

AN ANALYSIS OF THE PERCEPTIONS OF
TRADITIONAL AND LONG DISTANCE
STUDENTS TOWARD TELECOURSES

By

JOHNNY MAC ALLEN
"

Bachelor of Science
Central State University
Edmond, Oklahoma
1978

Master of Arts
University of Oklahoma
Norman, Oklahoma
1979

Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillments of
the requirements for
the Degree of
DOCTOR OF EDUCATION
December, 1984



AN ANALYSIS OF THE PERCEPTIONS OF
TRADITIONAL AND LONG DISTANCE
STUDENTS TOWARD TELECOURSES

Thesis Approved:

A handwritten signature in cursive script, appearing to read "Norman N. Kershaw".

Thesis Adviser

A handwritten signature in cursive script, appearing to read "John J. Kardon".

A handwritten signature in cursive script, appearing to read "Robert A. Kamm".

A handwritten signature in cursive script, appearing to read "I. Duane Edwards".

A handwritten signature in cursive script, appearing to read "Norman N. Kershaw".

Dean of the Graduate College

ACKNOWLEDGMENTS

The writer wishes to express appreciation to Dr. Tom Karman for his leadership, guidance, and support while serving as the doctoral committee chairman.

Appreciation is also expressed to Dr. Robert Kamm, Dr. John Gardiner and Dr. I. Dwaine Eubanks for serving on the committee and assisting in the preparation of this dissertation.

Special thanks are also to be expressed to Dr. Bill Sutterfield for volunteering his personal support and that of Tulsa Junior College in collecting data for the study.

A word such as acknowledgment or appreciation is small in terms of feeling that this writer has and can express about the support he has received from his family, especially his wife Hughanne.

TABLE OF CONTENTS

Chapter	Page
I. INTRODUCTION.	1
Historical Survey of Television	
Instructions	4
Descriptions and Existing Research in Long Distance Learning	6
II. THE RESEARCH PROBLEM.	11
Introduction	11
Survey of the Literature	17
Statement of the Purpose	18
Hypotheses	19
Significance of the Study.	22
Limitations of the Study	23
Definition of Terms.	24
Conclusion	27
III. THE RESEARCH DESIGN	29
The Administration of the Instrument	29
Data Analysis.	31
IV. ANALYSIS OF THE DATA.	33
Test of the Hypotheses	34
Grade Expected by the Students.	88
Reasons for Enrollment.	88
Combined-Group Category	89
Age Range of the Students	89
Sex of the Students	90
Highest Level of Education of the Students.	90
Marital and Family Status of the Students.	91
Principal Occupation of the Students.	91
Number of Semester Hours Taken by Students.	92
Distance from Home to the Attending College of the Students	92
What Are the Ultimate Degree Plans of the Students	93

Chapter	Page
Highest Level of Formal Education Obtained by Student's Father. . . .	93
Highest Level of Formal Education Obtained by Student's Mother. . . .	93
Summary.	94
V. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS. . .	95
Findings	95
Purpose of the Study.	95
Population.	97
Analysis of the Data	98
Profile of the Long-Distance Learner	100
Recommendations.	102
Suggested Considerations for Additional Research Topics.	105
Conclusion	107
BIBLIOGRAPHY	109
APPENDIX A: COMPARATIVE DATA BETWEEN THE TRADITIONAL ON-CAMPUS STUDENT AND THE LONG-DISTANCE LEARNER IN RESPONSE TO THE QUESTION- NAIRE	113
APPENDIX B: DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES ON-CAMPUS AND BY LONG- DISTANCE (COMBINED GROUP)	142
APPENDIX C: COMPARATIVE DATA BETWEEN THE TRADITIONAL ON-CAMPUS STUDENT, THE LONG-DISTANCE LEARNER, AND THE COMBINED-GROUP OF STUDENTS TAKING COURSES BOTH ON-CAMPUS AND BY TELECOURSE METHOD.	171
APPENDIX D: THE QUESTIONNAIRE	200

LIST OF TABLES

Table	Page
I. Hypothesis 1 Correlation and Significance. . .	35
II. Hypothesis 2 Correlation and Significance. . .	35
III. Hypothesis 3 Correlation and Significance. . .	36
IV. Hypothesis 4 Correlation and Significance. . .	37
V. Hypothesis 5 Correlation and Significance. . .	37
VI. Hypothesis 6 Correlation and Significance. . .	38
VII. Hypothesis 7 Correlation and Significance. . .	39
VIII. Hypothesis 8 Correlation and Significance. . .	39
IX. Hypothesis 9 Correlation and Significance. . .	40
X. Hypothesis 10 Correlation and Significance . .	41
XI. Hypothesis 11 Correlation and Significance . .	41
XII. Hypothesis 12 Correlation and Significance . .	42
XIII. Hypothesis 13 Correlation and Significance . .	43
XIV. Hypothesis 14 Comparison	43
XV. Hypothesis 15 Comparison	44
XVI. Hypothesis 16 Comparison	45
XVII. Hypothesis 17 Comparison	46
XVIII. Hypothesis 18 Comparison	47
XIX. Hypothesis 19 Comparison	48
XX. Hypothesis 20 Comparison	48
XXI. Hypothesis 21 Comparison	49
XXII. Hypothesis 22 Comparison	50

Table	Page
XXIII. Hypothesis 23 Comparison	51
XXIV. Hypothesis 24 Comparison	52
XXV. Hypothesis 25 Comparison	53
XXVI. Descriptive Statistics (On-Campus)	55
XXVII. Descriptive Statistics (By Television)	56
XXVIII. Descriptive Statistics (On-Campus and By TV)	57
XXIX. Descriptive Statistics (On-Campus)	58
XXX. Descriptive Statistics (By Television)	58
XXXI. Descriptive Statistics (On-Campus and By TV)	59
XXXII. Descriptive Statistics (On-Campus)	60
XXXIII. Descriptive Statistics (By Television)	60
XXXIV. Descriptive Statistics (On-Campus and By TV)	61
XXXV. Descriptive Statistics (On-Campus)	63
XXXVI. Descriptive Statistics (By Television)	64
XXXVII. Descriptive Statistics (On-Campus and By TV)	65
XXXVIII. Descriptive Statistics (On-Campus)	65
XXXIX. Descriptive Statistics (By Television)	66
XL. Descriptive Statistics (On-Campus and By TV)	67
XLI. Descriptive Statistics (On-Campus)	67
XLII. Descriptive Statistics (By Television)	68
XLIII. Descriptive Statistics (On-Campus and By TV)	70
XLIV. Descriptive Statistics (On-Campus)	71
XLV. Descriptive Statistics (By Television)	71
XLVI. Descriptive Statistics (On-Campus and By TV)	73
XLVII. Descriptive Statistics (On-Campus)	74
XLVIII. Descriptive Statistics (By Television)	74

Table	Page
XLIX. Descriptive Statistics (On-Campus and By TV) .	75
L. Descriptive Statistics (On-Campus)	76
LI. Descriptive Statistics (By Television)	77
LII. Descriptive Statistics (On-Campus and By TV) .	77
LIII. Descriptive Statistics (On-Campus)	78
LIV. Descriptive Statistics (By Television)	79
LV. Descriptive Statistics (On-Campus and By TV) .	80
LVI. Descriptive Statistics (On-Campus)	81
LVII. Descriptive Statistics (By Television)	81
LVIII. Descriptive Statistics (On-Campus and By TV) .	82
LIX. Descriptive Statistics (On-Campus)	83
LX. Descriptive Statistics (By Television)	84
LXI. Descriptive Statistics (On-Campus and By TV) .	85
LXII. Descriptive Statistics (On-Campus)	86
LXIII. Descriptive Statistics (By Television)	86
LXIV. Descriptive Statistics (On-Campus and By TV) .	87
LXV. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "When Compared to My Other Courses, the Work Required for This Course Has Been..."	114
LXVI. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Compared With My Other Courses, the Demands Placed on Me to Do the Assignments in this Course Are..."	115

Table	Page
LXVII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "When Compared With My Other Courses, the Overall Content (Material) I Have Learned Thus Far in This Course Is..."	116
LXVIII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "When Compared With My Other Courses, My General Understanding of Concepts, Goals and Objectives In This Course Has Been..."	117
LXIX. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "When Compared With My Other Courses, the Time Demands (Such as Assignments That Are to be Turned In at a Specified Time) Have Been..."	118
LXX. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "When Compared With My Other Courses (Now or In the Past), the Pace of This Instruction Is..."	119
LXXI. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Compared With My Other Courses, I Would Say This Course Ranks _____ in Having a Lasting Learning Effect..."	120
LXXII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Compared With My Other Courses, I Would Say the Course Instructor Involvement and Participation Is..."	121

Table	Page
LXXIII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Considering All Factors That Would Lead to a Calculated Decision, Would You Recommend This Course to Your Friends..."	122
LXXIV. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Compared With My Other Courses (Now and In the Past), I Would Say This Course Is..."	123
LXXV. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Taking This Course Has Helped Me to Make Up My Mind to Continue My Education..."	124
LXXVI. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Compared With My Other Courses at This Point in the Semester, I Would Say That I Am Learning..."	125
LXXVII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Compared With Other Courses You Are Now Taking, or Have Taken in the Past, and Based on Responses Already Made, How Would You Rate This Course..."	126
LXXVIII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Based on My Experiences in This Course Thus Far, I Expect to Receive the Letter Grade of..."	127

Table	Page
LXXIX. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "I Enrolled in This Course Primarily Because..."	128
LXXX. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "I Am Presently Taking Courses That Are..."	129
LXXXI. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Your Age..."	130
LXXXII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Your Sex..."	131
LXXXIII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Your Highest Level of Education Completed..."	132
LXXXIV. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "Marital and Family Status..."	133
LXXXV. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "What Is Your Principal Occupation...?"	134

Table	Page
LXXXVI. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "How Many Hours per Week Do You Work...?"	135
LXXXVII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "What Is Your Racial Background...?"	136
LXXXVIII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "How Many Semester Hours Are You Currently Taking...?"	137
LXXXIX. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "How Far From Home Is the College You Attend...?"	138
XC. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "What Are Your Ultimate Degree Plans...?"	139
XCI. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "What Is the Highest Level of Formal Education Obtained by Your Parents (Mother)...?"	140
XCII. Comparative Data on All Traditional Students Taking Courses on Campus as Compared to All Long-Distance Learners Receiving Instruction Via Television Known as Telecourse Responding to the Question, "What Is the Highest Level of Formal Education Obtained by Your Parents (Father)...?"	141

Table	Page
XCIII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Work Required.	143
XCIV. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Demands to Do Assignments	144
XCV. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Overall Content.	145
XCVI. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) General Understanding.	146
XCVII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Time Demands	147
XCVIII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Pace	148
XCIX. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Academic Comparison	149
C. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Instructor Involvement and Participation.	150
CI. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Recommend the Course	151
CII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Feeling for the Course	152
CIII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Make Up Mind to Continue Education.	153

Table	Page
CIV. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Amount Learned . . .	154
CV. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Course Rating. . .	155
CVI. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Letter Grade Expected	156
CVII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Reasons for Enrolling.	157
CVIII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Type of Courses Taking	158
CIX. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Age.	159
CX. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Sex.	160
CXI. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Level of Education.	161
CXII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Marital and Family Status.	162
CXIII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Occupation	163
CXIV. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Hours Worked per Week	164

Table	Page
CXV. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Ethnic/Racial Background.	165
CXVI. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Semester Hours Currently Taking	166
CXVII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Distance From Home	167
CXVIII. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Ultimate Degree Plans	168
CXIX. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Father's Level of Education	169
CXX. Descriptive Statistics on Those Students Taking Courses On-Campus and by Long-Distance (Combined Group) Mother's Level of Education	170
CXXI. Descriptive Statistics for Entire Sample Work Required.	172
CXXII. Descriptive Statistics for Entire Sample Demands to Do Assignments.	173
CXXIII. Descriptive Statistics for Entire Sample Overall Content.	174
CXXIV. Descriptive Statistics for Entire Sample General Understanding.	175
CXXV. Descriptive Statistics for Entire Sample Time Demands	176
CXXVI. Descriptive Statistics for Entire Sample Pace	177
CXXVII. Descriptive Statistics for Entire Sample Academic Comparison.	178

Table	Page
CXXVIII. Descriptive Statistics for Entire Sample Instructor Involvement and Partici- pation	179
CXXIX. Descriptive Statistics for Entire Sample Recommend the Course	180
CXXX. Descriptive Statistics for Entire Sample Feeling for the Course	181
CXXXI. Descriptive Statistics for Entire Sample Make Up Mind to Continue Education	182
CXXXII. Descriptive Statistics for Entire Sample Amount Learned	183
CXXXIII. Descriptive Statistics for Entire Sample Course Rating.	184
CXXXIV. Descriptive Statistics for Entire Sample Letter Grade Expected.	185
CXXXV. Descriptive Statistics for Entire Sample Reasons for Enrolling.	186
CXXXVI. Descriptive Statistics for Entire Sample Type of Courses Taking	187
CXXXVII. Descriptive Statistics for Entire Sample Age.	188
CXXXVIII. Descriptive Statistics for Entire Sample Sex.	189
CXXXIX. Descriptive Statistics for Entire Sample Level of Education	190
CXL. Descriptive Statistics for Entire Sample Marital and Family Status.	191
CXLI. Descriptive Statistics for Entire Sample Occupation	192
CXLII. Descriptive Statistics for Entire Sample Hours Worked per Week.	193
CXLIII. Descriptive Statistics for Entire Sample Ethnic/Racial Background	194
CXLIV. Descriptive Statistics for Entire Sample Semester Hours Currently Taking.	195

Table	Page
CXLV. Descriptive Statistics for Entire Sample Distance From Home	196
CXLVI. Descriptive Statistics for Entire Sample Ultimate Degree Plans.	197
CXLVII. Descriptive Statistics for Entire Sample Father's Level of Education.	198
CXLVIII. Descriptive Statistics for Entire Sample Mother's Level of Education.	199

CHAPTER I

INTRODUCTION

Vice President Walter Mondale, while serving as a member of the Senate Committee on Labor and Public Welfare, issued a warning to higher education in America in the late 1970's which, for the most part, seemed to go unheeded.

Between 1970 and 2000, the number of persons over 20 will have increased from 127 million to 190 million. With the declining birth rates and the extension of life expectancy, there will be more adult Americans who want and need to live productive lives for longer periods of time than ever before. Higher Education must respond more fully to the growing numbers of part-time learners.¹

The potential for reaching into every American home with college credit courses exists more today than ever before utilizing television.² With this potential, and as colleges and universities find themselves serving more and more older learners, it has also become a reality to adjust to the demands of family, job and community responsibilities faced by their busy students.

¹Michael C. Helmantoler, "The Non-Traditional College Student and Public TV," The Community and Junior College Journal (March 1978), p. 13.

²Ibid.

Many of the alternatives such as satellite campuses and dispersed learning centers so popular in the 1960's and 1970's simply prove too costly in a period of financial constraint and rising energy costs. As Brock of the Public Broadcasting Service explained, "There is a revolution going on in post-secondary education today."³

One part of that change is taking place on campuses. To say that campuses are going gray may be an overstatement, but surely the student body is getting older. A recent Newsweek article (December 21, 1981) reported that one-third of all students enrolled in credit bearing courses in colleges and universities are now over twenty-five years old. The number of students thirty-five and older has increased thirty₄six and one-half percent in the last five years.

As declining enrollments and increasing budget restraints continue to plague higher education, alternative forms of educational delivery are being implemented, some as experimental forms, others as proven methodology such as "Telecourses," college courses via television. However, as these "new" and established methods become more commonplace, the overall effect on the student's ability to learn becomes more important. It is simply not enough to find alternative ways to save money, hire less, and deliver more in the way of services and courses; it is imperative that the student's ability to capitalize on his learning experience be central to whatever the method of delivery.

³Dee Brock, "Promise and Partnership: Public Television and Higher Education," Proceedings of Applying New Technologies in Higher Education (March 14-17, 1982), p. 1.

⁴Ibid.

This was pointed out by Keller in his book, Academic Strategy: The Management Revolution in Higher Education.

A specter is haunting higher education: the specter of decline and bankruptcy. Experts predict that between 10 percent and 30 percent of America's 3,100 colleges and universities will close their doors or merge with other institutions by 1995. Indeed, hundreds of colleges and a few universities are already near the end.⁵

Whether alternative methods of higher education delivery can or will save those institutions from collapse is not the question here. The question is whether the best possible education available to all those who seek it will remain open, and will "long distance" learning such as instruction by television provide the quality education needed.

Today, virtually all of the United States is covered by television and radio transmitters. Regardless of whether these are designated commercial or noncommercial, the influence they possess by their very nature of communicating information to nearly all persons in the country is enormous.

The forces of technology, demographic changes, and the demand for better education will make a significant impact on higher education. The future of educational institutions is relevant to learners of all ages, and the future is not at all predetermined.

⁵George Keller, Academic Strategy: The Management Revolution in American Higher Education (Baltimore and London: The Johns Hopkins University Press, 1983), p. 3.

Historical Survey of Television

Instructions

The 1950's was the decade of educational television innovation when the City Colleges of Chicago pioneered the first programs for college credit. Students could actually obtain a degree by taking television courses exclusively.⁶

Britain's Open University, established in London in 1969, was designed to provide non-traditional education opportunities via television. Today the BOU enrolls approximately 40,000 students a year, many earning regular degrees.⁷

Television's potential for educational delivery was discussed early, when, for example, Murphy and Gross, writing in Learning by Television, a report on the status of Instructional Television for the Ford Foundation, stated that "television works as an educational tool."⁸ Writing in the Education section of Time, October 20, 1967, a writer exclaimed that the resistance from certain factions notwithstanding "prove television's validity in almost every study of its effectiveness."⁹

The Maryland Center for Public Broadcasting began

⁶Louise Matthews Hewitt, An Administrator's Guide to Telecourses (Mountain Valley, California: Office of Telecourse Development, Coastline Community College, 1980), p. 6.

⁷Ibid.

⁸James J. Zigerell, A Brief Historical Survey: Using Mass Media for Learning (Washington, D.C.: American Association of Community and Junior Colleges, 1979), p. 1.

⁹Ibid.

offering telecourses in 1970, and today, enrollment documents students from 19 two- and four-year institutions in the state.¹⁰ In that same year, the Southern California Consortium for Community College Television was initiated.¹¹ In 1970, a special report on instructional technology commissioned by the White House was issued, entitled To Improve Learning. It is especially applicable today. The report, in brief, stated that a comprehensive approach coupled with a systematic methodology is the link to technology's contribution to the advancement of education.¹²

The year 1972 was especially important in the development of long-distance learning by telecourses as well. That year, four community college districts undertook the producing and offering of courses. Miami-Dade Community College District in Florida patterned itself after the British Open University, Dallas Community College District and Tarrant County Junior College District in Texas, and Coast Community College District, Costa Mesa, California.¹³

In addition, numerous individual educational institutions, two-year and four-year, now offer telecourses throughout the United States.

¹⁰Hewitt, An Administrator's Guide to Telecourses, p. 6.

¹¹Ibid.

