-out rates in distance education. Attendance problems may also stem from distance learners experiencing less opportunity to interact with the instructor. Absence of the social and interactional atmosphere from the traditional "live" classroom may also contribute to low attendance rates (Abrami and Bures, 1996). Another source that could be a direct concern of attendance problems in distance education is "...linked to technology that has surfaced in some students comments about frustration resulting from equipment design or function problems, such as poor sound, or an inability to see or speak with the instructor" (Reid,1996).

Also, current distance education methods may encourage students to retain knowledge on a lower level. "Without interaction with peers, learners at a distance have few if any opportunities to experience complex problem solving in a collaborative

environment" (Abrami and Bures, 1996). These drawbacks cause students to fail to develop interpersonal skills that are necessary for professional careers.

Distance education practices need to be improved to enhance educational outcomes, such as higher achievement levels, more cognitive and interpersonal skills for students, and motivation for distance education students to be self-directed learners. "One way to achieve these objectives is to increase the overall amount and kind of learner interaction with the instructor, with peers, and with course content" (Abrami and Bures, 1996).

A relatively large study was conducted at a university that had twenty-thousand students enrolled. The subjects were representatives of distance education students. Forty-five of the students participating in this investigation (15.6% of the overall sample) "attended" their classes alone at a given site. These students exhibited the highest performance in their course work. Socially non-intimidating, and anxiety free atmospheres, at the smaller sites were conducive to student attendance (Abrami and Bures, 1996).

Successful Implementation of Distance Education Programs

A main concern of distance educators is providing a high quality educational experience for students. A goal that all distant educators should have for successful implementation in their program is developing independent and self-reliant learners (Lucent, 1996). For distant educators to attain this goal, different methods of evaluation should be used. Evaluations authenticate the notions of flexibility, feedback, and

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organizational learning (Keast, 1996). "One technique is to employ qualitative assessment techniques to understand why a student would perform well or poorly in a distance learning environment" (Lucent, 1996).

Comprehensive planning, collective change, flexibility, feedback, and collaboration are examples of successful implementation strategies for distance education (Keast, 1996). Adequate monitoring and support will also boost program improvement in distance learning. Administrative support must be present for effective implementation in any distance learning program.

According to Keast (1996), if certain criteria are met, successful implementation will result. Implementation should be structured around the individual and collective change. Evaluation should be taken seriously for providing a knowledge base in program development. Lastly, Keast states, "Technology is not the issue. The issue is how and what do we want students to learn ? . . . concentrate on designing the learning experience and not on testing the technology."

Professional development for distance educators will also ensure that implementation progresses smoothly. Instructional methods, addressing the teachers' needs, and including instructor input are just a few of the multi-faced items that will prove effective. A common flaw in professional development is the emphasis of information transmission rather than the provision of opportunities for hands-on practice (Lucent, 1996).

Another feature that could aid in successful implementation in distance education programs is the impact of technology on learning effectiveness. Learning effectiveness

has been defined in terms of traditional measures of student achievement (Reid, 1996). Examples of student achievement would be test scores and final grades. Student achievement is not a function of the mode of instruction. However, some studies have shown that the mode of instruction is a factor in achievement (Reid, 1996).

One of the key questions in educational technology is whether or not the technology actually contributes to student's learning in distance education. Educational technology effectiveness focuses on "mode of instruction, media attributes, context of learning and distance learning success factors" (Reid, 1996). Most of the research concerning these four attributes centers on the uniqueness of such features contributing to student development. Examples of such features are television, videodisc, and interactive computer programs.

Other research focuses on learning rather than the specific modes of delivery. "Such studies examined factors that could affect the individual learner, including the design of the lesson, peer interaction, and learning style" (Reid, 1996). The interaction of collaborative work and technology often produced positive results in student achievement.

Summary

Distance education is planned learning that normally occurs in a different place from teaching and as a result requires special techniques of course design, special instructional techniques, special methods of communication by electronic and other technology, and special organization and administrative arrangements (Grover, 1998).

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This type of education does not imply the physical presence of an instructor. By the use of technical media, it is possible for a large array of students to be instructed wherever they live (Grover, 1998).

In this section of the paper, research has been viewed on what has been studied up to this present time. For this study, further research needs to be undertaken on the effective implementation of distance education programs in community colleges to further raise FTE levels. This study currently being conducted aids the researcher in answering the question of whether or not attendance problems are higher or lower in the distance education classroom. Also, this study will further serve to aid the administrators and facilitators at SVCC and VHCC in determining which classroom type (distance education or "live" lecture) provides for greater academic success among students. Distance education is also viewed as a bridge between teachers and learners. It is an organizational framework which uses various technologies in support of the educational process. The effective and independent learner is the desired product of this process (Vaughan, 1996). Chapter III ventures into covering the methods and procedures used in the data collection process.

CHAPTER III

METHODS AND PROCEDURES

Chapter III contains a description of the methods and procedures used to obtain the needed information in this study. It describes the population of this study and the statistical data to be obtained from Southwest Virginia Community College as the transmitting site. It also explains how data is to be collected from Virginia Highlands Community College as the receiving site. The way the data will be analyzed and synthesized is also outlined.

Population

The students observed in this study are college sophomore students. This is accurate for both the transmitting and the receiving sites. Nine students were observed at SVCC as the transmit site, and four students at VHCC as the receive site. These students were studying in Nursing 203 (Theories in Advanced Medical Practice) Section 30.

The faculty member surveyed and observed in this study was a female adult, approximately thirty years old. This staff member taught Nursing classes at SVCC. The site facilitator at VHCC was a middle age female of about forty. She was the key to ensuring that the Nursing class at VHCC ran according to schedule and that they had no technical difficulties.

Instrument Design

The survey used in data collection for this study asked questions in the following areas:

1. Students responses to distance learning instruction.

2. The comparison of distance learning instruction to "live" instruction.

3. The effectiveness of instruction in relation to student development.

Two features that students were questioned on was successful implementation of the program, and the technology used in distance learning development. Questions were developed on a five point Likert scale. A copy of the survey is found in Appendix A.

Data Collection

The data were collected during the summer semester of 2000. The participants completed the survey through questions and short answer responses.

Statistical Analysis

The data were complied manually to organize the survey results for analysis. Each survey's responses were tabulated, question by question on a check sheet. The mean for each of the survey items was calculated and recorded according to the respondent's choice. The tables will further support the procedures and instruments used in analysis.

Summary

Chapter III discussed the design and procedures used for collection and treatment

of this study's data. Chapter IV describes the findings and analyzes the statistical data.

CHAPTER IV

FINDINGS

The problem of this study was to determine the effectiveness of instruction in a nursing class at Southwest Virginia Community College through distance learning and "live" instruction. This chapter presents the information from the survey. The following research goals were instrumental in determining what information was necessary to include in the survey.

- Does a change from "live" instruction to distance learning instruction have a positive or negative impact on the effectiveness of instruction in relation to student development?

- Does a change from "live" instruction to distance learning instruction provide for greater academic success?

- Does a change from a "live" nursing course to a distance learning course reduce attendance problems?

- Does successful implementation and technology used in program development have an impact on student achievement in distance learning courses?

Survey Response

Four distance learners who were studying nursing and nine traditional learners were surveyed. All thirteen surveys were completed and returned as requested by the researcher. There was 100% response to the survey.

Survey Data Analysis

The following is an analysis of the information provided by the responses on the survey. The number of responses and percentage analysis of each of the questions contained in the survey are also provided.

Question 1: Is this your first distance education course? Yes or no. There were four distance learners and nine traditional based learners surveyed. All thirteen students completed and returned the survey. The four distance learners, which made up 100% of the distance participants, responded that this was not there first distance course. The nine traditional learners, which made up 100% of the "live" lecture audience, responded that this was their first distance learning course.

Question 2: How would you rate your perception of distance learning in general? 1) poor 2) average 3) good 4) very good 5) excellent. Four of the distance learners, which made up 100% of the distance participants, responded that their overall perception of distance learning was (4) very good. Of the nine traditional based learners that were surveyed, one student, 11%, responded that their perception of distance learning was average. Four learners, 44%, responded that their perception was very good. Four learners, 44%, responded that their perception was excellent. The average response of the traditional learners was very good. The average response gave an excellent rating (4.8). The overall average for the entire group was 4.4.