¹²Zigerell, A Brief Historical Survey, p. 7.

¹³Hewitt, An Administrator's Guide to Telecourses, p. 7.

Descriptions and Existing Research
in Long Distance Learning

According to Boud, "A major problem in distance learning is that of developing ways in which students can learn without continual dependence on prescribed study guides and correspondence from a tutor." To master the objectives and content of a course, he emphasizes, "it is necessary to develop skills of independent learning."¹⁴

The need to develop these skills of independent learning for long-distance learners was very much evident at the National Conference on Open Learning in Higher Education which took place in 1973-1974. Five separate categories graced the agenda on open learning. The five issues were:

1. Open learning systems are based upon an audience with needs beyond that of an isolated campus system.
2. The development of the curriculum must remain open to the learner's goals as well as meet the goals of the institution.
3. Instruction through a technology-based system must be affective and appealing to the learner while remaining open in its production to new strategies and techniques.
4. Evaluation in an open-learning system must be two-way. It must let the student know how he is progressing while at the same time providing an evaluation on how to better provide learning activities.
5. One primary issue of an open-learning system is to go beyond that which has been traditional.¹⁵

¹⁴D. J. Boud, "Descriptions of Distance Learning Schemes: Distance Learning and Evaluation," Aspects of Educational Technology XV (New York: Kogan Page London, Nichols Publishing Company, 1981), p. 35.

¹⁵Carnegie Commission on Higher Education, "Report and Recommendations by the Commission," The Fourth Revolution:

Education via television has brought with it many suggestions as well as questions. For example, Riddick, an instructor in child development at Orange Coast College, worked with a modified Hill model for learning preferences in conducting research using a cognitive mapping concept over a two-semester period in 1979.¹⁶ Using 1,400 participants, the results were based on a 224-item questionnaire comprised of 28 elements.¹⁷ According to Riddick, telecourse students prefer to work independently; prefer to read to learn about a topic; and possess a greater ability to hypothesize. Television students, according to the study, are more sensitive to the quality of the experience in areas of sound, taste, touch, sight, are more aware of the learning environment, and work better in areas of beauty.¹⁸

In an attempt to identify the reasons why undergraduate students requested study options different from the traditional method, Zelan and Gardner surveyed the vast eight campuses of the University of California. The results revealed: (a) "a pursuit for greater space and time flexibility in access to higher education, which arises out of objective familial and financial impediments to easy, full-

Instructional Technology in Higher Education (New York: McGraw-Hill Book Company, Inc., 1972).

¹⁶Glenda Riddick, "OCC Psychologist Maps Students," The Coast Communicator Newsletter (Mountain Valley, California: Coast Community Colleges, 1980), p. 4.

¹⁷Ibid.

¹⁸Ibid.

time enrollment," and (b) "a negative view of established forms and modes of higher education."¹⁹

Zelan and Gardner's research gained support from McClure in his study of the effectiveness of televised occupational-technical courses in the Dallas County Community College District. Using survey and experimental data, their results were based on four telecourses with an average semester enrollment of approximately 950 students. The majority of students explained that telecourses were "academically respectable and a useful way to earn college credit."²⁰

While there are several reasons the students enroll in telecourses, many seem to agree that convenience is certainly one of the most attractive elements. For example, the findings of a survey conducted in January, 1978, to determine the characteristics and interests of students enrolled in telecourses at Central Texas College revealed that a large majority of these students were married Caucasian females, were working for wages or a salary, and had taken a telecourse because of the convenience factor.²¹

¹⁹Joseph Zelan and David P. Gardner, "Alternatives in Higher Education--Who Wants What?," Higher Education 3 (1975): 317-333.

²⁰Lyndon McClure, Occupational-Technical Curriculum Development TV Study (United States: Educational Resources Information Center, ERIC Document, ED 127, 395, 1975).

²¹Paul A. Zeiss, "Assessing Characteristics and ITV Interests of Students Enrolled in Telecourses at Central Texas College," unpublished Ph.D. dissertation, Central Texas College (1978), Abstract.

Through random sampling of students who had enrolled in one or more telecourses at the State University of Nebraska, Brown, the principal investigator in a study to learn the impact of an adult distance learning program on campus enrollments, found that most felt the courses were instrumental in encouraging them to continue their education. Furthermore, Brown concluded that there was no discernable decrease in on-campus college programs due to the long-distance offerings.²²

Dirr and Katz's "Higher Education Utilization Study Phase 1: Final Report," presented in March, 1981, reported the results of a questionnaire sent to 2,993 colleges and universities to determine the uses each institution makes of television in their academic programs. With an overall response rate of 94 percent, the major findings showed that approximately 71 percent of the institutions used television in some way, and 61 percent utilize the TV option for instruction. Of those using television for instructional purposes, 25 percent offered courses via television, and 36 percent used television to supplement existing courses.²³

Not to be overlooked, Public Television has been

²²Lawrence A. Brown, Jr., "The Impact of an Adult Distance Learning Program on Campus Enrollments," a paper presented at the Annual Meeting of The American Educational Research Association, March 19-23, 1982, New York, New York (The University of Mid-America, Lincoln, Nebraska).

²³Peter J. Dirr and Joan H. Katz, "Higher Education Utilization Study Phase I: Final Report" (Washington, D.C.: Corporation for Public Broadcasting, 1981), Abstract.

associated with higher education both directly and indirectly and now has begun to form a partnership to enhance learning, especially adult learning, through telecourses. For example, in 1981, the first year of PBS's Adult Learning Service, 220 public television stations worked cooperatively with over 500 colleges to deliver television courses that would be received by approximately 50,000 students for credit.²⁴

As Lawrence K. Grossman, President of the Public Broadcasting Service, said in his remarks to the National Telecourse Conference in Dallas, Texas:

It is suggested that higher education and public television have the technology and experience to provide high quality programs. There is a great opportunity here--for you and for us. The revolution in television holds great promise for helping colleges and universities to find solutions to some of the problems of adult learners, full and part time, on and off campus, in ways that meet their needs and fit their schedules.²⁵

²⁴Lawrence K. Grossman, "Coming Together--Public Television and Higher Education," remarks before the National Telecourse Conference, 1982, Managing Technology for Adult Learners (April 30, 1982), Abstract.

²⁵Ibid., p. 5.

CHAPTER II

THE RESEARCH PROBLEM

Introduction

One study of the interests and characteristics of students enrolled in telecourses was a survey conducted at Central Texas College in January, 1978, by Zeiss. Questionnaires were returned by 41 percent of the telecourse students. Responses indicated that the majority of students were between the ages of 18 and 35, had taken a telecourse primarily because of the convenience and opportunity, and were working toward a degree or certificate. Zeiss recommended that an annual study of the interests and characteristics of telecourse students should be implemented in order "to continue basing telecourse selections on actual student interests."¹

Although the purpose of the Zeiss study was to determine the interests and characteristics of students enrolled in telecourses at Central Texas College, it does lend itself to comparative analysis as applied to the traditional

¹Paul A. Zeiss, "Assembling Characteristics and ITV Interests of Students Enrolled in Telecourses at Central Texas College," unpublished Ph.D. dissertation, Central Texas College (1978), Abstract.

student.

As Zeiss pointed out, telecourse selections based on student interests can be an important factor as data from various study projects such as this one become available.

Unlike the well-established correspondence programs and similar self-paced modes of instruction, the long-distance learner, through his participation in the telecourse forms of higher education delivery, is still a relatively new type of student, and one who is in the minority. Differences abound between him and the traditional student, we suspect, but we need to know more.

A cooperative effort of the American Association of Community and Junior Colleges (AACJC), the Corporation for Public Broadcasting (CPB), and the National Center for Education Statistics (NCES) was implemented to determine for the first time the extent to which television is being used for instruction, primarily by all two-year colleges in the United States.² The summary of the findings showed that 73 percent of all two-year colleges were making some use of television, while some 65 percent used television for on-campus and/or off-campus instruction. The report also revealed that on-campus instruction use of television consumed twice as much of the total television effort as did off-campus instruction. A total of 349 two-year colleges reported offering

²Peter J. Dirr and Ronald J. Pedone, Instructional Uses of Television by Two-Year Colleges 1978-79, Adult Learning and Public Broadcasting, American Association of Community and Junior Colleges, Washington, D.C. (1980), p. 5.

approximately 2,300 courses via television in 1978-79, generating approximately 162,000 enrollments. The findings also revealed positive support for future uses of television. Those institutions which were not using television at the time of the questionnaire survey were asked whether they had ever used it in the past and whether they planned to use it in the future. Forty-three percent indicated that they had used television for instruction in the past. Fifty-one percent reported that they did intend to use it in the future. A final indication of the increased interest in the use of televised instruction by two-year colleges was the large positive response to the question, "Is your institution interested in receiving technical assistance in utilizing television for instruction?"

There has been a general concern in education that long distance learning persons are at a disadvantage. However, evidence suggested this was false. The conclusions from a study of the relationships between achievement and instructional arrangements which summarized data from 91 investigations in the areas of accounting, algebra, American government, biology, chemistry, child development, education, engineering, English composition, history, mathematics, physiology, psychology, quadratic equations, general science, physical science, speech, and statistics showed positive results. Comparisons were made with the following instructional conditions: lecture, discussion, several arrangements of lecture-discussion meetings, supervised and unsupervised

independent study, television, and programmed materials. The authors concluded that the results "demonstrate clearly and unequivocally that there is no measurable difference among truly distinctive methods of college instruction when evaluated by student performance on final examinations."³

According to Roohk, professor of biology at Golden West College and instructional manager for the telecourse, "Introducing Biology," the telecourse student has several common characteristics such as a strong desire to learn, a willingness to work for knowledge, and a busy schedule. Roohk added that the telecourse student was usually older than the average campus student, self-motivated, may have young children to attend, may have transportation problems, may be confined to the residence, and may be handicapped, which would prevent the student from attending on-campus classes. Through her observations at Coast Community College District, Roohk further stated, "Their educational backgrounds range from drop outs to double doctorates, and the telecourse students and their professions bridge the collar colors from blue to white."⁴

Due to the very fact that a telecourse student is usually an adult (over the traditional college age of 18-24) and enrolls on a part-time basis, balancing a full-time job

³Ohmer Milton, Alternative of the Traditional (San Francisco: Jossey-Bass, Inc., 1972), p. 156.

⁴Bonnie Roohk, "Who Takes Telecourses?," The Coast Communicator Newsletter (Mountain Valley, California: Coast Community Colleges, n.d.), p. 4.

with part-time classes is usually very evident. For example, Celeste Price, 29, a full-time tax clerk for Kentucky Fried Chicken in Louisville, enrolled in the PBS offering of American Government for three credits at Eastern Kentucky University in Richmond, 105 miles away. She watched the telecasts on Tuesday and Thursday at 11 p.m., when her four-year-old son was asleep. She stated that she did miss the interaction with fellow classmates but found the telecourse exciting. She also admitted, however, "I didn't think there would be as much homework or that it would be this hard."⁵

The influx of adult learners into the collegiate student body has provided a new wave of research and teaching methodologies designed especially for this segment of the student population. In one such study by Kotaska and Dickinson on the effects of a study guide on independent adult learning, the authors concluded that "the components of individual methods of adult education should be examined carefully to determine whether they are essential to adult learning."⁶ In other words, adults may not adopt at face value the items that have been successfully demonstrated by the traditional on-campus students.

In general, the profile of the adult learner is one who

⁵"No Boob Tubes," Education Section, Time 118 (October 5m 1981): 46.

⁶Janelyn Kotaska and G. Dickinson, "Effects of a Study Guide on Independent Adult Learning," Adult Education 25 (1975): 161-169.

is experienced, firmly established in a life-style or profession, and usually set firm in previous study habits.

Indeed, Rokeach in his review of dogmatism stated a similar definition, which in effect compares favorably with the aforementioned: (1) a relatively closed cognitive organization of beliefs about reality, (2) organized around a central set of beliefs about absolute authority which, in turn, (3) provides the framework for patterns of intolerance toward others.⁷

It seems that before a final conclusion can be reached on whether adult learners are more open to new information, additional research should be conducted on older non-students.

More and more adult learners are returning to the college ranks, and still many more have the desire but not the means to do so. The telecourse concept of long-distance learning continues to prove valuable in reaching this population. This can be demonstrated by the examination of goals of potential and actual learners, conducted in the early establishment of the University of Mid-America/State University of Nebraska. The report focused on what students want. Conducted in 1974, the market survey gathered data on demographic information, what people wanted to learn, and how they wanted to learn, in addition to educational plans.

⁷M. Rokeach, The Open and Closed Mind: Investigation Into the Nature of Belief Systems and Personality Systems (New York: Basic Books, 1960).

Among the findings were that most students had a general desire to know and/or a desire to advance economically.⁸

Survey of the Literature

According to several authors the demand for higher education delivery has challenged educations' ability to create flexible learning systems to reach an ever-growing number of students seeking alternative methods of instruction.⁹ This continuing effort to reach as many potential students as possible has led to a new open learning system which utilizes television. At this point, leadership from the European countries has provided very valuable models for alternate learning systems such as television; however, development has been slow on campuses in the United States. Nevertheless, many authors agree that progress is being made.

The survey of the literature includes studies of the junior colleges, community colleges, and four-year institutions.

⁸John D. Eggert, An Examination of Goals of Potential and Actual Learners, Educational Resources Information Center, ERIC Document, ED 16130 (1974).

⁹James W. Armsey and Norman C. Dahl, An Inquiry Into the Uses of Instructional Technology (New York: The Ford Foundation, 1973), p. 43; see also, Carnegie Commission on Higher Education, Report and Recommendations by the Commission, The Fourth Revolution; see also, Edward C. Covert, "S-U-N A Model for Open Learning Systems," Educational and Industrial Television 6, No. 2 (1974): 19, 29.

Statement of the Purpose

The purpose of the study was to determine the attitudes, perceptions, and demographic differences between students enrolled in telecourses (long-distance delivery/television) and those students taking the same course on campus in the traditional classroom setting. In order to study such differences, the study was designed to seek specific answers to the following questions:

1. Will the attitude toward the method of instruction utilized by long-distance learners be significantly different from that of traditional students, or those enrolled on campus?

2. Will the long-distance learner do equally well or better than his counterpart on campus in the same course in terms of work assignments, tests, and final grades?

3. Will the traditional student and the long-distance learner provide the same reasons for enrollment in the same course?

4. Will the age difference between the traditional student and the long-distance learner be significant?

5. Will the long-distance learner have more family responsibilities than the traditional student?

6. Will there be more women or men taking long distance courses compared with their counterparts on campus?

7. Will more married students be taking courses on campus in traditional settings compared to long-distance

learners?

8. Will there be a significant difference between ethnic or racial background between traditional and long-distance learners?

9. Will the educational delivery system make a difference in decisions to continue their education based on traditional instruction and long-distance learning?

10. Will the long-distance learner feel he is receiving the same education as the traditional student?

11. Will the long-distance learner have more work or job related responsibilities than the traditional student?

12. Will the parents of long-distance learners have less formal education than traditional student parents?

Hypotheses

Hypothesis 1: There is no significant difference between the traditional student and the long distance learner in the attitude toward the method of instruction utilized by long-distance learners and that of the traditional on-campus students.

Hypothesis 2: There is no significant difference between the traditional student and the long-distance learner taking the same course in terms of work assignments and testing.

Hypothesis 3: There is no significant difference between the reasons for enrollment between the long-distance learner and the traditional student.

Hypothesis 4: There is no significant difference between the long-distance learner and the traditional student in terms of the general understanding of concepts, principles, goals and objectives of the course.

Hypothesis 5: There is no significant difference in time demands (such as assignments that are to be turned in at a specified time) between the traditional student and the long-distance learner.

Hypothesis 6: There is no significant difference between the traditional student and the long-distance learner in relation to the pace of instruction such as the material covered in each session.

Hypothesis 7: There is no significant difference in lasting learning effects between the long-distance learner and the traditional student taking the same course.

Hypothesis 8: There is no significant difference between the traditional student and the long-distance learner in evaluating instructor involvement.

Hypothesis 9: There is no significant difference between the long-distance learner and the traditional student in recommending the same course to their friends.

Hypothesis 10: There is no significant difference between the traditional student and the long-distance learner in rating the same course.

Hypothesis 11: There is no significant difference between the long-distance learner and the traditional student in relation to making a decision to continue their

education based on the same course.

Hypothesis 12: There is no significant difference in learning based on self-evaluation between the traditional student and the long-distance learner taking the same course.

Hypothesis 13: There is no significant difference between the long-distance learner and the traditional student in the rating of the course.

Hypothesis 14: There is no significant difference in anticipated letter grade expected between the traditional student and the long-distance learner.

Hypothesis 15: There is no significant difference between the long-distance learner and the traditional student in terms of age.

Hypothesis 16: There is no significant difference between the traditional student and the long-distance learner in the category of sex.

Hypothesis 17: There is no significant difference in the area of highest level of education received between the traditional student and the long-distance learner taking the same course.

Hypothesis 18: There is no significant difference in marital and family status between the long-distance learner and the traditional student.

Hypothesis 19: There is no significant difference in principal occupation between the traditional student and the long-distance learner.

Hypothesis 20: There is no significant difference between the number of hours worked per week between the long-distance learner and the traditional student.

Hypothesis 21: There is no significant difference in ethnic or racial background between the long-distance learner and the traditional student.

Hypothesis 22: There is no significant difference in the number of semester hours being taken between the traditional student and the long-distance learner.

Hypothesis 23: There is no significant difference between the traditional student and the long-distance learner in terms of ultimate degree plans.

Hypothesis 24: There is no significant difference in the highest level of formal education obtained by parents of the traditional students and the long-distance learner.

Significance of the Study

This study should be of value to those in administration who seek alternative modes of instruction in these times of serious budget and staff reductions, not to mention declining full-time enrollments. Although this study is limited to one college, the investigation can provide initial information to those institutions contemplating alternative methods of instruction and the recipients who are likely to be consumers.

Limitations of the Study

The study was limited to a randomly-selected sample of students enrolled in a general education political science course taught by an instructor on-campus who also acted as a facilitator for those students taking the course via television. Those students enrolled on campus received their instruction by the traditional lecture method from the instructor in a regular classroom. Those students who received their instruction by television utilized the standard textbook for the class plus a student study guide and a faculty manual. Since the telecourse was an integrated learning system which encompassed a variety of teaching devices and learning strategies appropriate to the subject matter and goals and objectives, it was far different from the traditional on-campus method of instruction. The instruction was presented in a sequential series of pre-recorded television programs which were professionally produced and developed by an independent production company specializing in telecourse delivery through the auspices of the Dallas County Community College District, Miami Dade Community College, and Coast Community College, California. The on-campus instructor, in other words, did not conduct the telecourse classes, but rather acted as a facilitator in guiding the long-distance students through the course objectives, which were the same as those required of the traditional student.

The study is limited further in that it is not reflective of any other population or publics and is therefore confined to one institution only, that of Tulsa Junior College in Tulsa, Oklahoma.