Question 3: How would you rate the effectiveness of instruction for feedback? 1) poor 2) average 3) good 4) very good 5) excellent. One of the distance learners, 25% of the participants surveyed, responded that the effectiveness of instruction for feedback was (5) excellent. Three learners, 75% responded that the effectiveness of instruction for

feedback was (4) very good. The average response for the distance learners was (4.3) very good. Of the nine traditional students that were surveyed, two, 22%, stated that they rated the effectiveness of instruction for feedback as (2) average. One, 11%, responded that the feedback was (3) good. Two or 22% rated the feedback as very good. Four or 44% rated the instructional feedback as (5) excellent. This group of four (44%) responded with excellent as the average answer. The overall mean for both groups was 4.7.

Question 4: How would you rate the effectiveness of instruction for feedback from the teacher/facilitator? 1. poor 2. average 3. good 4. very good 5. excellent. Three or 75% of the distance learners surveyed rated the feedback from the teacher/facilitator as (4) very good. The average response for the distance learners was (4) or very good. One or 25% rated the feedback from the teacher/facilitator as (5) excellent. One or 11% of the traditional learners rated the instructional feedback from the teacher/facilitator as (2) average. Three or 33% of the traditional learners rated the feedback as (4) very good. Five or 37% of the traditional learners rated the feedback as (5) excellent. The average response for the traditional-live lecture group was (4.3) very good. The overall average for both groups was 4.2.

Question 5: Did the instructor demonstrate proficiency in the operation of the following technology for distance learning? a. presentation graphics b. internet use c. e-mail. Of the four distance learners surveyed, three or 75% responded yes to each technological usage. One or 25% responded yes to presentation graphics and Internet use and no to e-mail use. The average response was yes to all three technological uses by the distance students. Of the nine traditional learners surveyed all nine or 100% responded yes to

effective usage and proficiency in the areas of presentation graphics, Internet use, and e-mail.

Question 6: Did the site facilitator demonstrate proficiency in the operation of the following technology for distance learning? a. Presentation graphics b. Internet use c. E-mail. Of the four distance learner participants, 100% responded yes to presentation graphics and Internet use. One or 25% responded no to e-mail use. Three or 75% responded yes to site facilitator e-mail use. Of the nine traditional students surveyed, all nine, 100%, responded that the site facilitator demonstrated proficiency in the areas of presentation graphics, Internet use, and e-mail.

Question 7: Check the technology that is readily available at your respective site: a. Internet use b. Fax c. Computer laboratory. All four of the distance learners or 100% of the participants surveyed answered yes in each category. Of the nine traditional students surveyed, six students or 67% answered that the Internet, fax, and computer lab was available to them. Two learners or 22% responded that they had Internet access only. One or 11% responded that they had computer lab access. The average response of the traditional-live lecture group was that all the technologies were available.

Question 8: How accessible was the instructor for feedback in the following modes of communication: a. E-mail b. Fax c. Phone. Of the nine traditional learners surveyed seven or 77% rated the instructor as being excellent in each category. One or 11% rated the instructor as a poor communicator. One or 11% rated the instructor as being a (4) very good communicator. The average response for the traditional students was (4.4) very good. Of the four distance learners surveyed three students or 75% responded that the instructor was an excellent communicator. One student or 25% rated the instructor as

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a (4) very good communicator. The average response for distance learners was (4.8) very good. The overall average for the entire group was 4.6.

Question 9: How would you rate your academic development through distance learning? Circle the one that best represents your development: 1. poor 2. average 3. good 4. very good 5. excellent. Of the four distance learners surveyed, two students or 50% rated their development as (4) very good. Two or 50% rated their development as (5) excellent. The average response for distance learners was (4.5) excellent. Of the nine traditional learners surveyed one or 11% rated their development as (1) poor. Four or 44% rated their development as (4) very good. Four or 44% rated their learning as (5) excellent. The average response for traditional-live learners was (4.1) very good. The overall average was 4.3.

Question 10: Has this course offered at a distance enabled you to further your education? A. yes B. no. Of the four distance learners surveyed, all four or 100% responded yes. One distance learner commented that this class enabled her to continue to fulfill requirements for her degree. Of the nine traditional learners surveyed eight or 88% responded yes and one or 11% responded no. The overall average response (92.3%) was yes.

Question 11: If given a choice, which classroom setting would you prefer? A. Traditional-live lecture B. Distance learning environment. Of the four distance learners surveyed four or 100% responded that they would prefer traditional-live lecture. Of the nine traditional students surveyed eight or 88% responded that they prefer traditional-live lecture. One or 11% responded that they prefer the distance environment.

Question 12: As a distance or a traditional taught student, did you observe faithful class attendance? A. Often B. Seldom C. Rarely. Of the four distance learners surveyed four or 100% responded often. Of the nine traditional students surveyed all nine participants stated that they came to class often.

Student Responses

The student responses were tabulated and formatted into a table. Table 1 provides specific responses for the students that were surveyed and the statistical tabulations for each question in the survey. Table 2 provides the response mean scores for each group.

Summary

This chapter presented the data collected for the research to determine the effectiveness of instruction in a nursing class at Southwest Virginia Community College through distance learning or "live" instruction. The survey data were analyzed to determine the percentages for all questions. Chapter V summarizes this research study. The final chapter will contain the summary, conclusions, and recommendations for this research.

Did the site facilitator demonstrate proficiency in the operation of the following technology for distance learning? a. Presentation graphics b. Internet use c. E-mail	75% responded yes to each technological use.	100% responded yes to each technological use
Check the technology that is readily available at your respective site: a. Internet use b. Fax c. Computer Laboratory	100% responded that all the technology mentioned was available	67% responded that all the technology mentioned was available
How accessible was the instructor for feedback in the following modes of communication: a. e-mail b. fax c. phone	(4.8) excellent	(4.4) very good
How would you rate your academic development through distance learning?	(4.5) excellent	(4.1) very good
Has this course offered at a distance, enabled you to further your education?	Yes	Yes
If given a choice which classroom setting would you prefer? A. traditional-live lecture B. distance learning environment	Traditional-live lecture	Traditional-live lecture
As a distance or a traditional taught student did you observe faithful class attendance? A. Often B. Seldom C. Rarely	Often	Often

Table 2

Student Survey Response Mean Scores

Questions	Distance Learners Mean Scores	Traditional Learners Mean Response
Is this your first distance education course?	100% - no	100% - yes
How would you rate your perception of distance learning in general?	(4) very good	(4.8) excellent
How would you rate the effectiveness of instruction for feedback?	(4.3) very good	(3.9) very good
How would you rate the effectiveness of instruction for feedback from the teacher/facilitator?	(4.3) very good	(4.3) very good
Did the instructor demonstrate proficiency in the operation of the following technology for distance learning? a. Presentation graphics b. Internet use c. E-mail	Yes to each technological usage	Yes to each technological usage

How would you rate your academic development through distance education?				
Poor		1		11%
Average				
Good				
Very good	2	4	50%	44%
excellent	2	4	50%	44%
Has this course offered at a distance enabled you to further your education?				
Yes	4	8	100%	88%
No	0	1		11%
If given a choice, which classroom setting would you prefer?				
Traditional-live lecture	4	8	100%	88%
Distance Learning	0	1		11%
As a distance or traditional student, did you observe faithful class attendance?				
Yes	4	9	100%	100%
No	0	0		

Did the instructor demonstrate proficiency in the operation of the following technology for distance learning?				
Presentation graphics	3	9	75%	100%
Internet use	3	9	75%	100%
E-mail	1	9	25%	100%
Did the site facilitator demonstrate proficiency in the operation of the following technology for distance learning?				
Presentation graphics	4	9	100%	100%
Internet use	4	9	100%	100%
E-mail	3 yes	9	75%	100%
	1 no		25%	
Check the technology that is readily available to you at your respective sites:				
Internet	4	8	100%	88%
Fax	4	6	100%	66%
Computer Lab	4	7	100%	77%
How accessible was the instructor for feedback in the following modes of communication? E-mail, fax, and phone.				
Poor		1	.	11%
Average				
Good				
Very good	1	1	25%	11%
excellent	3	7	75%	77%

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Table 1

Student Survey Statistical Data

Questions	Distance Learners responses	Traditional Learners Response	Percentages Distance Learners	Percentages Traditional Learners
Is this your first distance education course?	0_yes 4_no	9_yes 0_no	100%	100%
How would you rate your perception of distance learning in general? Poor Average Good Very Good Excellent	4	1 4 4	100%	11% 44% 44%
How would you rate the effectiveness of instruction for feedback? Poor Average Good Very Good Excellent	3 1	2 1 2 4	75% 25%	22% 11% 22% 44%
How would you rate the effectiveness of instruction for feedback from the teacher/facilitator Poor Average Good Very Good Excellent	3 1	1 3 5	75% 25%	11% 33% 55%

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CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The problem of this study was to compare the effectiveness of instruction in a nursing class at Southwest Virginia Community College offered through distance learning to "live" onsite instruction. This chapter summarizes the research study, draws conclusions based on the findings of the data, and provides recommendations based on these conclusions.