Definition of Terms

Junior College

A public two-year college that stresses lower division work leading to immediate employment, transfer to a senior college or university, or for general cultural value.¹⁰

Long-Distance Learner

A learner who is at a distance from the teacher for much, most, or even all of the time during the teaching-learning processes.¹¹ For the purposes of this study, the long-distance learner is one who receives regular course instruction via television in his/her home.

Traditional Instruction

This type of instruction is based upon the American school concept of the late nineteenth and early twentieth

¹⁰Leland L. Medsker, The Junior College: Progress and Prospect (New York: McGraw-Hill Book Company, Inc., 1960), p. 16.

¹¹R. Sims, An Inquiry Into Correspondence Education Processes: Policies, Principles and Practices in Correspondence Education Systems Worldwide, unpublished ICCE-UNESCO Report (New York, 1977).

centuries in which innovation and experimentation are minimal.¹²

Traditional Student

One who receives his/her course instruction on campus in a classroom setting with other students and usually one instructor. For the purposes of this study, the traditional student received no course instruction via television in an off-campus setting.

Full-Time Instructor

An instructor who teaches fifteen or more semester hours.

Student Attitudes

The feelings or perceptions of students enrolled at a junior college in a course taught either by long distance using television as the mode of instruction, or by the traditional methodology.

What is a Telecourse

A telecourse is not a correspondence course, but rather, in addition to the television programs themselves, usually consists of a textbook, a student study guide, tests, a faculty manual, and written arrangements for interaction

¹²Carter V. Good, Dictionary of Education (New York: McGraw-Hill Book Company, Inc., 1973), p. 613.

between students and supervising faculty. Students may also read supplementary material, undertake special projects, write research papers, take field trips, or even perform laboratory exercises.¹³

Telecourse Development

In the design of a telecourse, recognized principles of instructional design are utilized. A design team is formed that includes the instructional designer, consultants from the discipline, television producers and directors, writers, editors, and of course, researchers.¹⁴

National Telecourses

This refers to courses whereby the academic institution "localizes" objectives, goals, readings, and other test materials around the existing programs. The national telecourse material is produced by independents, commercial networks or stations, and networks such as PBS, the Public Broadcasting System, and the BBC, the British Broadcasting Corporation.¹⁵

Syndicated Telecourses

The syndicated telecourse is developed and produced by sponsoring and cooperating academic institutions. The

¹³Hewitt, An Administrator's Guide to Telecourses, p. 3.

¹⁴Ibid.

¹⁵Ibid., p. 4.

programs are usually leased to other academic institutions for broadcast over stations, or they can be used in other ways, depending on existing contract agreements. For example, the Coast Community College District and the Dallas Community College District produce much of the programming for telecourse delivery for Rose State College, Oklahoma City Community College, and Tulsa Junior College.¹⁶

Conclusion

Today more than ever before in American higher education, there is a conducive climate and a willingness for the utilization of communication technologies, and as a result, more and more Americans will have the opportunity to take advantage of college credit courses. For some, it will be their first exposure to college level instruction.

Consideration of the differences between these two groups, the traditional college age student (18-24) and the adult learner, must be paramount in the decisions affecting curriculum offered, support systems, tutoring, orientation, and in general, methods of delivery.

In order for administrators to be effective and efficient, they must have all available data regarding not only the traditional student, but also the long-distance learner, the former being on-going for decades, the latter being relatively new in accumulated research, especially in the

¹⁶Ibid., p. 5.

area of "telecourse" methodology. It is this delivery that should receive priority in order to fulfill one of the main charges of a college or university, that of service in this, the "era of information revolution."

It stands to reason that the more we know about a subject, such as the differences between the traditional and long-distance student, the more likely we are to uncover the most effective way of providing not only an education, but also a quality education to our citizens who seek to improve their way of life.

As the nation grows older, and as the traditional student population dwindles for the next decade and beyond, communicative modes of higher educational delivery will no doubt become more and more important. Those such as Coast Community College District, Miami-Dade, and Dallas Community College District have forged a path for others to follow.

CHAPTER III

THE RESEARCH DESIGN

Based on sources such as Evans, Lewis and Forrester, and the Purdue University Attitude Survey,¹ an instrument was developed which utilized the Likert Scale. In addition, Best and Kerlinger afforded information which assisted in the finalization of the study instrument.²

Following the formulation of the instrument, it was sent to administrative officials at Tulsa Junior College for review to avoid duplicative research.

The Administration of the Instrument

For the purposes of continuity, it was decided to

¹Richard I. Evans, Resistance to Innovation in Higher Education (San Francisco: Jossey-Bass, Inc., 1968), pp. 111-123; James Lewis, Jr., Administering the Individualized Instruction Program (New York: Parker Publishing Company, Inc., 1971), pp. 123-125; Thomas C. Forrester and Richard D. Zalia, "Evaluation of Televised Instruction," Selecting Media for Learning: Readings from Audiovisual Instruction (Washington, D.C.: Association for Educational Communications and Technology, 1974), pp. 52-55; and Purdue University Libraries Attitude Survey, 1959-1960 (Lafayette, Indiana: Purdue University, 1964), pp. 50-52.

²John W. Best, Research in Education (New Jersey: Prentice-Hall, Inc., 1970), pp. 173-181; Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), pp. 392-408.

administer the instrument to those students who were enrolled in a general education course. The questionnaire contained twenty-seven questions with the majority allowing for six responses measured from the most negative to the most positive.

A general education requirement, political science, a freshman level course, was chosen for the survey. It was assumed that those students, both traditional and long-distance, enrolled in a freshman level political science course would be, for the most part, working toward the goal of completing their basic educational requirements at the very least.

The survey was administered to a total of one hundred twenty-two students by the political science instructor of both courses, on-campus traditional and long-distance. Of these, a total of sixty-eight students were traditional, and 54 were long-distance learners. In addition, twenty-five of the 54 long-distance learners indicated that they were taking courses on campus and by television; however, they were classified as "long-distance" learners for the purpose of this study and are dealt with apart in subsequent chapters. There were no on-campus students taking long-distance courses.

The questionnaire was administered prior to the beginning of the class for the traditional students, and was mailed to those off-campus. Those off-campus were provided ample time to respond to the survey. Caution was taken to

assure that no student completed more than one questionnaire. The combined total of students, 122, reflects a one hundred percent response.

The questionnaire was administered following the fourth week of classes, which provided for the necessary time for students to become familiar with the type of instruction being provided.

Data Analysis

In order to measure two independent samples of relatively small size, and to use the non-parametric measure, it was determined that the Mann-Whitney "U" test using a static group comparison and rating scale would be suitable.³ In addition, the test reveals the prediction of differences found in a parametric "T" test without the requirement of in-depth assumptions. The utilization of the Mann-Whitney "U" test for the study is ideally suited for collecting data from small samples using a rating scale.⁴

Noted differences at the .05 percent level of significance were considered sufficient to reject the research hypotheses with data to be reported in terms of U score, Z score, and level of significance.

³Donald T. Campbell and Julian C. Stanley, Experimental Designs for Research (Chicago, Illinois: Rand McNally College Publishing Company, 1963), pp. 12-13.

⁴Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964, p. 116.

The Statistical Package for the Social Sciences (SPSS) was selected for the analysis of data, and the computation was based on responses to the questionnaire and covered the following: demographic determinations, percentages, frequency count, median, mode, as well as those observations that were missed. The statistical hypotheses analyses, using the Mann-Whitney "U" Test, and reported by the SPSS program, were interpreted by the terms of N, mean rank, U score, Z score and level of significance.

CHAPTER IV

ANALYSIS OF THE DATA

To measure the attitudes and the demographic differences between those students enrolled in telecourses (long-distance) and those enrolled in traditional lecture courses, data were collected from students enrolled in Political Science. A questionnaire was administered to 122 students--68 traditional and 54 long-distance learners. The questionnaire was analyzed in terms of total sample, student completions, age, sex, racial background, family status, occupation, and employment status of the student.

The data presented in this chapter will follow the same order as the hypotheses listed in Chapter II. Each hypothesis will be rejected at the .05 level of significance.

The Statistical Package for the Social Sciences (SPSS) was utilized for the analysis of this study. The program analysis of the data was computed in relation to demographic responses to the questionnaire as follows: frequency count, median, and mode. Statistical analyses of the hypotheses utilizing the Mann-Whitney "U" test were reported in terms of N, mean rank, U score, Z score and level of significance.

Test of the Hypotheses

The purpose of this section is to state and accept or reject the hypotheses for the total sample. Subsequently, each paragraph will contain the following: statement of the hypothesis, a summary of the statistical data in the form of a chart, acceptance or rejection of the hypothesis, a brief narrative, and the reported level of significance. Tables appear in the Appendices to simplify the presentation of data for the observer.

Hypothesis 1. There is no significant difference between the traditional student and the long-distance learner in the attitude toward the method of instruction such as the on-campus in-class lecture and the classes by television delivery known as telecourses.

The hypothesis was accepted based on the analysis of the responses to the question, "Compared with other courses you are now taking, or have taken in the past, and based on responses already made, how would you rate this course?" The significance level was (0.065).

Hypothesis 2. There is no significant difference between the traditional student and the long-distance learner taking the same course in terms of work assignments and testing.

The hypothesis was rejected based upon the analysis of the responses to the question, "When compared with my other courses, the demands placed on me to do the assignments in this course are?" The significance level was (0.001).

TABLE I
HYPOTHESIS 1 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
95	-1.8390	0.065

TABLE II
HYPOTHESIS 2 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
94	-3.2677	0.001

Hypothesis 3. There is no significant difference between the reasons for enrollment between the long-distance learner and the traditional student.

The hypothesis was rejected based upon the analysis of the responses to the question, "I enrolled in this course primarily because?" The significance level was (0.627).

Hypothesis 4. There is no significant difference between

the long-distance learner and the traditional student in terms of the general understanding of concepts, principles, goals and objectives of the course.

TABLE III
HYPOTHESIS 3 CORRELATION
AND SIGNIFICANCE

Traditional			Long-Distance		
		N			N
Required for degree		58	Required for degree		26
Count as elective		4	Count as elective		0
Increase knowledge		4	Increase knowledge		1
Job-career improvement		2	Job-career improvement		2
Chi-Square	4.36230		DF	6	
Mean	Median	Mode	Mean	Median	Mode
1.353	1.000	1.000	1.379	1.000	1.000
Significance Level 0.627					

The hypothesis was rejected based on the analysis of the responses to the question, "When compared with my other courses, my general understanding of concepts, principles, goals and objectives in this course has been?" The significance level was (0.025).

Hypothesis 5. There is no significant difference in time demands (such as assignments that are to be turned in at a

specific time) between the traditional student and the long-distance learner.

TABLE IV
HYPOTHESIS 4 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
95	-2.2379	0.025

The hypothesis was rejected based on the analysis of the responses to the question, "When compared with my other courses, the time demands (such as assignments that are to be turned in at a specified time) have been?" The significance level was (0.014).

TABLE V
HYPOTHESIS 5 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
95	-2.4573	0.014

Hypothesis 6. There is no significant difference between the traditional student and the long-distance learner in relation to the pace of instruction such as the material covered in each session.

The hypothesis was accepted based on the analysis of the responses to the question, "When compared with my other courses (now or in the past), the pace of this instruction is?" The significance level was (0.446).

TABLE VI
HYPOTHESIS 6 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
95	-0.7620	0.446

Hypothesis 7. There is no significant difference in lasting learning effects between the long-distance learner and the traditional student taking the same course.

The hypothesis was accepted based on responses to the question, "Compared with my other courses, I would say this course ranks _____ in having a lasting learning effect?" The significance level was (0.242).

Hypothesis 8. There is no significant difference between

the traditional student and the long-distance learner in evaluating the instructor involvement.

TABLE VII
HYPOTHESIS 7 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
96	-1.1693	0.242

The hypothesis was rejected based on the analysis of responses to the question, "Compared with my other courses, I would say the course instructor involvement and participation is?" The significance level was (0.001).

TABLE VIII
HYPOTHESIS 8 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
90	-6.4910	0.001

Hypothesis 9. There is no significant difference between the long-distance learner and the traditional student in recommending the same course to their friends.

The hypothesis was rejected based on the analysis of the responses to the question, "Considering all factors that would lead to a calculated decision, would you recommend this course to your friends?" The significance level was (0.038).

TABLE IX
HYPOTHESIS 9 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
97	-2.0656	0.038

Hypothesis 10. There is no significant difference between the traditional student and the long-distance learner in rating the same course.

The hypothesis was accepted based on the analysis of the responses to the question, "Compared with my other courses (now or in the past), I would say this course is?" The significance level was (0.303).

TABLE X
HYPOTHESIS 10 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
96	-1.0298	0.303

Hypothesis 11. There is no significant difference between the long-distance learner and the traditional student in relation to making a decision to continue their education based on the same course.

The hypothesis was accepted based on the analysis of the responses to the question, "Taking this course has helped me to make up my mind to continue my education." The significance level was (0.783).

TABLE XI
HYPOTHESIS 11 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
93	-0.2754	0.783

Hypothesis 12. There is no significant difference in learning based on self-evaluation between the traditional student and the long-distance learner taking the same course.

The hypothesis was accepted based on the analysis of the responses to the question, "Compared with my other courses at this point in the semester, I would say that I am learning?" The significance level was (0.437).

TABLE XII
HYPOTHESIS 12 CORRELATION
AND SIGNIFICANCE

N	Correlation Score	Significance Level
94	-0.7763	0.437

Hypothesis 13. There is no significant difference between the long-distance learner and the traditional student in the rating of the course.

The hypothesis was accepted based on the analysis of the responses to the question, "Compared with other courses you are now taking, or have taken in the past, and based on responses already made, how would you rate this course?" The significance level was (0.065).

TABLE XIII
 HYPOTHESIS 13 CORRELATION
 AND SIGNIFICANCE

N	Correlation Score	Significance Level
95	-1.8390	0.065

Hypothesis 14. There is no significant difference in anticipated letter grade expected between the traditional student and the long-distance learner.

The hypothesis was accepted based on the analysis of the responses to the question, "Based on my experiences in this course thus far, I expect to receive the letter grade of ___ for the semester." The significance level was (0.127).

TABLE XIV
 HYPOTHESIS 14 COMPARISON

Traditional		Long-Distance	
Letter Grade	N	Letter Grade	N
A	23	A	7
B	31	B	13
C	9	C	3
Don't know	4	Don't know	5
Chi-Square	9.92546	DF	6

TABLE XIV (Continued)

Mean	Median	Mode	Mean	Median	Mode
2.090	2.000	2.000	2.750	2.000	2.000
Significance Level 0.127					

Hypothesis 15. There is no significant difference between the long-distance learner and the traditional student in terms of age.

The hypothesis was rejected based on the analysis of the responses to the question, "Your age?" The significance level was (0.004).

TABLE XV
HYPOTHESIS 15 COMPARISON

Traditional			Long-Distance		
	N			N	
Under 20	28		Under 20	2	
20-34	34		20-34	21	
35-49	5		35-49	6	
50-64	1		50-64	0	
Chi-Square 19.07702					
Mean	Median	Mode	Mean	Median	Mode
1.691	2.000	2.000	2.138	2.000	2.000
Significance Level 0.004					

Hypothesis 16. There is no significant difference between the traditional student and the long-distance learner in the category of sex.

The hypothesis was accepted based on the analysis of the responses to the question, "Your sex?" The significance level was (0.395).

TABLE XVI
HYPOTHESIS 16 COMPARISON

Traditional			Long-Distance		
N			N		
Male students	28		Male students	8	
Female students	40		Female students	21	
Both on-campus and off-campus			N		
Male students			8		
Female students			17		
Chi-Square 1.85381					
Mean	Median	Mode	Mean	Median	Mode
1.588	2.000	2.000	1.724	2.000	2.000
Significance Level 0.395					

Hypothesis 17. There is no significant difference in the area of highest level of education received between the traditional student and the long-distance learner taking the same course.

The hypothesis was rejected based on the analysis of the responses to the question, "Your highest level of education completed?" The significance level was (0.015).

TABLE XVII
HYPOTHESIS 17 COMPARISON

Traditional			Long-Distance		
N			N		
11th grade or less	1		11th grade or less	0	
High school graduate	28		High school graduate	8	
Trade-business school	2		Trade-business school	5	
Diploma	19		Diploma	12	
1-3 years of college	17		1-3 years of college	4	
College graduate	0		College graduate	0	
Chi-Square	21.98071		DF	10	
Mean	Median	Mode	Mean	Median	Mode
3.309	4.000	2.000	3.414	4.000	4.000
Significance Level 0.015					

Hypothesis 18. There is no significant difference in marital and family status between the long-distance learner and the traditional student.

The hypothesis was rejected based on the analysis of the responses to the question, "Marital and family status?" The significance level was (0.001).

TABLE XVIII
HYPOTHESIS 18 COMPARISON

Traditional			Long-Distance		
N			N		
Single		47	Single		6
Single parent		8	Single parent		0
Married, no children		1	Married, no children		4
Married, young children		7	Married, young children		15
Married, grown children		2	Married, grown children		2
Widowed, divorced, separated		2	Widowed, divorced, separated		2
Chi-Square	38.64016		DF	10	
Mean	Median	Mode	Mean	Median	Mode
1.750	1.000	1.000	3.448	4.000	4.000
Significance Level 0.001					

Hypothesis 19. There is no significant difference in principal occupation between the traditional student and the long-distance learner.

The hypothesis was rejected based on the analysis of the responses to the question, "What is your principal occupation?" The significance level was (0.001).

Hypothesis 20. There is no significant difference between the number of hours worked per week between the long-distance learner and the traditional student.

The hypothesis was rejected based on the analysis of the responses to the question, "How many hours per week do you work?" The significance level was (0.001).

TABLE XIX
HYPOTHESIS 19 COMPARISON

Traditional			Long-Distance		
N			N		
Student	37		Student	0	
Self-employed	4		Self-employed	1	
Employed for wages- salary	25		Employed for wages- salary	24	
Homemaker	2		Homemaker	4	
Military	0		Military	0	
Chi-Square	33.83774		DF	6	
Mean	Median	Mode	Mean	Median	Mode
1.882	1.000	1.000	3.103	3.000	3.000
Significance Level 0.001					

TABLE XX
HYPOTHESIS 20 COMPARISON

Traditional		Long-Distance	
N		N	
None	20	None	2
1-9	4	1-9	1
10-19	9	10-19	3
20-29	18	20-29	0
30-39	7	30-39	6
40-49	6	40-49	16
50 or more	4	50 or more	1

TABLE XX (Continued)

Chi-Square 36.45701			DF 12		
Mean	Median	Mode	Mean	Median	Mode
3.324	4.000	1.000	5.034	6.000	6.000
Significance Level 0.001					

Hypothesis 21. There is no significant difference in ethnic or racial background between the long-distance learner and the traditional student.

The hypothesis was accepted based on the analysis of the responses to the question, "What is your ethnic or racial background?" The significance level was (0.145).