Summary

Education is changing to keep up with new technology and for the convenience of the student. Distance learning is now used as a tool for recruiting students to boost full time equivalent students at some colleges. While "live" instruction has been viewed as the more traditional way to learn, distance education offers students more flexibility. Although there are concerns with distance learning instruction, students continue to enroll in its programs. "It is important to note that those who have taken distance courses have generally responded positively to the experience and would recommend it to other students" (Lucent, 1996). A prime advantage of distance education offerings enables students to take courses that ordinarily would not have been offered.

SVCC has already implemented the technology to teach at a distance. The survey used in this research study was designed to study the effectiveness of instruction through distance learning or "live" instruction. The survey was distributed to four distance learners and nine traditionally taught students. The response rate was 100%.

Conclusions

The survey used in this research indicated that students were favorable toward distance learning. Data were collected that reflects the positive impact on the effectiveness of instruction in relation to student development. Using this data conclusions can be made based on the four research goals of this study.

The first goal was to determine if a change in "live" instruction to distance learning has a positive or negative impact on the effectiveness of instruction in relation to student development. Of the four distance learners surveyed, 50% of the learners stated that they would rate their academic development through distance learning as very good. The remaining 50% rated their academic development as excellent. The average response for distance learners was (4.5) excellent. Of the nine traditional learners surveyed, 11% rated their academic development as poor, 44% rated their development as very good, and 44% rated their development as excellent. The average for the traditional-based learners was (4.1) very good. The overall average was 4.3 for both group.

The second goal of this research was to determine if a change from "live" instruction to distance learning provided for greater academic success. Of the four distance learners surveyed, 100% stated that distance education had enabled them to further their education. Of the nine traditional students surveyed, 88% stated that distance education had enabled them to further their education. Overall, the average percentage of students surveyed, 94% felt that distance education provided for greater academic success.

The third research goal was to determine if a change from a "live" course to a distance learning course would reduce attendance problems. All of the participants that were surveyed came to class meetings as scheduled by the site director or instructor. In this research study traditional students attended the distance learning course as well as their distance-learning counterparts. 100% of both groups came to scheduled class meetings.

The last research goal was to determine if successful implementation of technology used in program development would have an effect on student achievement in distance learning courses. Of the four distance learners surveyed, 100% stated that the site facilitator successfully implemented presentation graphics, Internet use, and E-mail. Of the nine traditional students surveyed, 100% stated that the instructor was proficient in the technology that was used in the program. 100% of the traditional and distance learners responded that there distance learning instructor successfully implemented the technology used in the program development.

Recommendations

Based on the findings and conclusions of this research study, the following recommendations are made to improve SVCC's distance education environment and offerings.

- Survey the site director and the instructor to determine how the academic development of learners can be furthered.

- Have the site director and scheduled instructors available for scheduled office hours.

- A flexible distance education schedule (a variety of course offerings)

- Promote fax availability for traditional learners. (often at SVCC only the instructors have access)

References

Abrami, P. C. and Bures, E. M. (1996). Computer-supported collaborative learning and distance education. *The American Journal of Distance Education,* 37-41.

Biner, et.al. (1997). The impact of remote-site group size on student satisfaction and relative performance in interactive telecourses. *The American Journal of Distance Education,* Vol. 11 No. 1 23-31.

Gatliff, B. and Wendel, F. C. (1998). Inter-institutional collaboration and team teaching. *The American Journal of Distance Education.* Vol. 12 No. 1 8-16.

Grover, A. (1999). Group definitions of distance education. wysiwg://112/http://grover.edu.u.../~charters/proto/old404/define.htm

Keast, D. A. (1998). Toward an effective model for implementing distance education programs. *The American Journal of Distance Education.* Vol. 9 No. 1 39-53.