TABLE XXI

HYPOTHESIS 21 COMPARISON

Traditional			Long-Distance		
	N			N	
Caucasian or white	55	Caucasian or white		26	
Mexican or Chicano	0	Mexican or Chicano		1	
Black	9	Black		1	
Oriental	1	Oriental		0	
American Indian	3	American Indian		0	
Other	0	Other		1	
Chi-Square 14.64617			DF 10		
Mean	Median	Mode	Mean	Median	Mode
1.485	1.000	1.000	1.276	1.000	1.000

TABLE XXI (Continued)

Significance Level 0.145

Hypothesis 22. There is no significant difference in the number of semester hours being taken between the traditional student and the long-distance learner.

The hypothesis was rejected based on the analysis of the responses to the question, "How many semester hours are you currently taking?" The significance level was (0.001).

TABLE XXII

HYPOTHESIS 22 COMPARISON

Traditional			Long-Distance		
	N			N	
1-3 hours	2		1-3 hours	11	
4-6 hours	2		4-6 hours	11	
7-9 hours	4		7-9 hours	2	
10-12 hours	21		10-12 hours	3	
More than 12 hours	39		More than 12 hours	3	
Chi-Square	76.08238		DF	8	
Mean	Median	Mode	Mean	Median	Mode
4.368	5.000	5.000	2.138	2.000	2.000
Significance Level 0.001					

Hypothesis 23. There is no significant difference between the traditional student and the long-distance learner in terms of ultimate degree plans.

The hypothesis was accepted based on the analysis of the responses to the question, "What are your ultimate degree plans?" The significance level was (0.402).

TABLE XXIII
HYPOTHESIS 23 COMPARISON

Traditional			Long-Distance		
	N			N	
None	1		None	1	
Associates degree or equivalent	15		Associates degree or equivalent	9	
Bachelor's degree	20		Bachelor's degree	10	
Master's degree	13		Master's degree	5	
Doctoral degree	3		Doctoral degree	0	
Professional degree (law, Dentistry, Medicine)	9		Professional degree (law, Dentistry, Medicine)	1	
Undecided	7		Undecided	3	
Chi-Square	12.54826		DF	12	
Mean	Median	Mode	Mean	Median	Mode
3.838	3.000	3.000	3.310	3.000	3.000
Significance Level 0.402					

Hypothesis 24. There is no significant difference in the highest level of formal education obtained by parents of

the traditional students and the long-distance learners.

The hypothesis was accepted based on the analysis of the responses to the question, "What is the highest level of formal education obtained by your parents?" The significance level was (0.128) for "mother" and (0.147) for "father."

TABLE XXIV
HYPOTHESIS 24 COMPARISON

Traditional (mother)			Long-Distance (mother)			
			N			N
High school		20	High school		17	
Post secondary school		8	Post secondary school		5	
Some Vo-Tech		6	Some Vo-Tech		1	
Vo-Tech degree		2	Vo-Tech degree		1	
Some college		16	Some college		5	
Some graduate school		1	Some graduate school		0	
Graduate degree		11	Graduate degree		0	
Chi-Square	17.61093		DF	12		
Mean	Median	Mode	Mean	Median	Mode	
3.735	3.500	1.000	2.034	1.000	1.000	
Significance Level 0.128						

Because the two groups, i.e., traditional and long-distance, contained a separate element within the off-campus population taking courses both on-campus and off, it is necessary to compare all three groups as they relate to the

responses generated by the questionnaire. The responses were collected in terms of value, frequency count, percentages, median, mode, and missing observations. A brief summary chart of the statistical treatment of the data and a narrative of comparison to all three groups is contained in each paragraph as they relate to the questionnaire through question 13. Questions 14 through 27 follow in a summary comparison discussion.

TABLE XXV
HYPOTHESIS 25 COMPARISON

Traditional (father)			Long-Distance (father)		
N			N		
High school	19		High school	11	
Post secondary school	7		Post secondary school	2	
Some Vo-Tech	4		Some Vo-Tech	2	
Vo-Tech degree	1		Vo-Tech degree	1	
Some college	14		Some college	12	
College degree	10		College degree	1	
Some graduate school	1		Some graduate school	0	
Graduate degree	11		Graduate degree	0	
Chi-Square	19.47645		DF	14	
Mean	Median	Mode	Mean	Median	Mode
4.090	5.000	1.000	3.138	3.000	5.000
Significance Level 0.147					

All three groups, on-campus traditional, long-distance by television, and combined-instruction students strongly agree that the amount of work required for their individual efforts in order to compete successfully in their particular settings is "average," with "3" indicating neither less nor greater, but rather "neutral" or "average," a total of 46.3 percent so indicated (Table 26) (Appendix Table 65) in the on-campus category; 39.3 percent (Table 27) in the long-distance response; and 44.0 percent (Table 28) (Appendix Table 93) for the combined-instruction group. In further analysis, only one telecourse student indicated the work required was less, while three students said it was much greater (Table 27). The combined-instructional group (Table 28) seemed to follow with three students reporting the work to be "less," and three students also reporting the work to require above average or "greater."

The results would seem to reinforce a study by Fernandez (1976), which related to the role of the campus instructor. One group was provided the services of a campus instructor at a community college while taking a specific class on television. The second group consisted of students who were exposed to television only. The study reported no significant difference in the achievement level and course completion rate between the two groups.¹ It would seem

¹Alfred P. Fernandez, "The Role of the Campus Instructor in Student Achievement in Community College Television Instruction" (unpublished doctoral dissertation, University of Southern California, 1976).

rational to assume that if all three groups indicate the required work is "average" in their individual assessment, then their chances of successfully completing the requirements would be enhanced by this psychological evaluation, be they traditional or long-distance students.

TABLE XXVI
DESCRIPTIVE STATISTICS
(ON-CAMPUS)

"When compared to my other courses, the work required for this course has been..."			
Value		Frequency	Valid Percent
Much less	1	9	13.4
	2	18	26.9
	3	31	46.3
	4	9	13.4
Mean		Median	Mode
2.597		3.000	3.000
Valid cases	67	Missing cases	1

While the traditional on-campus group and the long-distance students (Table 29 and Table 30) (Appendix Table 66) indicate a 37.9 and 39.3 percent majority for "average" demands placed on them to do the assignments, the on-campus and television students (Table 31) (Appendix Table 94) also considered said demands to be "normal" based on their

experiences. However, 28.0 percent indicated slightly below average demands as did a like percentage indicate a slightly above average demand. This can most likely be interpreted as a strictly "personal" circumstance in this application given the majority percentages of the total sample.

TABLE XXVII
DESCRIPTIVE STATISTICS
(BY TELEVISION)

"When compared to my other courses, the work required for this course has been..."			
Value		Frequency	Valid Percent
Much less	1	1	3.6
	3	11	39.3
	4	9	32.1
	5	4	14.3
Much greater	6	3	10.7
Out of range		1	missing
Mean		Median	Mode
3.857		4.000	3.000
Valid cases	28	Missing cases	1

In the various groups, a variance is significant in that the on-campus group (Table 32) (Appendix Table 66) indicated the course material learned is slightly greater compared to their other courses with a frequency of 24 for a 35.3 valid percentage rate. However, it is interesting

to note in this instance that 27.9 percent indicate "less" as well as "above average." The group taking courses on-campus and by television stipulated that they were learning more (Table 34) (Appendix Table 95) with a 12 frequency registered at 48.0 percent. Seven, however, indicated that they were learning the material at the "average" rate. Based on questionnaire analysis, the rationale would indicate that overall, the three groups judge themselves by self-evaluation, as learning slightly more, as opposed to their other scheduled subjects. The "much greater" range showed six on-campus students, four telecourse students, and four combined-group students. Only four students in the total sample signified that they were learning less.

TABLE XXVIII
DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"When compared to my other courses, the work required for this course has been..."			
Value		Frequency	Valid Percent
Much less	2	3	12.0
	3	11	44.0
	4	8	32.0
	5	3	12.0
Mean		Median	Mode
3.440		3.000	3.000
Valid cases	25	Missing cases	0

TABLE XXIX
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"When compared with my other courses, the demands placed on me to do the assignments in this course are..."			
Value		Frequency	Valid Percent
Much less	1	13	19.7
	2	18	27.3
	3	25	37.9
	4	10	15.2
		2	missing
Mean		Median	Mode
2.485		3.000	3.000
Valid cases	66	Missing cases	2

TABLE XXX
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"When compared with my other courses, the demands placed on me to do the assignments in this course are..."			
Value		Frequency	Valid Percent
Much less	1	3	10.7
	2	2	7.1
	3	11	39.3
	4	6	21.4
	5	3	10.7
Much greater	6	3	10.7

TABLE XXX (Continued)

Mean	Median	Mode
3.464	3.000	3.000
Valid cases 28	Missing cases 1	

TABLE XXXI

DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"When compared with my other courses, the demands placed on me to do the assignments in this course are..."

Value	Frequency	Valid Percent
Much less	1	2
	2	5
	3	8
	4	7
	5	1
Much greater	6	2
		8.0
		20.0
		32.0
		28.0
		4.0
		8.0
Mean	Median	Mode
3.240	3.000	3.000
Valid cases 25	Missing cases 0	

TABLE XXXII
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"When compared with my other courses, the overall content (material) I have learned thus far in this course is..."			
Value		Frequency	Valid Percent
Much less	1	1	1.5
	2	2	4.4
	3	16	27.9
	4	24	35.3
	5	19	27.9
Much greater	6	6	8.8
Mean		Median	Mode
4.118		4.000	4.000
Valid cases	68	Missing cases	0

TABLE XXXIII
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"When compared with my other courses, the overall content (material) I have learned thus far in this course is..."			
Value		Frequency	Valid Percent
Much less	2	2	7.1
	3	9	32.1
	4	9	32.1
	5	4	14.3
Much greater	6	4	14.3

TABLE XXXIII (Continued)

Mean	Median	Mode
3.964	4.000	3.000
Valid cases 28	Missing cases 1	

TABLE XXXIV

DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"When compared with my other courses, the overall content (material) I have learned thus far in this course is..."			
Value		Frequency	Valid Percent
Much less	1	1	4.0
	2	1	4.0
	3	7	28.0
	4	12	48.0
	5	4	16.0
Mean		Median	Mode
3.680		4.000	4.000
Valid cases 25		Missing cases 0	

Those students receiving instruction by television (Table 36) (Appendix Table 67) indicate their perceptions

to be greater by 33.3 valid percent in terms of understanding, etc. In addition, those students classified as on-campus and by television reinforce the response by 48.0 valid percent (Table 37) (Appendix Table 96). By comparison, the on-campus only group registered 29.4 valid percent in favor of much greater understanding of the course compared to others they were taking at the time of the questionnaire sampling or in the past. The percentage of long-distance learners showed a significantly larger increase over their counterparts (33.3 to 29.4) in the category of "much greater" understanding. While all three groups indicated that they were understanding more by their responses to the question, the significance lies in the percentile of the on-campus group and the long-distance learners. A significance is also noted in the "positive" responses to the question. While there is a difference in the three groups by percentages, all are toward the "much more" range identification as opposed to the "much less" category of understanding.

While the on-campus group (Table 38) (Appendix Table 68) was negative in their responses to the question and indicated the time constraints were less than average, the long-distance learner response (Table 39) favored "above average" demands (29.6) valid percent. It is noteworthy that the combined-group (Table 40) (Appendix Table 97) which would seem to have additional time constraints by the very nature of their category, indicated the "time

demands" were "much less," which runs contrary to immediate face-value assumption. In the 1980 publication by Munshi, a chapter entitled, "Telecourse: Benefits and Problems," speaks to one of the problematic areas being that of difficulty in using an unfamiliar educational system, such as one might experience by the utilization of television instruction.² Based on the responses to the question regarding time constraints, the majority of long-distance learners (29.6) valid percent may very well fit into this category for various reasons, one of which might very well be "unfamiliarity" with the mode of instruction, as well as other commitments unidentified at this point.

TABLE XXXV
DESCRIPTIVE STATISTICS
(ON-CAMPUS)

"When compared with my other courses, my general understanding of concepts, principles, goals and objectives in this course has been..."			
Value		Frequency	Valid Percent
Much less	1	1	1.5
	2	2	2.9
	3	11	16.2
	4	20	29.4
	5	20	29.4
Much greater	6	14	20.6
Mean		Median	Mode
4.441		4.500	4.000

²Kiki S. Munshi, Telecourses: Reflections 1980 (Washington: Corporation for Public Broadcasting, 1980).

TABLE XXXV (Continued)

Valid cases	68	Missing cases	0
-------------	----	---------------	---

TABLE XXXVI

DESCRIPTIVE STATISTICS
(BY TELEVISION)

"When compared with my other courses, my general understanding of concepts, principles, goals and objectives in this course has been..."			
	Value	Frequency	Valid Percent
Much less	1	1	3.7
	2	1	3.7
	3	8	29.6
	4	9	33.3
	5	7	25.9
Much greater	6	1	3.7
	Mean	Median	Mode
	3.852	4.000	4.000
Valid cases	27	Missing cases	2

TABLE XXXVII
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS AND BY TV)

"When compared with my other courses, my general understanding of concepts, principles, goals and objectives in this course has been..."			
Value		Frequency	Valid Percent
Much less	2	1	4.0
	3	7	28.0
	4	12	48.0
	5	5	20.0
Mean		Median	Mode
3.840		4.000	4.000
Valid cases	25	Missing cases	0

TABLE XXXVIII
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"When compared with my other courses, the time demands (such as assignments that are to be turned in at a specified time) have been..."			
Value		Frequency	Valid Percent
Much less	1	21	30.9
	2	21	30.9
	3	18	26.5
	4	7	10.3
Much greater	6	1	1.5

TABLE XXXVIII (Continued)

Mean	Median	Mode
2.221	2.000	1.000
Valid cases 68	Missing cases	0

TABLE XXXIX

DESCRIPTIVE STATISTICS
(BY TELEVISION)

"When compared with my other courses, the time demands (such as assignments that are to be turned in at a specified time) have been..."			
Value		Frequency	Valid Percent
Much less	1	5	18.5
	2	6	22.2
	3	5	18.5
	4	8	29.6
	5	1	3.7
Much greater	6	2	7.4
Mean		Median	Mode
3.000		3.000	4.000
Valid cases 27		Missing cases	2

TABLE XL
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS AND BY TV)

"When compared with my other courses, the time demands (such as assignments that are to be turned in at a specified time) have been..."			
Value		Frequency	Valid Percent
Much less	1	8	33.3
	2	9	37.5
	3	4	16.7
	4	2	8.3
Much greater	5	1	4.2
Mean		Median	Mode
2.125		2.000	2.000
Valid cases	24	Missing cases	1

TABLE XLI
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"When compared with my other courses (now or in the past), the pace of instruction is..."			
Value		Frequency	Valid Percent
Much less	1	2	3.0
	2	5	7.5
	3	28	41.8
	4	26	38.8
	5	4	6.0
Much greater	6	2	3.0

TABLE XLI (Continued)

Mean	Median	Mode
3.463	3.000	3.000
Valid cases 67	Missing cases	1

TABLE XLII

DESCRIPTIVE STATISTICS
(BY TELEVISION)

"When compared with my other courses (now or in the past), the pace of instruction is..."			
Value		Frequency	Valid Percent
Much less	1	1	3.6
	2	1	3.6
	3	12	42.9
	4	8	28.6
	5	4	14.3
Much greater	6	2	7.1
Mean		Median	Mode
3.679		3.500	3.000
Valid cases	28	Missing cases	1

The hypothesis was accepted at the (0.446) level of significance. The responses indicated a majority of

"average" (Table 43) (Appendix Table 70) in relation to pace which is understandable in one sense due to the time element of the questionnaire. The sampling procedure was begun after the fourth week of class. While this time element is sufficient to allow for evaluation by all groups, it is especially significant for the "telecourse" or long-distance learner. It is felt that this four-week plus experience is more than ample time for a serious self-evaluation of the variables, especially the "pace" of instruction. Based on assumptions that students receiving their instruction on a strictly self-motivated concept would find difficulty with the "pace" aspect, relying also on the assumption that the "natural" environment would be removed from the ideal learning situation and replaced with possible interruptions, faulty reception and sound, and an otherwise less than ideal learning situation apparently, for the purposes of this sampling, is false.

Based on the responses to the question, the significance level was (0.242) (Appendix Table 71). Evidence has shown as in the Riddick study, that television students are more sensitive to the quality of the experience in areas of sound, taste, touch, sight, and are more aware of the learning environment compared to their on-campus counterparts.³ The "telecourse" students rated the learning effect the

³Glenda Riddick, OCC Psychologist Maps Students (Mountain Valley, California: The Coast Community Colleges).

lowest with 28.6 valid percent (Table 45), while the on-campus traditional student ranked the course as having the higher lasting learning effect, 35.3 valid percent at the 5 value and 24 frequency determination (Table 44). Psychologically speaking, those students may possibly be exposed to the television medium a great deal more than the on-campus students and consequently have difficulty in making the transition from "entertainment" to "learning." It goes without saying that courses by television require self-discipline in the acquisition of knowledge and learning is not "classroom" controlled, but rather self-controlled.

TABLE XLIII
DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"When compared with my other courses (now or in the past), the pace of instruction is..."			
Value		Frequency	Valid Percent
Much less	2	1	4.0
	3	11	44.0
	4	9	36.0
	5	4	16.0
Mean		Median	Mode
3.640		4.000	3.000
Valid cases	25	Missing cases	0

TABLE XLIV
DESCRIPTIVE STATISTICS
(ON-CAMPUS)

"Compared with my other courses, I would say this
course ranks ___ in having a lasting
learning effect..."

Value	Frequency	Valid Percent
Much less	1	1.5
	2	5.9
	3	10.3
	4	27.9
	5	35.3
Much greater	6	19.1

Mean	Median	Mode
4.471	5.000	5.000

Valid cases	68	Missing cases	0
-------------	----	---------------	---

TABLE XLV
DESCRIPTIVE STATISTICS
(BY TELEVISION)

"Compared with my other courses, I would say this
course ranks ___ in having a lasting
learning effect..."

Value	Frequency	Valid Percent
Much less	2	7.1
	3	28.6
	4	21.4
	5	25.0
Much greater	6	17.9

TABLE XLV (Continued)

Mean	Median	Mode
4.179	4.000	3.000
Valid cases 28	Missing cases	1

As would be assumed, the course instructor involvement and participation was rated much higher (44.8 valid percent) (Appendix Table 72) by the on-campus group (Table 47). The long-distance respondents evaluated the involvement and participation at 30.4 valid percent (Table 48) toward the "much less" side of the scale. The combined-group, on-campus and by television respondents indicated a 41.7 valid percent in the "much less" column (Table 49) (Appendix Table 100). Although it is difficult to pinpoint the exact reasons, one may assume this is due in large measure to their (on-campus and by TV) schedules of course work and either employment or home responsibilities, not to mention extracurricular activities. These, as well as countless other reasons, could have influenced their perceptions of instructor involvement and participation. The long-distance learners, on the other hand, are exposed to only minimal instructor involvement by the "telecourse" method in the traditional sense (immediate feedback, for example, in a classroom setting). Rather, minimal lecture is utilized, as opposed to "narration" combined with sound and

visual effects that one experiences by telecourse. In this context, the "professor" is relegated to a "supplemental" force in the overall subject delivery, which varies from course to course. By and large, however, the telecourse instructor is highly removed from the "center of attention." This could account for the high percent (41.7) of the combined-course instruction group (Table 49), indicating a "much less" response. No doubt, the comparison by this group was more acute.

TABLE XLVI
DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"Compared with my other courses, I would say this course ranks ___ in having a lasting learning effect..."			
Value		Frequency	Valid Percent
Much less	1	1	4.0
	3	6	24.0
	4	11	44.0
	5	6	24.0
Much greater	6	1	4.0
Mean		Median	Mode
3.960		4.000	4.000
Valid cases	25	Missing cases	0

TABLE XLVII
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"Compared with my other courses, I would say the course instructor involvement and participation is..."			
Value		Frequency	Valid Percent
Much less	1	1	1.5
	3	4	6.0
	4	20	29.9
	5	30	44.8
Much greater	6	12	17.9
Mean		Median	Mode
4.701		5.000	5.000
Valid cases	67	Missing cases	1

TABLE XLVIII
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"Compared with my other courses, I would say the course instructor involvement and participation is..."			
Value		Frequency	Valid Percent
Much less	1	10	41.7
	2	6	25.0
	3	7	29.2
	4	1	4.2

TABLE XLVIII (Continued)

Mean	Median	Mode
2.435	2.000	2.000
Valid cases 23	Missing cases 6	

TABLE XLIX

DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"Compared with my other courses, I would say the course instructor involvement and participation is..."			
Value		Frequency	Valid Percent
Much less	1	10	41.7
	2	6	25.0
	3	7	29.2
	4	1	4.2
Mean		Median	Mode
1.958		2.000	1.000
Valid cases 24		Missing cases 1	

The hypothesis was rejected based on the significance level of (0.038). Although the differences in percentile exist, again, it should be noted that, by and large,

positive responses outnumbered negative expressions for the entire sample. The combined group of respondents (Table 52) (Appendix Table 101) also indicated reservations at the negative and positive levels, with only 20.0 valid percent responding to highest positive indication of "absolutely yes." On the most negative range, only four students indicated "absolutely not" for the entire sample. Although the hypothesis was rejected, the significance level, (0.038), is narrow by correlation and can be argued to some degree. For the purposes of this study and the significance of 0.05, the conclusion by statistic must be honored.

TABLE L
DESCRIPTIVE STATISTICS
(ON-CAMPUS)

"Considering all factors that would lead to a calculated decision, would you recommend this course to your friends...?"		
Value	Frequency	Valid Percent
Absolutely not	1	1.5
	2	1.5
	3	4.4
	4	11.8
	5	29.4
Absolutely yes	6	51.5
Mean	Median	Mode
5.206	6.000	6.000
Valid cases	68	Missing cases
		0

TABLE LI
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"Considering all factors that would lead to a calculated decision, would you recommend this course to your friends...?"			
Value		Frequency	Valid Percent
Absolutely not	1	2	6.9
	2	2	6.9
	3	5	17.2
	4	5	17.2
	5	3	10.3
Absolutely yes	6	12	41.4
Mean		Median	Mode
4.414		5.000	6.000
Valid cases	29	Missing cases	0

TABLE LII
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS AND BY TV)

"Considering all factors that would lead to a calculated decision, would you recommend this course to your friends...?"			
Value		Frequency	Valid Percent
Absolutely not	2	1	4.0
	3	5	20.0
	4	7	28.0
	5	7	28.0
Absolutely yes	6	5	20.0

TABLE LII (Continued)

Mean	Median	Mode
4.400	4.000	4.000
Valid cases 25	Missing cases	0

The hypothesis was accepted (see Table 53 and Table 54) (Appendix Table 74). The high valid percent on the "negative" scale (Table 55) (Appendix Table 102) is below average and is majority percentile. This may very well be explained due to the "combination" of educational delivery being confused with the ability of being able to cope with the two methods at satisfactory levels. This is, however, only speculation.

TABLE LIII

DESCRIPTIVE STATISTICS
(ON-CAMPUS)

"Compared with my other courses (now or in the past), I would say this course is..."			
Value		Frequency	Valid Percent
Very dull	1	1	1.5
	3	7	10.3
	4	18	26.5
	5	26	38.2
Stimulating	6	16	23.5

TABLE LIII (Continued)

Mean	Median	Mode
4.706	5.000	5.000
Valid cases . 68	Missing cases . 0	

TABLE LIV

DESCRIPTIVE STATISTICS
(BY TELEVISION)

"Compared with my other courses (now or in the past), I would say this course is..."		
Value	Frequency	Valid Percent
Very dull	1	3.6
	2	10.7
	3	10.7
	4	25.0
	5	25.0
Stimulating	6	25.0
Mean	Median	Mode
4.321	4.500	4.000
Valid cases . 28	Missing cases . 1	

TABLE LV
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS AND BY TV)

"Compared with my other courses (now or in the past), I would say this course is...."			
Value		Frequency	Valid Percent
Very dull	1	1	4.0
	2	7	28.0
	3	6	24.0
	4	4	16.0
	5	5	20.0
Stimulating	6	2	8.0
Mean		Median	Mode
3.440		3.000	2.000
Valid cases 25		Missing cases 0	

It is notable to observe that 18.5 valid percent stated that the course had helped them to make up their mind (Table 57) (Appendix Table 75). Likewise, the combined group indicated their preference at the 29.2 valid percent level (Table 58) (Appendix Table 103). However, their strong indication of "absolutely not" at the 37.5 valid percent is the most significant, and again is perhaps a preference of recommending that a student "not take on-campus and off-campus" courses at the same time. In this context, which is speculation, these students would probably not wish to continue their education based on this "combination" of learning environments.

TABLE LVI
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"Taking this course has helped me to make up my mind to continue my education..."			
Value		Frequency	Valid Percent
Absolutely not	1	7	10.6
	2	3	4.5
	3	17	25.8
	4	25	37.9
	5	7	10.6
Absolutely yes	6	7	10.6
Mean		Median	Mode
3.652		4.000	4.000
Valid cases	66	Missing cases	2

TABLE LVII
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"Taking this course has helped me to make up my mind to continue my education..."			
Value		Frequency	Valid Percent
Absolutely not	1	2	7.4
	2	3	11.1
	3	9	33.3
	4	6	22.2
	5	2	7.4
Absolutely yes	6	5	18.5

TABLE LVII (Continued)

Mean	Median	Mode
3.667	3.000	3.000
Valid cases 27	Missing cases	2

TABLE LVIII

DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"Taking this course has helped me to make up my mind to continue my education..."			
Value		Frequency	Valid Percent
Absolutely not	1	9	37.5
	2	3	12.5
	3	4	16.7
	4	7	29.2
Absolutely yes	6	1	4.2
Mean		Median	Mode
2.542		2.500	1.000
Valid cases 24		Missing cases	1

The on-campus respondents (Table 59) (Appendix Table 76) indicated by majority percent (36.8) that they were learning more, but only slightly above average. The long-

distance learners (Table 60) showed a 30.8 percent above average and 30.8 percent at the average level. The combined group (Table 61) (Appendix Table 104) showed a 40.0 percent above average response. The hypothesis was accepted at the (0.437) level of significance. This speaks well for the long-distance method of delivery, in that these students, both strictly telecourse and combined categories, feel they are progressing satisfactorily even though one group (long-distance) is removed altogether from the classroom-lecture environment. It is also noteworthy that the long-distance respondents (Table 60) indicated slightly under majority (Frequency 5) (19.2) percent as learning "much more," while only 3.6 percent said they were learning "much less."

TABLE LIX
DESCRIPTIVE STATISTICS
(ON-CAMPUS)

"Compared with my other courses at this point
in the semester, I would say that
I am learning..."

Value	Frequency	Valid Percent
Much less	1	1.5
	2	2.9
	3	16.2
	4	36.8
	5	29.4
Much greater	6	13.2

TABLE LIX (Continued)

Mean	Median	Mode
4.294	4.000	4.000
Valid cases 68	Missing cases 0	

TABLE LX
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"Compared with my other courses at this point in the semester, I would say that I am learning..."			
Value		Frequency	Valid Percent
Much less	2	1	3.8
	3	8	30.8
	4	8	30.8
	5	4	15.4
Much greater	6	5	19.2
Mean		Median	Mode
4.154		4.000	3.000
Valid cases 26		Missing cases 3	

The primary sample, traditional and long-distance students indicate a high rating for the course (Table 62 and

Table 63) (Appendix Table 77) and consequently, the hypothesis was accepted at the (0.065) level of significance. The combined-group (Table 64) (Appendix Table 105) also confirms the hypothesis with the majority (36.0) valid percent rating the course at the 5 level value. The perceptions of each group indicate many variables in this self-evaluation, but one must strongly consider the aspect of "learning" and student responses to it in this context, and their attitudes of feeling comfortable with the instruction.

TABLE LXI
DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"Compared with my other courses at this point in the semester, I would say that I am learning..."			
Value		Frequency	Valid Percent
Much less	1	1	4.0
	2	2	8.0
	3	9	36.0
	4	10	40.0
Much greater	5	3	12.0
Mean		Median	Mode
3.480		4.000	4.000
Valid cases	25	Missing cases	0

TABLE LXII
 DESCRIPTIVE STATISTICS
 (ON-CAMPUS)

"Compared with other courses you are now taking, or have taken in the past, and based on responses already made, how would you rate this course...?"

Value	Frequency	Valid Percent
Worthless	2	1.5
	3	4.4
	4	19.1
	5	45.6
Excellent	6	29.4
Mean	Median	Mode
4.971	5.000	5.000
Valid cases	68	Missing cases 0

TABLE LXIII
 DESCRIPTIVE STATISTICS
 (BY TELEVISION)

"Compared with other courses you are now taking, or have taken in the past, and based on responses already made, how would you rate this course...?"

Value	Frequency	Valid Percent
Worthless	2	14.8
	3	11.1
	4	22.2
	5	25.9

TABLE LXIII (Continued)

Value	Frequency	Valid Percent
Excellent 6	7	25.9
Mean	Median	Mode
4.370	5.000	5.000
Valid cases 27	Missing cases	2

TABLE LXIV

DESCRIPTIVE STATISTICS
(ON-CAMPUS AND BY TV)

"Compared with other courses you are now taking, or have taken in the past, and based on responses already made, how would you rate this course...?"		
Value	Frequency	Valid Percent
Worthless 2	1	4.0
3	6	24.0
4	8	32.0
5	9	36.0
Excellent 6	1	4.0
Mean	Median	Mode
4.120	4.000	5.000
Valid cases 25	Missing cases	0

Grade Expected by the Students

Both traditional and long-distance students indicated by their responses that they expected to receive the letter grade of "B" for the final grade in the course (Appendix Table 78). The on-campus group followed with 41.7 valid percent in predicting the same outcome. A total of four on-campus students, five long-distance learners, and seven combined-group indicated a "don't know" response. Seven long-distance learners indicated that they expected the letter grade of "A," while 23 on-campus and six combined-group specified the highest grade. The traditional on-campus group and the long-distance learners, by their sample responses, showed no significant difference in their letter grade expectations (Appendix Table 106).

Reasons for Enrollment

All three groups, traditional, long-distance and combined-group, indicated their reasons for enrollment were 85.3, 89.7, and 92.0 valid percent in the "required for degree" category (Table 79) Appendix Table 107). This was understandable in that one of the primary considerations for undertaking the study was based on this requirement. In other categories, two traditional and long-distance learners indicated their reasons as being "job or career improvement," while only one student in the combined-group so specified.

Combined-Group Category

Question 16 addressed the determination of those who were taking courses both on-campus and by television. The total number was 25 in this category. It is acceptable at most institutions where telecourses are offered that those students seeking this combination of courses be given the opportunity to do so, but usually on a limited basis.

Age Range of the Students

In relation to age, the traditional on-campus student responses were 50.0 percent (Appendix Table 81) in the 20-34 group and 72.4 percent in the long-distance student category. The combined-group response registered 64.0 valid percent (Appendix Table 81). The traditional on-campus student, usually 18-24 by national statistic, was so indicated, with a total of 28 respondents out of 68 so specified, while only two long-distance students out of 29 categorically responded. Of the combined-group of respondents, only three indicated that they were under 20 (Appendix Table 109). The age of the long-distance learner may be 20 or under, or on the other hand, 25-30 years of age. This was consistent with the Dallas Report and its findings, which indicated a bi-modal distribution that was in evidence in this sample.⁴

⁴Instructional Television/Dallas, "The First Six Years," Dallas County Community College District, May, 1978.

Sex of the Students

The sample followed the national trends of more female enrollment. However, the long-distance learners were in majority in this category, with 72.4 valid percent female enrollees (Appendix Table 82). This is again consistent with the Dallas Report, which recorded an increase in female participation in non-traditional curricula.⁵ All three groups show female dominance: 58.8 valid percent for traditional students (Appendix Table 110); 72.4 valid percent for long-distance learners; and 68.0 valid percent for the combined-group. Women especially find the non-traditional method of delivery preferable due to the flexible scheduling process. This scheduling lends itself to those who have full-time employment responsibilities in addition to young children to tend.

Highest Level of Education of the Students

The on-campus group, long-distance learners, and the combined-group, by majority percent indicated the "high school graduate" category in their responses. Only 2.9 valid percent (Appendix Table 83) of the traditional students indicated "11th grade or less," while none of the long-distance learners so responded. The highest level of education category registered 25.0 valid percent at the

⁵Dallas Report, loc. cit.

"1-3 years of college" level for the on-campus group, and 13.8 valid percent specified for the long-distance learner in this designation.

Marital and Family Status of the Students

A total of 69.1 valid percent (Appendix Table 84) of the traditional students indicated that they were single, compared to 20.7 valid percent of the long-distance learners. Of the telecourse students, 51.7 percent indicated that they were married with one young child. Again, the long-distance delivery of courses lends itself to those students who, by their individual situations, are more or less required to remain in the home, such as the group with young children to tend. By contrast, only 10.3 percent in the traditional student category stated that they were married with one child. The hypothesis was rejected at the 0.001 level of significance.

Principal Occupation of the Students

The on-campus traditional students by 54.4 valid percent (Appendix Table 85) listed their occupation as students, and 36.8 percent specified that they were "working for wages or salary." The long-distance learners by 82.8 valid percent responded in the category of "wages or salary." As so stated by Zelan and Gardner, non-traditional courses offer the greatest flexibility for these

students.⁶ Descriptive statistics for the entire sample (Appendix Table 141) show that only 9.0 valid percent indicated that they were "homemakers" and 4.9 percent were "self-employed." There were no "military" respondents in the category of occupation.

Number of Semester Hours Taken by Students

The on-campus group, as was expected, registered high in this category. A total of 57.4 valid percent (Appendix Table 88) of the respondents stated "more than 12 hours." By comparison, only 10.3 percent of the long-distance learners registered in this category.

Distance From Home to the Attending College of the Students

The long-distance learners responded with a percentage of 51.7 (Appendix Table 89) in the 1-10 miles category, as did the on-campus students with 47.1 percent. However, 41.4 percent of the long-distance students listed their choice as 11-25 miles from the college campus. As the literature reflects, one of the advantages of the telecourse method of delivery is that a student will only have to visit the originating campus a minimum of times (i.e., examinations, counseling, enrollment, etc.). This is a

⁶Joseph Zelan and David Gardner, "Alternatives in Higher Education--Who Wants What?," Higher Education 3 (1975): 317-33.

strong marketing point for an institution and is to the benefit of the student in reducing the expenses of transportation.

What are the Ultimate Degree Plans of the Students

The majority of both groups indicated their preference of continued education toward a bachelor's degree, with 29.4 valid percent for the on-campus traditional student and 34.5 percent of the long-distance learners (Appendix Table 90).

Highest Level of Formal Education Obtained by Student's Father

Of the on-campus group respondents, 29.4 valid percent indicated "high school," while among the long-distance learners, 41.4 percent stated "some college" (Appendix Table 91).

Highest Level of Formal Education Obtained by Student's Mother

Again, the on-campus group identified "high school" by 29.4 valid percent (Appendix Table 92). The long-distance student majority response was also "high school," with 58.6 percent. Although the on-campus group registered 11.8 percent in the "college and graduate degree" category, none was listed for the long-distance students in terms of their mother's formal education.

Summary

The analysis of the data centered on an examination of the responses of Tulsa Junior College Students to the survey questionnaire.

The results of these hypotheses were discussed as they related to the 24 hypotheses. Additional analysis of the data were reviewed in relation to demographical outcomes, and all questions were analyzed reporting significant data. Mann-Whitney "U" tests were computed on 14 responses, of which five were reported to be significant at the .05 level. Of the ten remaining hypotheses, six were reported to be significant at the .05 level using descriptive statistics.

Because a sub-group identified as "combined-group," referring to those students taking both on-campus and long-distance courses, figured in the analysis of the data, separate treatment was necessary. A brief narrative was utilized for clarification following statistical treatment of identifiable data and was utilized as "comparison" to the two main groups under study, the traditional student and the long-distance learner.

CHAPTER V
FINDINGS, CONCLUSIONS, AND
RECOMMENDATIONS

A short summary of the statement of purpose and the subsequent procedures utilized in obtaining and analyzing the data is the introduction to the significant findings and resulting discussion of the study. Recommendations for further study and research are also examined.

Findings

Purpose of the Study

The purpose of this study was to determine whether differences exist between the traditional college and university student taking classes in an on-campus setting and those of the long-distance learner, the non-traditional student, taking classes via the "telecourse" method of delivery. In order to study such differences, the study was designed to seek specific answers to the following questions:

1. Will the attitude toward the method of instruction utilized by long-distance learners be significantly different from that of traditional students, or those enrolled on

campus?

2. Will the long-distance learner do equally well or better than his counterpart on campus in the same course in terms of work assignments, tests, and final grades?

3. Will the traditional student and the long-distance learner provide the same reasons for enrollment in the same course.

4. Will the age difference between the traditional student and the long-distance learner be significant?

5. Will the long-distance learner have more family responsibilities than the traditional student?

6. Will there be more men or women taking long-distance courses compared with their counterparts on campus?

7. Will more married students be taking courses on campus in traditional settings compared to long-distance learners?

8. Will there be a significant difference between ethnic or racial background between traditional and long-distance learners?

9. Will the educational delivery system make a difference in decisions to continue their education based on traditional instruction and long-distance learning?

10. Will the long-distance learner feel he is receiving the same education as the traditional student?

11. Will the long-distance learner have more work or job related responsibilities than the traditional student?

12. Will the parents of long-distance learners have

less formal education than traditional student parents?

A post-test of the questionnaire was administered to five students enrolled in traditional on-campus classes. Of these, two had taken courses via television. The purpose of this pilot phase was to determine if the responses to the questionnaire would be sufficient to justify continuation of the study, and to alter or change any questions for better clarification. The resulting success of the post-test was positive in overall content and only minor adjustments were undertaken in finalizing the questionnaire.