Larson M. R. and Bruning, R. (1996). Participant perceptions of a collaborative satellite-based mathematics course. *The American Journal of Distance Education.* Vol. 12 No. 1 8-16.

Mowen, A. J. and Parks, S.C. (1997). Competitive marketing of distance education: A model for placing quality within a strategic planning context. *The American Journal of Distance Education.* Vol. 11 No. 3 28-39

Reid, K. A. (1996). Impact of technology on learning effectiveness.

http://www.lucent.dk/cedl/impact.html

Reid, K. A. (1996). Student attitudes toward distance learning.

http://www.lucent.dk/cedl/stdtatt.html

Vaughan, M. (1996). Summary of quality Issues in distance education.

http://www.lucent.dk/cedl/sumqual.htm

APPENDICES

Appendix A—Distance Education and Traditional Based Lecture Survey

Appendix B—Sample Cover Letter

APPENDIX A

Distance Education and Traditional Based Lecture Survey

Spring Semester, 2000

Virginia Highlands Community College

Southwest Virginia Community College

The purpose of this survey is to gather information concerning distance learning as compared to a traditional lecture classroom setting. Please complete the following survey and leave it in my mailbox, located in Russell Hall, Business Division, by April 17, 2000. Your participation is greatly appreciated.

DISTANCE LEARNING SURVEY

1. Is this your first distance education course?

      a. Yes   b. no

2. How would you rate your perception of distance learning in general?

    1. Poor

    2. Average

    3. Good

    4. Very Good

    5. Excellent

3. How would you rate the effectiveness of instructional feedback for distance learning?

    1. Poor

    2. Average

    3. Good

    4. Very Good

    5. Excellent

4. How would you rate your attendance throughout the course of the semester?

    1. Poor

    2. Average

    3. Good

    4. Very Good

    5. Excellent

5. Did the instructor demonstrate proficiency in the operation of the following

technology to deliver distance learning?

    a. Presentation Graphics   _____yes   _____no

    b. Internet Use   _____yes   _____no

    c. E-mail   _____yes   _____no

    d. Televised-instruction   _____yes   _____no

6. Did the site facilitator demonstrate proficiency in the operation of the following

technology for distance learning?

    a. Presentation Graphics   _____yes   _____no

    b. Internet Use   _____yes   _____no

    c. E-mail   _____yes   _____no

7. Check the technology that is readily available to you at your respective site:

    a. ___Internet

    b. ___Fax

    c. ___Computer Laboratory

    d. ___Telephone

8. How accessible was the instructor for feedback in the following modes of communication? Please rate the following categories on a scale of 1-5. (1, poor—5, excellent)

    a. E-mail   1 2 3 4 5

    b. Fax   1 2 3 4 5

    c. Phone   1 2 3 4 5

9. How would you rate your academic development through distance learning? Circle the one that represents your learning development on a scale of 1-5: (1, poor—5 excellent)

    1 2 3 4 5

10. Has this course, offered at a distance, enabled you to further your education?

    a. Yes

    b. No

    If yes, please

    explain_____

    _____

11. If given a choice, which classroom setting would you prefer?

    a. Traditional-Live Lecture

    b. Distance Learning Environment

    Please explain your answer:

_____

_____

12. As a distance or traditional taught student, did you observe faithful class attendance?

    a. often

    b. seldom

    c. rarely

Thank You.

Jennifer R. Horton

APPENDIX B

SAMPLE COVER LETTER

Name:
Office Number:
Date:

Dear Name:

You have been selected to participate in a research study concerning the effectiveness of instruction in distance learning through Southwest Virginia Community College. Due to changes in education it is necessary to implement distance learning programs to generate Full Time Equivalent students. Through a variety of distance courses, students have the potential to further their education.

Participation in this study is encouraged and all responses will be kept strictly confidential. I am pursuing my Masters degree in Occupational and Technical Studies and the information provided by this research will be very beneficial in my completing the research requirement for this program. The attached survey will take approximately 10 minutes to complete. Please leave the completed survey in my mailbox by June 12, 2000.

Your participation in this study will be greatly appreciated.
Sincerely,

Jennifer Horton
Adjunct Faculty Member
Business Division