Population

The sample population included 121 students from Tulsa Junior College located in Tulsa, Oklahoma. Tulsa Junior College then served approximately 2,485 full-time students (twelve credit hours or more) and approximately 11,000 part-time students (eleven credit hours or less). The average age was approximately 28.5 years. Tulsa Junior College is the largest junior college in Oklahoma and ranks third largest college in the state. The college has three campuses: the Metro Campus, located downtown, the Northeast Campus, and the Southeast Campus.¹

A general education requirement, "Political Science," a freshman level course, was chosen for the survey; this class was also available to long-distance learners via

¹Alfred M. Philips, The President's Annual Report to the Board, submitted to the Tulsa Junior College Board of Regents, Tulsa, 1981.

television. Although the college offers numerous non-traditional courses in the televised category, the course selected for this study represents one of the oldest offerings of the TV curriculum. In addition, it was reasoned that students enrolled in a freshman level political science course would be, for the most part, working toward the goal of completing the general education requirement in this area at the very least. In addition, continuity of comparison was highly desirable.

Analysis of the Data

A preliminary instrument in the form of a 27-item questionnaire was constructed and critically examined by a panel of experts. The purpose of the examination was to determine if the items proposed were appropriate to the intent of the study.

Data from the questionnaire were analyzed in three ways. First, responses to the first 14 questions were analyzed in relation to the Mann-Whitney "U" test. Data were represented for the total population and subsequent pairs of selected groups. Data were also analyzed for the "combined'group" segment and used in a comparison method for "information only" purposes. Data were presented by demographic categories and were analyzed by frequency count, percentage, median, mode, and missing observations.

Although a difference apparently does not exist in the methodology of traditional lecture method and instruction

by television, there does appear to be a significant difference in evaluating instructor involvement. Perhaps the interaction affordability of the traditional on-campus student and its resulting feedback mechanism affording the student immediate gratification is indeed one area of deficiency experienced by the long-distance learner to a larger degree than heretofore assumed. By the very fact that the telecourse student is removed from this interaction, he then must assume a more active role in information retrieval, void of "instructor involvement."

The statistics revealed a significant difference in responses to "...my general understanding of concepts, principles, goals and objectives in this course has been?" The percentage of long-distance learners showed a significantly larger increase over their counterparts (Appendix A, Table 68). While all three groups, the traditional, long-distance and combined-group, those taking courses on campus and by TV indicated that they were understanding more by their responses to the question, the overriding significance lies in the percentile of the two primary groups in question which form the basis of the study.

Data showed a significant difference at the 0.01 level in relation to the time demands, such as assignments to be turned in. The long-distance learners responded toward the "above average" demands placed on them. It would be safe to conclude that an unfamiliar learning technique, such as televised instruction, coupled with individual

responsibilities such as employment demands and family considerations, not to mention "home environment" distractions and interruptions, played heavily in this area of response by telecourse students.

In rating the course, the significance level was 0.24 (see Appendix A, Table 71). The long-distance learners rated the course lower than their counterparts. As is the case with traditional methods of learning, and what one is accustomed to from kindergarten through adulthood, any departure would be understandably met with reserve, and in some instances, total resentment. In addition, television is an "entertainment" medium, and depending upon the exposure of the individual to television, it would seem logical to conclude that a "transition" from entertainment to learning would offer challenge for some and problems for others. Self-discipline and motivation also play a significant part in this scenario.

A significant difference was noted at the 0.03 level in respondents to the question of recommending the course to their friends. The level is marginal, resulting from the on-campus group expressing recommendation by majority, while the TV group expressed reserve. Based on self-evaluation, and by one's own circumstance, recommendation is categorically subjective.

Profile of the Long-Distance Learner

As the literature indicates, a consistency exists in

relation to recommendations by major writers of non-traditional delivery systems to investigate and determine the major characteristics of the student population prior to any curriculum development for those institutions considering this form of instructional delivery. In order to assist those who may be contemplating a non-traditional delivery system, a profile is offered as information based on the results of this study.

Age Range of the Student

While the literature indicates the majority of long-distance learners are usually older in relation to their on-campus counterparts and are usually more successful due to this method of instruction by the very nature of their maturity (self-discipline, motivation, etc.), it is also true that the telecourse student may be any age. For the purposes of this study, the latter was true.

Two were under 20, 21 were age 20 to 34, and six were 35 to 39 years of age.

Sex of the Student

The national trend of more female enrollment is also true of the non-traditional student. All groups showed a female dominance, but the long-distance category was by far the majority in this category. The increased role of female opportunities and the demand for increased educational credentials in various fields has led to the exercising of all

options, with telecourse delivery being given above average consideration by the female population. In addition, this female influx has had a direct effect on the curricular areas of education in general.

Semester Hours Enrolled

For the purposes of this study, it was noted that the non-traditional student was enrolled in a range of one to six hours of course work. The pattern was consistent with the employment category of the student.

Employment Status of the Student

The majority of the long-distance students in this study were employed approximately 40-49 hours per week. One of the major advantages of reaching this segment of the population by non-traditional delivery is "flexibility." Students employed full-time or part-time can take advantage of course offerings without fear of employment conflict.

Recommendations

The following is a summary of recommendations for two-year colleges implementing telecourses. The suggestions are based upon the results of this study.

The results of this study indicate that long-distance instruction should continue to be offered as an alternative to traditional on-campus lecture courses.

Telecourses are by no means designed to replace

standard institutional instruction in the traditional method; rather, they are designed to reach a segment of the population heretofore untapped, a resource that wants to learn, but for various reasons are unable to attend on-campus classes. In this context, flexibility should not be designed around the student-centered concept of learning, and not at the convenience of the faculty or institution in general. Total access to enrollment should be emphasized and individual attention should be applied when possible.

As the study indicated, instructor involvement plays an important role not only in relation to the effectiveness and subsequent learning, but also future enrollments. The long-distance student should be made aware that although he is removed from the traditional classroom setting, he is by no means any less important. The study revealed that 34.5 valid percent (Appendix Table 90) intend to continue their education, and it can be assumed that many will base their judgments on long-distance delivery experiences.

Based on the statistical demographic responses as they relate to age in the study, it is recommended that special attention be paid to the "adult" aspect of the long-distance student profile. By their very nature of being "removed" from the campus scene, these students need to be made aware of additional campus offerings designed for their particular age group. This may come by implementation in the adult and continuing education category, either by long-distance or on-campus.

Without feedback from the long-distance learners in the form of overall content difficulty, clarity and general understanding of instructions, interpretation of course material, as well as individual student characteristics such as age, employment status, family responsibilities, and conditions of the at-home learning environment, the course instructor can only resort to speculations. Ongoing evaluation of such feedback loops should receive priority and be implemented where none exist.

It appears that the weakest link in the telecourse method of higher education delivery is the method for monitoring student involvement and progress. The so-called "event paced" model utilized in the on-campus classroom setting appears to be a poor substitute both managerially and philosophically. Alternative methods of analysis in measurement are obviously needed.

Instantaneous two-way communication through the use of teleconferencing which allows for interactive exchange of information among different size groups of students can greatly aid the long-distance learner. This can be accomplished by engaging in cooperative planning whereby institutional representatives, be they teachers or administrators, seek to maximize each other's strengths and weaknesses in a combined effort to provide better long-distance learning, and greater student satisfaction.

As the study indicates, telecourse students are eager to learn, experience, and even complete a goal of a college

degree. The method of delivery by telecommunications is making this a reality, and as a result, creating a more productive citizenry, and certainly a more educated one.

Suggested Considerations for Additional Research Topics

The following is a list of research topics that should be considered for future study.

1. Additional analysis should be undertaken concerning the characteristics of students who choose to enroll in long-distance courses utilizing the television delivery system. The analysis should address such variables as family responsibilities, occupation or career objectives, handicap status, educational background and goals. In addition, individualized testing in the areas of reading level, mathematical skill, and writing abilities should be explored, especially if the student has been removed from the educational experience for a long period of time.

2. Additional study should be undertaken to identify the "needs" of the telecourse student, i.e., additional supplemental material. Due to the obvious lack of immediate feedback and interaction between the student and the instructor, investigation should identify areas that could bring more "interaction" in the form of innovation utilizing television.

3. Investigation should be made into the television delivery system as it relates to the "adult" student. As

the population continues to grow older, adaptable techniques for improvement in the delivery to target audiences should be studied.

4. A more in-depth study should be undertaken to determine more precisely the differences between the traditional student in the areas of attitude, performance, and motivation as compared to those students off-campus in a long-distance setting. It is suggested that several studies be undertaken at several colleges differing in course offerings, philosophy, location, and student demographics.

5. Additional study should be made into the impact of telecourses on the colleges themselves and their curriculum. Suggested areas of study should include increase or decrease in delivery costs of education and increase or decrease in student enrollment.

6. An ongoing investigation should be undertaken to determine whether long-distance students are securing as much information from television alone or from selected readings. Research is deficient in this area supporting the utilization of only one medium.

7. Research should be undertaken to investigate the success rate of the telecourse student upon entering the on-campus classroom following telecourse introduction. In addition, the drop-out rate for these students should be investigated in-depth.

8. Additional analysis should be undertaken to determine the scheduling of television courses as it relates to

maximum usage by the student. Also, time elements for proper instruction and information dissemination as it relates to "known" courses that offer a high rate of difficulty should be investigated to identify areas for improvement.

9. An investigation should be implemented to identify problem areas in developing support systems. Special attention should be given to the very specialized nature of the delivery system itself. A study of several systems in place at several community colleges should be analyzed.

10. Additional study should be undertaken to identify the perceptions of long-distance learners in their relation to on-campus students, faculty and administrators.

Conclusion

The results of this study support the concept of higher education delivery by "telecourse" and further indicate that this type of alternative learning system should continue to be made available, because in the final analysis it is possible to learn equally well from a distance as it is in a face-to-face situation. In addition, as the study suggests, the convenience of studying at home and at one's own pace prompts numerous persons to enroll in open learning courses. The study revealed that most students intend to continue their education, and by so doing, indicated the very positive aspect of extending services of the institution to a new clientele. One significant aspect of the study

emphasized the fact that some students must learn at a distance or not at all, and in this instance, the definition of "service" takes on a deeper meaning and significance. It should be remembered that alternative delivery systems such as telecourses are only alternatives to the "ideal" on-campus experience of the learning model and are not intended to replace traditional instructional methods found only in the classroom. As the study indicated, most students intend to continue their education, which, for the telecourse student at least, reinforces the notion that this can be a reality despite his family and/or employment responsibilities and flexible daily schedule. The long-distance delivery alternative can also serve as a method by which those students who would normally complete their requirements on campus, but by circumstance are forced to seek other means, can successfully complete their education via television. In the last analysis then, open learning programs do indeed represent "access to education."

BIBLIOGRAPHY

- Armsey, James W., and Dahl, Norman C. An Inquiry Into the Uses of Instructional Technology. New York: The Ford Foundation, 1973.
- Best, John W. Research Into Education. New Jersey: Prentice-Hall, Inc., 1970.
- Boud, D. J. "Descriptions of Distance Learning Schemes: Distance Learning and Evaluation." Aspects of Educational Technology XV. New York: Kogan Page London, Nichols Publishing Company, 1981.
- Brock, Dee. Promise and Partnership: Public Television and Higher Education. Proceedings of Applying New Technologies in Higher Education (March 14-17, 1982).
- Brown, Laurence A., Jr. "The Impact of an Adult Distance Learning Program on Campus Enrollments." A paper presented to the Annual Meeting of the American Educational Research Association, March 19-23, 1982, New York, N.Y. Lincoln, Nebraska: The University of Mid-America. Abstract.
- Campbell, Donald T., and Stanley, Julian C. Experimental and Quasi-Experimental Designs for Research. Chicago: Rand McNally College Publishing Company, 1963.
- Carnegie Commission on Higher Education. Report and Recommendations by the Commission. The Fourth Revolution: Instructional Technology in Higher Education. New York: McGraw-Hill Book Company, Inc., 1972.
- Covert, Edward C. "S-U-N A Model for Open Learning Systems." Educational and Industrial Television 6, No. 2, 1974.
- Dirr, Peter J., and Katz, Joan H. Higher Education Utilization Study Phase I: Final Report. Washington, D.C.: Corporation for Public Broadcasting, March, 1981. Abstract.
- Dirr, Peter J., and Pedone, Ronald J. Instructional Use of Television by Two-Year Colleges 1978-79. Washington, D.C.: Adult Learning and Public Broadcasting, American Association of Community and Junior Colleges, 1980.

- Eggert, John D. An Examination of Goals of Potential and Actual Learners. Educational Resources Information Center, ERIC Document, ED 161310, 1974.
- Ehrlich, H. J., and Lee, Dorothy. "Dogmatism, Learning and Resistance to Change: A Review and a New Paradigm." Psychological Bulletin, 1969, 1971.
- Evans, Richard I. Resistance to Innovation in Higher Education. San Francisco: Jossey-Bass, Inc., 1968.
- Fernandez, Alfred P. The Role of the Campus Instructor in Student Achievement in Community College Television Instruction. Unpublished doctoral Dissertation, University of Southern California, 1976.
- Forrester, Thomas C., and Zakia, Richard D. "Evaluation of Televised Instruction." Selecting Media for Learning: Readings from Audio-Visual Instruction. Washington, D.C.: Association for Educational Communications and Technology, 1974.
- Good, Carter V. Dictionary of Education. New York: McGraw-Hill Book Company, Inc., 1973.
- Grossman, Lawrence K. Coming Together--Public Television and Higher Education. Remarks before the National Telecourse Conference, 1982. "Managing Technology for Adult Learners." April 30, 1982. Abstract.
- Helmantoler, Michael C. "The Non-Traditional College Student and Public TV." The Community and Junior College Journal, March, 1978.
- Hewitt, Louise Matthews. An Administrator's Guide to Telecourses. Mountain View, California: Office of Telecourse Development, Coastline Community College, 1980.
- Instructional Television/Dallas. "The First Six Years." Dallas County Community College District, May, 1978.
- Keller, George. Academic Strategy: The Management Revolution in American Higher Education. Baltimore and London: The John Hopkins University Press, 1983.
- Lewis, James, Jr. Administering the Individualized Instruction Program. New York: Parker Publishing Company, Inc., 1971.
- McClure, Lyndon. Occupational-Technical Curriculum Development TV Study. United States Educational Resources Center. ERIC Document ED 127 395, 1975.

- Medsker, Leland L. The Junior College: Progress and Prospect. New York: McGraw-Hill Book Company, Inc., 1960.
- Milton, Ohmer. Alternatives of the Traditional. San Francisco, California: Jossey Bass, Inc., 1972.
- Munshi, Kiki S. Telecourses: Reflections 1980. Washington, D.C.: Corporation for Public Broadcasting, 1980.
- Philips, Alfred M. The President's Annual Report to the Board. Report submitted to Tulsa Junior College Board of Regents, 1981.
- Purdue University Libraries Attitude Survey, 1959-60. Lafayette, Indiana: Purdue University, 1964.
- Riddick, Glenda. OCC Psychologist Maps Students. Fountain Valley, California: The Coast Community Colleges.
- Roelfs, Pamela. "Teaching and Counseling Older College Students." Findings 2 (1975), pp. 5-8.
- Rokeach, M. The Open and Closed Mind: Investigation Into the Nature of Belief Systems and Personality Systems. New York: Basic Books, 1960.
- Roohk, Bonnie. "Who Takes Telecourses?" The Coast Communicator Newsletter. Fountain Valley, California: Coast Community Colleges.
- Sims, R. An Inquiry Into Correspondence Education Processes: Policies, Principles and Practices in Correspondence Education Systems Worldwide. Unpublished ICCE-UNESCO Report.
- Zeiss, Paul A. Assessing Characteristics and ITV Interests of Students Enrolled in Telecourses at Central Texas College. Unpublished doctoral Dissertation, Central Texas College, 1978. Abstract.
- Zelan, Joseph, and Gardner, David. "Alternatives in Higher Education--Who Wants What?" Higher Education 3 (1975), pp. 317-33.

APPENDICES

APPENDIX A

COMPARATIVE DATA BETWEEN THE TRADITIONAL
ON-CAMPUS STUDENT AND THE LONG-
DISTANCE LEARNER IN RESPONSE
TO THE QUESTIONNAIRE

TABLE LXV

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"When compared to my other courses, the work required
 for this course has been..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
67	39.56	28	68.20
U = 372.5	Z = -4.8690	Significance Level	0.001

TABLE LXVI

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Compared with my other courses, the demands placed on
 me to do the assignments in this course are..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
66	41.74	28	61.07
U = 544.0	Z = -3.2677	Significance Level	0.001

TABLE LXVII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"When compared with my other courses, the overall
 content (material) I have learned thus
 far in this course is..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	49.97	28	44.93
U = 852.0		Z = 0.8373	
		Significance Level 0.4024	

TABLE LXVIII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"When compared with my other courses, my general understanding
 of concepts, principles, goals and objectives
 in this course has been..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	51.86	27	38.28
U = 655.5	Z = 2.2379	Significance Level	0.025

TABLE LXIX

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"When compared with my other courses, the time demands (such as
 assignments that are to be turned in at a
 specified time) have been..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	43.76	27	58.69
U = 629.5	Z = -2.4573	Significance Level	0.014

TABLE LXX

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"When compared with my other courses (now or in the
 past), the pace of this instruction is..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
67	46.69	28	51.13
U = 850.5	Z = -0.7620	Significance Level	0.446

TABLE LXII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Compared with my other courses, I would say this course
 ranks ___ in having a lasting learning effect..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	50.75	28	43.48
U = 811.5	Z = -1.1693	Significance Level	0.242

TABLE LXXII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Compared with my other courses, I would say the course
 instructor involvement and participation is..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
67	55.65	23	15.93
U = 90.5	Z = -6.4910	Significance Level	0.001

TABLE LXXIII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Considering all factors that would lead to a
 calculated decision, would you recommend
 this course to your friends..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	52.60	29	40.57
U = 741.5	Z = -2.0656	Significance Level	0.0380

TABLE LXXIV

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Compared with my other courses (now and in the past),
 I would say this course is..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	50.31	28	44.11
U = 829.0	Z = -1.0298	Significance Level	0.303

TABLE LXXV

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Taking this course has helped me to make up my
 mind to continue my education..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
66	47.48	27	45.83
U = 859.5	Z = -0.2754	Significance Level	0.783

TABLE LXXVI

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION.

"Compared with my other courses at this point in the
 semester, I would say that I am learning..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	48.80	26	44.10
U = 795.5	Z = -0.7763	Significance Level	0.437

TABLE LXXVII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Compared with other courses you are now taking, or have taken
 in the past, and based on responses already made,
 how would you rate this course..."

Traditional		Long-Distance	
N	Mean Rank	N	Mean Rank
68	51.12	27	40.15
U = 706.0	Z = -1.8390	Significance Level	0.065

TABLE LXXVIII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Based on my experiences in this course thus far, I
 expect to receive the letter grade of..."

Traditional		Long-Distance	
Letter Grade	N	Letter Grade	N
A	23	A	7
B	31	B	13
C	9	C	3
Don't know	4	Don't know	5
Chi Square = 9.92546		D.F. = 6	
		Significance Level 0.127	
Mean	= 2.090	Mean	= 2.750
Median	= 2.000	Median	= 2.000
Mode	= 2.000	Mode	= 2.000

TABLE LXXIX

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"I enrolled in this course primarily because..."

Traditional		Long-Distance	
	N		N
Required for degree	58	Required for degree	26
Count as elective	4	Count as elective	0
Increase knowledge	4	Increase knowledge	1
Job or career improvement	2	Job or career improvement	2
Chi-Square = 4.36230		D.F. = 6	
		Significance Level = 0.627	
Mean	= 1.353	Mean	= 1.379
Median	= 1.000	Median	= 1.000
Mode	= 1.000	Mode	= 1.000

TABLE LXXX

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTIONS,

"I am presently taking courses that are..."

Traditional		Long Distance	
	N		N
On campus only	68	On campus only	0
By TV only	0	By TV only	29
Both	0	Both	25
Mean = 1.648	Median = 1.000	Mode = 1.000	Valid cases = 122

TABLE LXXXI

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Your age..."

Traditional		Long-Distance	
	N		N
Under 20	28	Under 20	2
20-34	34	20-34	21
35-49	5	35-49	6
50-64	1	50-64	0
Chi-Square = 19.07702		D.F. = 6	
		Significance Level 0.004	
Mean	= 1.691	Mean	= 2.138
Median	= 2.000	Median	= 2.000
Mode	= 2.000	Mode	= 2.000

TABLE LXXXII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Your sex..."

Traditional		Long-Distance	
N		N	
Male	28	Male	8
Female	40	Female	21
Both On-Campus and Off-Campus		N	
Male		8	
Female		17	
Chi-Square = 1.85381		D.F. = 2	
		Significance Level 0.395	
Mean	= 1.588	Mean	= 1.724
Median	= 2.000	Median	= 2.000
Mode	= 2.000	Mode	= 2.000

TABLE LXXXIII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Your highest level of education completed..."

Traditional		Long-Distance	
	N		N
11th grade or less	2	11th grade or less	0
High school graduate	28	High school graduate	8
Trade-business school	2	Trade-business school	2
Diploma	19	Diploma	12
1-3 years of college	17	1-3 years of college	2
College graduate	0	College graduate	0
Chi-Square = 21.98071		D.F. = 10	
		Significance Level 0.015	
Mean	= 3.309	Mean	= 3.414
Median	= 4.000	Median	= 4.000
Mode	= 2.000	Mode	= 4.000

TABLE LXXXIV

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"Marital and family status..."

Traditional		Long-Distance	
	N		N
Single	47	Single	6
Single parent	8	Single parent	0
Married, no children	2	Married, no children	4
Married, young children	7	Married, young children	15
Married, grown children	2	Married, grown children	2
Widowed, divorced, separated	2	Widowed, divorced, separated	2
Chi-Square = 38.64016		D.F. = 10	
		Significance Level 0.001	
Mean	= 1.750	Mean	= 3.448
Median	= 1.000	Median	= 4.000
Mode	= 1.000	Mode	= 4.000

TABLE LXXXV

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"What is your principal occupation...?"

Traditional		Long-Distance	
	N		N
Student	37	Student	0
Self-employed	4	Self-employed	1
Employed for wages or salary	25	Employed for wages or salary	24
Homemaker	2	Homemaker	4
Military	0	Military	0
Chi-Square = 33.83774		D.F. = 6	
		Significance Level 0.001	
Mean	= 1.882	Mean	= 3.103
Median	= 1.000	Median	= 3.000
Mode	= 1.000	Mode	= 3.000

TABLE LXXXVI

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"How many hours per week do you work...?"

Traditional		Long-Distance	
	N		N
None	20	None	2
1-9	4	1-9	1
10-19	9	10-19	3
20-29	18	20-29	0
30-39	7	30-39	6
40-49	6	40-49	16
50 or more	4	50 or more	1
Chi-Square = 36.45701		D.F. = 12	
		Significance Level 0.001	
Mean	= 3.324	Mean	= 5.034
Median	= 4.000	Median	= 6.000
Mode	= 1.000	Mode	= 6.000

TABLE LXXXVII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"What is your racial background...?"

Traditional		Long-Distance	
	N		N
Caucasian or white	55	Caucasian or white	26
Mexican or Chicano	0	Mexican or Chicano	1
Black	9	Black	1
Oriental	1	Oriental	0
American Indian	3	American Indian	0
Other	0	Other	1
Chi-Square = 14.64617		D.F. = 10	
		Significance Level 0.145	
Mean	= 1.485	Mean	= 1.276
Median	= 1.000	Median	= 1.000
Mode	= 1.000	Mode	= 1.000

TABLE LXXXVIII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"How many semester hours are you currently taking...?"

Traditional		Long-Distance	
	N		N
1-3 hours	2	1-3 hours	11
4-6 hours	2	4-6 hours	11
7-9 hours	4	7-9 hours	2
10-12 hours	21	10-12 hours	2
More than 12 hours	39	More than 12 hours	3
Chi-Square = 76.08238		D.F. = 8	
		Significance Level 0.001	
Mean	= 4.386	Mean	= 2.138
Median	= 5.000	Median	= 2.000
Mode	= 5.000	Mode	= 1.000

TABLE LXXXIX

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"How far from home is the college you attend...?"

Traditional		Long-Distance	
	N		N
1-10 miles	32	1-10 miles	15
11-25 miles	24	11-25 miles	12
26-50 miles	9	26-50 miles	2
51-100 miles	3	51-100 miles	0
Over 100 miles	0	Over 100 miles	0
Chi-Square = 5.91957		D.F. = 6	
		Significance Level 0.4323	
Mean	= 1.750	Mean	= 1.552
Median	= 2.000	Median	= 1.000
Mode	= 1.000	Mode	= 1.000

TABLE XC

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"What are your ultimate degree plans...?"

Traditional		Long-Distance	
	N		N
None	1	None	1
Associate degree or equivalent	15	Associate degree or equivalent	9
Bachelor's degree	20	Bachelor's degree	10
Master's degree	13	Master's degree	5
Doctoral degree	3	Doctoral degree	0
Professional degree (Law, Den- tistry, Medicine)	9	Professional degree (Law, Den- tistry, Medicine)	1
Undecided	7	Undecided	3
Chi-Square = 12.54826	D.F. = 12	Significance Level	0.402
Mean = 3.838		Mean = 3.310	
Median = 3.000		Median = 3.000	
Mode = 3.000		Mode = 3.000	

TABLE XCI

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"What is the highest level of formal education
 obtained by your parents (mother)...?"

Traditional		Long-Distance	
	N		N
High school	20	High school	17
Post secondary school	8	Post secondary school	5
Some Vo-Tech	6	Some Vo-Tech	1
Vocational Technical degree	2	Vocational Technical degree	1
Some college	16	Some college	5
College degree	8	College degree	1
Some graduate school	1	Some graduate school	0
Graduate degree	11	Graduate degree	0
Chi-Square = 17.61093		D.F. = 12	
		Significance Level 0.128	
Mean	= 3.735	Mean	= 2.034
Median	= 3.500	Median	= 1.000
Mode	= 1.000	Mode	= 1.000

TABLE XCII

COMPARATIVE DATA ON ALL TRADITIONAL STUDENTS TAKING COURSES ON
 CAMPUS AS COMPARED TO ALL LONG-DISTANCE LEARNERS RECEIVING
 INSTRUCTION VIA TELEVISION KNOWN AS TELECOURSE
 RESPONDING TO THE QUESTION,

"What is the highest level of formal education
 obtained by your parents (father)...?"

Traditional		Long-distance	
	N		N
High school	19	High school	11
Post secondary school	7	Post secondary school	2
Some Vo-Tech	4	Some Vo-Tech	2
Vocational-Technical degree	1	Vocational-Technical degree	1
Some college	14	Some college	12
College degree	10	College degree	1
Some graduate school	1	Some graduate school	0
Graduate degree	11	Graduate degree	0
Chi-Square = 19.47645		D.F. = 14	
		Significance Level 0.147	
Mean	= 4.090	Mean	= 3.138
Median	= 5.000	Median	= 3.000
Mode	= 1.000	Mode	= 5.000

APPENDIX B

DESCRIPTIVE STATISTICS ON THOSE STUDENTS
TAKING COURSES ON-CAMPUS AND BY
LONG-DISTANCE (COMBINED-GROUP)

TABLE XCIII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Work Required

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
	2	3	12.0	12.0	12.0
	3	11	44.0	44.0	56.0
	4	8	32.0	32.0	88.0
	5	3	12.0	12.0	100.0
	Total	25	100.0	100.0	
Mean	3.440	Median	3.000	Mode	3.000
	Valid Cases	25	Missing Cases	0	

TABLE XCIV

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Demands to Do Assignments

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	2	8.0	8.0	8.0
	2	5	20.0	20.0	28.0
	3	8	32.0	32.0	60.0
	4	7	28.0	28.0	88.0
	5	1	4.0	4.0	92.0
Much greater	6	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
Mean	3.240	Median	3.000	Mode	3.000
Valid Cases		25	Missing Cases		0

TABLE XCV

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Overall Content

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	1	4.0	4.0	4.0
	2	1	4.0	4.0	8.0
	3	7	28.0	28.0	36.0
	4	12	48.0	48.0	84.0
	5	4	16.0	16.0	100.0
	Total	25	100.0	100.0	
Mean	3.680	Median	4.000	Mode	4.000
Valid Cases		25	Missing Cases		0

TABLE XCVI

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

General Understanding

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
	2	1	4.0	4.0	4.0
	3	7	28.0	28.0	32.0
	4	12	48.0	48.0	80.0
	5	5	20.0	20.0	100.0
	Total	25	100.0	100.0	
Mean	3.840	Median	4.000	Mode	4.000
	Valid Cases	25		Missing Cases	0

TABLE XCVII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Time Demands

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	8	32.0	33.3	33.3
	2	9	36.0	37.5	70.8
	3	4	16.0	16.7	87.5
	4	2	8.0	8.3	95.8
	5	1	4.0	4.2	100.0
Out of Range		1	4.0	Missing	
	Total	25	100.0	100.0	
Mean	2.125	Median	2.000	Mode	2.000
Valid Cases		24	Missing Cases		1

TABLE XCVIII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Pace

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	2	1	4.0	4.0	4.0
	3	11	44.0	44.0	48.0
	4	9	36.0	36.0	84.0
	5	4	16.0	16.0	100.0
	Total	25	100.0	100.0	
Mean	3.640	Median	4.000	Mode	3.000
Valid Cases		25	Missing Cases		0

TABLE XCIX

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Academic Comparison

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	1	4.0	4.0	4.0
	3	6	24.0	24.0	28.0
	4	11	44.0	44.0	72.0
	5	6	24.0	24.0	96.0
Much greater	6	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	3.960	Median	4.000	Mode	4.000
Valid Cases		25	Missing Cases		0

TABLE C

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Instructor Involvement and Participation

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	10	40.0	41.7	41.7
	2	6	24.0	25.0	66.7
	3	7	28.0	29.2	95.8
	4	1	4.0	4.2	100.0
Out of Range		1	4.0	Missing	
	Total	25	100.0	100.0	
Mean	1.958	Median	2.000	Mode	1.000
	Valid Cases	24	Missing Cases	1	

TABLE CI

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Recommend the Course

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
	2	1	4.0	4.0	4.0
	3	5	20.0	20.0	24.0
	4	7	28.0	28.0	52.0
	5	7	28.0	28.0	80.0
Absolutely Yes	6	5	20.0	20.0	100.0
	Total	25	100.0	100.0	
Mean	4.400	Median	4.000	Mode	4.000
	Valid Cases	25	Missing Cases	0	

TABLE CII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Feeling for the Course

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Very dull	1	1	4.0	4.0	4.0
	2	7	28.0	28.0	32.0
	3	6	24.0	24.0	56.0
	4	4	16.0	16.0	72.0
	5	5	20.0	20.0	92.0
Stimulating	6	2	8.0	8.0	100.0
Total		25	100.0	100.0	
Mean	3.440		Median	3.000	
			Mode	2.000	
Valid Cases		25		Missing Cases	
				0	

TABLE CIII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Make Up Mind to Continue Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Absolutely no	1	9	36.0	37.5	37.5
	2	3	12.0	12.5	50.0
	3	4	16.0	16.7	66.7
	4	7	28.0	29.2	95.8
Absolutely yes	6	1	4.0	4.2	100.0
Out of Range		1	4.0	Missing	
	Total	25	100.0	100.0	
Mean	2.542	Median	2.500	Mode	1.000
Valid Cases		24	Missing Cases		1

TABLE CIV

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Amount Learned

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Much less	1	1	4.0	4.0	4.0
	2	2	8.0	8.0	12.0
	3	9	36.0	36.0	48.0
	4	10	40.0	40.0	88.0
	5	3	12.0	12.0	100.0
	Total	25	100.0	100.0	
Mean	3.480	Median	4.000	Mode	4.000
Valid Cases		25	Missing Cases		0

TABLE CV

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Course Rating

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
	2	1	4.0	4.0	4.0
	3	6	24.0	24.0	28.0
	4	8	32.0	32.0	60.0
	5	9	36.0	36.0	96.0
Excellent	6	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	4.120	Median	4.000	Mode	5.000
Valid Cases		25	Missing Cases		0

TABLE CVI

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Letter Grade Expected

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
A	1	6	24.0	25.0	25.0
B	2	10	40.0	41.7	66.7
C	3	1	4.0	4.2	70.8
Don't know	7	7	28.0	29.2	100.0
		1	4.0	Missing	
	Total	25	100.0	100.0	
Mean	3.250	Median	2.000	Mode	2.000
Valid Cases		24	Missing Cases		1

TABLE CVII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Reasons for Enrolling

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Required for degree	1	23	92.0	92.0	92.0
Increase knowledge	4	1	4.0	4.0	96.0
Job improvement	5	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	1.280	Median	1.000	Mode	1.000
	Valid Cases	25	Missing Cases	0	

TABLE CVIII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Type of Courses Taking

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Both	3	25	100.0	100.0	100.0
	Total	25	100.0	100.0	100.0
Mean	3.000	Median	3.000	Mode	3.000
	Valid Cases	25	Missing Cases	0	

TABLE CIX

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Age

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Under 20	1	3	12.0	12.0	12.0
20-34	2	16	64.0	64.0	76.0
35-49	3	6	24.0	24.0	100.0
	Total	25	100.0	100.0	
Mean	2.120	Median	2.000	Mode	2.000
Valid Cases		25	Missing Cases		0

TABLE CX

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Sex

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Male	1	8	32.0	32.0	32.0
Female	2	17	68.0	68.0	100.0
	Total	25	100.0	100.0	
Mean	1.680	Median	2.000	Mode	2.000
	Valid Cases	25	Missing Cases	0	

TABLE CXI

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Level of Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
11th or less	1	1	4.0	4.0	4.0
High school grad	2	10	40.0	40.0	44.0
Trade school	3	1	4.0	4.0	48.0
Diploma	4	12	48.0	48.0	96.0
Graduate degree	7	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	3.160	Median	4.000	Mode	4.000
	Valid Cases	25	Missing Cases	0	

TABLE CXII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Marital and Family Status

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Single	1	8	32.0	32.0	32.0
Single parent	2	2	8.0	8.0	40.0
Married, no children	3	4	16.0	16.0	56.0
Married, young children	4	9	36.0	36.0	92.0
Married, grown children	5	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
Mean	2.800	Median	3.000	Mode	4.000
Valid Cases		25	Missing Cases		0

TABLE CXIII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Occupation

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Student	1	6	24.0	24.0	24.0
Self-employed	2	1	4.0	4.0	28.0
Wages or salary	3	13	52.0	52.0	80.0
Homemaker	4	5	20.0	20.0	100.0
	Total	25	100.0	100.0	
Mean	2.680	Median	3.000	Mode	3.000
Valid Cases		25	Missing Cases		0

TABLE CXIV

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Hours Worked Per Week

Value Label	Value	Frequency	Percent	Value Percent	Cum. Percent
None	1	6	24.0	24.0	24.0
1-9	2	2	8.0	8.0	32.0
10-19	3	1	4.0	4.0	36.0
20-29	4	5	20.0	20.0	56.0
30-39	5	2	8.0	8.0	64.0
40-49	6	9	36.0	36.0	100.0
	Total	25	100.0	100.0	
Mean	3.880	Median	4.000	Mode	6.000
Valid Cases		25	Missing Cases		0

TABLE CXV

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Ethnic/Racial Background

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Caucasian or White	1	23	92.0	92.0	92.0
American Indian	5	2	8.0	8.0	100.0
	Total	25	100.0	100.0	
Mean	1.320	Median	1.000	Mode	1.000
	Valid Cases	25		Missing Cases	0

TABLE CXVI

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Semester Hours Currently Taking

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
4-6	2	6	24.0	24.0	24.0
7-9	3	7	28.0	28.0	52.0
10-12	4	9	36.0	36.0	88.0
More than 12	5	3	12.0	12.0	100.0
	Total	25	100.0	100.0	
Mean	3.360	Median	3.000	Mode	4.000
	Valid Cases	25	Missing Cases	0	

TABLE CXVII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Distance from Home

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
1-10 miles	1	17	68.0	68.0	68.0
11-25 miles	2	6	24.0	24.0	92.0
26-50 miles	3	1	4.0	4.0	96.0
51-100 miles	4	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	1.440	Median	1.000	Mode	1.000
	Valid Cases	25		Missing Cases	0

TABLE CXVIII

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Ultimate Degree Plans

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
None	1	1	4.0	4.0	4.0
Associate degree	2	7	28.0	28.0	32.0
Bachelor's degree	3	12	48.0	48.0	80.0
Master's degree	4	2	8.0	8.0	88.0
Doctoral degree	5	2	8.0	8.0	96.0
Undecided	7	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	3.040	Median	3.000	Mode	3.000
Valid Cases		25	Missing Cases		0

TABLE CXIX

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Father's Level of Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
High school	1	10	40.0	40.0	40.0
Post secondary	2	3	12.0	12.0	52.0
Some Vo-Tech	3	2	8.0	8.0	60.0
Some college	5	9	36.0	36.0	96.0
College degree	6	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	2.920	Median	2.000	Mode	1.000
	Valid Cases	25	Missing Cases	0	

TABLE CXX

DESCRIPTIVE STATISTICS ON THOSE STUDENTS TAKING COURSES
ON-CAMPUS AND BY LONG-DISTANCE (COMBINED GROUP)

Mother's Level of Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
High school	1	10	40.0	40.0	40.0
Post secondary	2	3	12.0	12.0	52.0
Some Vo-Tech	3	1	4.0	4.0	56.0
Some college	5	9	36.0	36.0	92.0
College degree	6	1	4.0	4.0	96.0
Graduate degree	8	1	4.0	4.0	100.0
	Total	25	100.0	100.0	
Mean	3.120	Median	2.000	Mode	1.000
Valid Cases		25	Missing Cases		0

APPENDIX C

COMPARATIVE DATA BETWEEN THE TRADITIONAL
ON-CAMPUS STUDENT, THE LONG-DISTANCE
LEARNER, AND THE COMBINED-GROUP OF
STUDENTS TAKING COURSES BOTH ON-
CAMPUS AND BY TELECOURSE METHOD

TABLE CXXI

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Work Required

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	10	8.2	8.3	8.3
	2	21	17.2	17.5	25.8
	3	53	43.4	44.2	70.0
	4	26	21.3	21.7	91.7
	5	7	5.7	5.8	97.5
Much greater	6	3	2.5	2.5	100.0
Out of Range		2	1.6	Missing	
	Total	122	100.0	100.0	
Mean	3.067	Median	3.000	Mode	3.000
	Valid Cases	120	Missing Cases	2	

TABLE CXXII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Demands to Do Assignments

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	18	14.8	15.1	15.1
	2	25	20.5	21.0	36.1
	3	44	36.1	37.0	73.1
	4	23	18.9	19.3	92.4
	5	4	3.3	3.4	95.8
Much greater	6	5	4.1	4.2	100.0
Out of Range		3	2.5	Missing	
Total		122	100.0	100.0	
Mean	2.874	Median	3.000	Mode	3.000
Valid Cases		119	Missing Cases		3

TABLE CXXIII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Overall Content

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	2	1.6	1.7	1.7
	2	5	4.1	4.1	5.8
	3	32	26.2	26.4	32.2
	4	45	36.9	37.2	69.4
	5	27	22.1	22.3	91.7
Much greater	6	10	8.2	8.3	100.0
Out of Range		1	.8	Missing	
	Total	122	100.0	100.0	
Mean	3.992	Median	4.000	Mode	4.000
	Valid Cases	121	Missing Cases	1	

TABLE CXXIV

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

General Understanding

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	2	1.6	1.7	1.7
	2	4	3.3	3.3	5.0
	3	26	21.3	21.7	26.7
	4	41	33.6	34.2	60.8
	5	32	26.2	26.7	87.5
Much greater	6	15	12.3	12.5	100.0
Out of Range		2	1.6	Missing	
	Total	122	100.0	100.0	
Mean	4.183	Median	4.000	Mode	4.000
	Valid Cases	120	Missing Cases	2	

TABLE CXXV

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Time Demands

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent	
Much less	1	34	27.9	28.6	28.6	
	2	36	29.5	30.3	58.8	
	3	27	22.1	22.7	81.5	
	4	17	13.9	14.3	95.8	
	5	2	1.6	1.7	97.5	
Much greater	6	3	2.5	2.5	100.0	
Out of Range		3	2.5	Missing		
	Total	122	100.0	100.0		
Mean	2.378		Median	2.000	Mode	2.000
		Valid Cases	119	Missing Cases	3	

TABLE CXXVI

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Pace

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	3	2.5	2.5	2.5
	2	7	5.7	5.8	8.3
	3	51	41.8	42.5	50.8
	4	43	35.2	35.8	86.7
	5	12	9.8	10.0	96.7
Much greater	6	4	3.3	3.3	100.0
Out of Range		2	1.6	Missing	
	Total	122	100.0	100.0	
Mean	3.550	Median	3.000	Mode	3.000
	Valid Cases	120	Missing Cases	2	

TABLE CXXVII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Academic Comparison

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	2	1.6	1.7	1.7
	2	6	4.9	5.0	6.6
	3	21	17.2	17.4	24.0
	4	36	29.5	29.8	53.7
	5	37	30.3	30.6	84.3
Much greater	6	19	15.6	15.7	100.0
Out of Range		1	.8	Missing	
	Total	122	100.0	100.0	
Mean	4.298	Median	4.000	Mode	5.000
	Valid Cases	121	Missing Cases	1	

TABLE CXXVIII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE
 Instructor Involvement and Participation

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Much less	1	16	13.1	14.0	14.0
	2	13	10.7	11.4	25.4
	3	18	14.8	15.8	41.2
	4	25	20.5	21.9	63.2
	5	30	24.6	26.3	89.5
Much greater	6	12	9.8	10.5	100.0
Out of Range		8	6.6	Missing	
	Total	122	100.0	100.0	
Mean	3.667	Median	4.000	Mode	5.000

TABLE CXXIX

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Recommend the Course

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Absolutely no	1	3	2.5	2.5	2.5
	2	4	3.3	3.3	5.7
	3	13	10.7	10.7	16.4
	4	20	16.4	16.4	32.8
	5	30	24.6	24.6	57.4
Absolutely yes	6	52	42.6	42.6	100.0
	Total	122	100.0	100.0	
Mean	4.852	Median	5.000	Mode	6.000
	Valid Cases	122	Missing Cases	0	

TABLE CXXX

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Feeling for the Course

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Very dull	1	3	2.5	2.5	2.5
	2	10	8.2	8.3	10.7
	3	16	13.1	13.2	24.0
	4	29	23.8	24.0	47.9
	5	38	31.1	31.4	79.3
Stimulating	6	25	20.5	20.7	100.0
Out of Range		1	.8	Missing	
	Total	122	100.0	100.0	
Mean	4.355	Median	5.000	Mode	5.000
	Valid Cases	121	Missing Cases	1	

TABLE CXXXI

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Make Up Mind to Continue Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Absolutely no	1	18	14.8	15.4	15.4
	2	9	7.4	7.7	23.1
	3	30	24.6	25.6	48.7
	4	38	31.1	32.5	81.2
	5	9	7.4	7.7	88.9
Absolutely yes	6	13	10.7	11.1	100.0
Out of Range		5	4.1	Missing	
	Total	122	100.0	100.0	
Mean	3.427	Median	4.000	Mode	4.000
	Valid Cases	117	Missing Cases	5	

TABLE CXXXII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Amount Learned

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Much less	1	2	1.6	1.7	1.7
	2	5	4.1	4.2	5.9
	3	28	23.0	23.5	29.4
	4	43	35.2	36.1	65.5
	5	27	22.1	22.7	88.2
Much greater	6	14	11.5	11.8	100.0
Out of Range		3	2.5	Missing	
	Total	122	100.0	100.0	
Mean	4.092	Median	4.000	Mode	4.000
	Valid Cases	119	Missing Cases	3	

TABLE CXXXIII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Course Rating

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
	2	6	4.9	5.0	5.0
	3	12	9.8	10.0	15.0
	4	27	22.1	22.5	37.5
	5	47	38.5	39.2	76.7
Excellent	6	28	23.0	23.3	100.0
Out of Range		2	1.6	Missing	
	Total	122	100.0	100.0	
Mean	4.658	Median	5.000	Mode	5.000
	Valid Cases	120	Missing Cases	2	

TABLE CXXXIV

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Letter Grade Expected

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
A	1	36	29.5	30.3	30.3
B	2	54	44.3	45.4	75.6
C	3	13	10.7	10.9	86.6
Don't know	7	16	13.1	13.4	100.0
Out of Range		3	2.5	Missing	
	Total	122	100.0	100.0	
Mean	2.479	Median	2.000	Mode	2.000
	Valid Cases	119	Missing Cases	3	

TABLE CXXXV

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Reasons for Enrolling

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Required for degree	1	107	87.7	87.7	87.7
Elective	2	4	3.3	3.3	91.0
Increase knowledge	4	6	4.9	4.9	95.9
Job improvement	5	5	4.1	4.1	100.0
	Total	122	100.0	100.0	
Mean	1.344	Median	1.000	Mode	1.000
	Valid Cases	122	Missing Cases	0	

TABLE CXXXVI

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Type of Courses Taking

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
On campus only	1	68	55.7	55.7	55.7
By TV only	2	29	23.8	23.8	79.5
Both	3	25	20.5	20.5	100.0
	Total	122	100.0	100.0	
Mean	1.648	Median	1.000	Mode	1.000
	Valid Cases	122	Missing Cases	0	

TABLE CXXXVII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Age

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Under 20	1	33	27.0	27.0	27.0
20-34	2	71	58.2	58.2	85.2
35-49	3	17	13.9	13.9	99.2
50-64	4	1	.8	.8	100.0
	Total	122	100.0	100.0	
Mean	1.885	Median	2.000	Mode	2.000
	Valid Cases	122	Missing Cases	0	

TABLE CXXXVIII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Sex

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Male	1	44	36.1	36.1	36.1
Female	2	78	63.9	63.9	100.0
	Total	122	100.0	100.0	
Mean	1.639	Median	2.000	Mode	2.000
	Valid Cases	122	Missing Cases	0	

TABLE CXXXIX

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Level of Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
11th or less	1	3	2.5	2.5	2.5
High school grad	2	46	37.7	37.7	40.2
Trade school	3	8	6.6	6.6	46.7
Diploma	4	43	35.2	35.2	82.0
1-3 yrs college	5	21	17.2	17.2	99.2
Graduate degree	7	1	.8	.8	100.0
	Total	122	100.0	100.0	
Mean	3.303	Median	4.000	Mode	2.000
	Valid Cases	122	Missing Cases	0	

TABLE CXL

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Marital and Family Status

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Single	1	61	50.0	50.0	50.0
Single parent	2	10	8.2	8.2	58.2
Married, no children	3	10	8.2	8.2	66.4
Married, young children	4	31	25.4	25.4	91.8
Married, grown children	5	6	4.9	4.9	96.7
Widowed, divorced, separated	6	4	3.3	3.3	100.0
	Total	122	100.0	100.0	
Mean	2.369	Median	1.500	Mode	1.000
	Valid Cases	122	Missing Cases	0	

TABLE CXLI

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Occupation

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Student	1	43	35.2	35.2	35.2
Self-employed	2	6	4.9	4.9	40.2
Wages or salary	3	62	50.8	50.8	91.0
Homemaker	4	11	9.0	9.0	100.0
	Total	122	100.0	100.0	
Mean	2.336	Median	3.000	Mode	3.000
	Valid Cases	122	Missing Cases	0	

TABLE CXLII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Hours Worked per Week

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
None	1	28	23.0	23.0	23.0
1-9	2	7	5.7	5.7	28.7
10-19	3	13	10.7	10.7	39.3
20-29	4	23	18.9	18.9	58.2
30-39	5	15	12.3	12.3	70.5
40-49	6	31	25.4	25.4	95.9
50 or more	7	5	4.1	4.1	100.0
	Total	122	100.0	100.0	
Mean	3.844	Median	4.000	Mode	6.000
	Valid Cases	122	Missing Cases	0	

TABLE CXLIII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Ethnic/Racial Background

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
Caucasian or White	1	104	85.2	85.2	85.2
Mexican or Chicano	2	1	.8	.8	86.1
Black	3	10	8.2	8.2	94.3
Oriental	4	1	.8	.8	95.1
American Indian	5	5	4.1	4.1	99.2
Other	6	1	.8	.8	100.0
	Total	122	100.0	100.0	
Mean	1.402	Median	1.000	Mode	1.000
	Valid Cases	122	Missing Cases	0	

TABLE CXLIV

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Semester Hours Currently Taking

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
1-3	1	13	10.7	10.7	10.7
4-6	2	19	15.6	15.6	26.2
7-9	3	13	10.7	10.7	36.9
10-12	4	32	26.2	26.2	63.1
More than 12	5	45	36.9	36.9	100.0
	Total	122	100.0	100.0	
Mean	3.631	Median	4.000	Mode	5.000
	Valid Cases	122	Missing Cases	0	

TABLE CXLV

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Distance from Home

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
1-10 miles	1	64	52.5	52.5	52.5
11-25 miles	2	42	34.4	34.4	86.9
26-50 miles	3	12	9.8	9.8	96.7
51-100 miles	4	4	3.3	3.3	100.0
	Total	122	100.0	100.0	
Mean	1.639	Median	1.000	Mode	1.000
	Valid Cases	122	Missing Cases	0	

TABLE CXLVI

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Ultimate Degree Plans

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent	
None	1	3	2.5	2.5	2.5	
Associate degree	2	31	25.4	25.4	27.9	
Bachelor's degree	3	42	34.4	34.4	62.3	
Master's degree	4	20	16.4	16.4	78.7	
Doctoral degree	5	5	4.1	4.1	82.8	
Professional degree	6	10	8.2	8.2	91.0	
Undecided	7	11	9.0	9.0	100.0	
	Total	122	100.0	100.0		
Mean	3.549		Median	3.000	Mode	3.000
	Valid Cases	122		Missing Cases	0	

TABLE CXLVII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Father's Level of Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
High school	1	40	32.8	33.1	33.1
Post secondary school	2	12	9.8	9.9	43.0
Some Vo-Tech school	3	8	6.6	6.6	49.6
Vo-Tech degree	4	2	1.6	1.7	51.2
Some college	5	35	28.7	28.9	80.2
College degree	6	12	9.8	9.9	90.1
Some graduate school	7	1	.8	.8	90.9
Graduate degree	8	11	9.0	9.1	100.0
Out of Range		1	.8	Missing	
	Total	122	100.0	100.0	
Mean	3.620	Median	4.000	Mode	1.000
	Valid Cases	121	Missing Cases	1	

TABLE CXLVIII

DESCRIPTIVE STATISTICS FOR ENTIRE SAMPLE

Mother's Level of Education

Value Label	Value	Frequency	Percent	Valid Percent	Cum. Percent
High school	1	47	38.5	38.5	38.5
Post secondary school	2	16	13.1	13.1	51.6
Some Vo-Tech school	3	8	6.6	6.6	58.2
Vo-Tech degree	4	3	2.5	2.5	60.7
Some college	5	30	24.6	24.6	85.2
College degree	6	9	7.4	7.4	92.6
Graduate degree	8	9	7.4	7.4	100.0
	Total	122	100.0	100.0	
Mean	3.205	Median	2.000	Mode	1.000
	Valid Cases	122	Missing Cases	0	

APPENDIX D

THE QUESTIONNAIRE

Questionnaire

This questionnaire involves the traditional student and the telecourse student. The information collected will be used for research and analysis and will be held strictly confidential. You are free to omit any question you feel is too personal. Please do not sign your name. Remember, you are not evaluating the instructor, just the course material.

Please respond to each of the questions by selecting only one answer that best describes your individual situation.

Your cooperation is greatly appreciated and thank you.

1. When compared with my other courses, the work required for this course has been

much less	:	:	:	:	:	much greater
(1)		(2)		(3)		(4)
	:		:		:	(5)
			:			(6)

2. When compared with my other courses, the demands placed on me to do the assignments in this course are

much less	:	:	:	:	:	much greater
(1)		(2)		(3)		(4)
	:		:		:	(5)
			:			(6)

3. When compared with my other courses, the overall content (material) I have learned thus far in this course is

much less	:	:	:	:	:	much greater
(1)		(2)		(3)		(4)
	:		:		:	(5)
			:			(6)

4. When compared with my other courses, my general understanding of concepts, principles, goals and objectives in this course has been

much less	:	:	:	:	:	much greater
(1)		(2)		(3)		(4)
	:		:		:	(5)
			:			(6)

5. When compared with my other courses, the time demands (such as assignments that are to be turned in at a specified time) have been

much
less _____ : _____ : _____ : _____ : _____ : _____ much
(1) (2) (3) (4) (5) (6) greater

6. When compared with my other courses (now or in the past), the pace of this instruction is

much
less _____ : _____ : _____ : _____ : _____ : _____ much
(1) (2) (3) (4) (5) (6) greater

7. Compared with my other courses, I would say this course ranks _____ in having a lasting learning effect

much
less _____ : _____ : _____ : _____ : _____ : _____ much
(1) (2) (3) (4) (5) (6) greater

8. Compared with my other courses, I would say the course instructor involvement and participation is

much
less _____ : _____ : _____ : _____ : _____ : _____ much
(1) (2) (3) (4) (5) (6) greater

9. Considering all factors that would lead to a calculated decision, would you recommend this course to your friends?

absolutely
not _____ : _____ : _____ : _____ : _____ : _____ absolutely
(1) (2) (3) (4) (5) (6) yes

10. Compared with my other courses (now or in the past), I would say this course is

very
dull _____ : _____ : _____ : _____ : _____ : _____ stimu-
(1) (2) (3) (4) (5) (6) lating

11. Taking this course has helped me to make up my mind to continue my education

absolutely
not _____ : _____ : _____ : _____ : _____ : _____ absolu-
(1) (2) (3) (4) (5) (6) tely
yes

12. Compared with my other courses at this point in the semester, I would say that I am learning

much less _____ : _____ : _____ : _____ : _____ : _____ much more
 (1) (2) (3) (4) (5) (6)

13. Compared with other courses you are now taking, or have taken in the past, and based on responses already made, how would you rate this course

worth-less _____ : _____ : _____ : _____ : _____ : _____ excel-
 (1) (2) (3) (4) (5) (6) lent

14. Based on my experiences in this course thus far, I expect to receive the letter grade of _____ for the semester.

_____ 1. A	_____ 5. F
_____ 2. B	_____ 6. I
_____ 3. C	_____ 7. Don't know
_____ 4. D	

15. I enrolled in this course primarily because (choose only one, please)

_____ It is required for my degree.
 _____ It will count as an elective.
 _____ I thought it would be fun.
 _____ To increase my current level of knowledge on the subject.
 _____ To prepare for a job or career improvement.
 _____ To satisfy my curiosity about my abilities to compete with other students.

16. I am presently taking courses that are

_____ On campus only
 _____ By television only
 _____ On campus and by television

17. Your age?

Under 20.....()	50 - 64.....()
20 - 34.....()	65 or over.....()
35 - 49.....()	

18. Your sex?

Male.....() Female.....()

19. Your highest level of education completed?

11th grade or less.....()
 High school graduate.....()
 Trade, technical or business school.....()
 Diploma.....()
 1 - 3 years of college.....()
 College graduate.....()
 Graduate degree.....()

20. Marital and family status?

Single.....()
 Single parent.....()....Ages _____
 Married, no children.....()
 Married, with mainly young children....()....Ages _____
 Married, with mainly grown children....()....Ages _____
 Widowed, divorced or separated.....()

21. What is your principal occupation?

Student.....()
 Self-employed.....()
 Employed for wages or salary.....()
 Homemaker.....()
 Military.....()

22. How many hours per week do you work?

None.....()
 1 - 9.....()
 10 - 19.....()
 20 - 29.....()
 30 - 39.....()
 40 - 49.....()
 50 or more.....()

23. What is your ethnic or racial background?

Caucasian or white.....()
 Mexican or Chicano.....()
 Black.....()
 Oriental.....()
 American Indian.....()
 Other.....() Explain _____

24. How many semester hours are you currently taking?

- 1 - 3.....()
 4 - 6.....()
 7 - 9.....()
 10 - 12.....()
 More than 12.....()

25. How far from home is the college you attend?

- 1 - 10 miles.....()
 11 - 25 miles.....()
 26 - 50 miles.....()
 51 - 100 miles.....()
 Over 100 miles.....()

26. What are your ultimate degree plans?

- None.....()
 Associate degree or equivalent.....()
 Bachelor's degree.....()
 Master's degree.....()
 Doctoral degree.....()
 Professional degree (Law, Dentistry, Medicine)....()
 Undecided.....()

27. What is the highest level of formal education obtained by your parents? (Mark one in each column)

	(Father)	(Mother)
Grade completed	_____	_____
Post secondary school	_____	_____
Some Vo-Tech education	_____	_____
Vocational Education degree	_____	_____
Some college	_____	_____
College degree	_____	_____
Some graduate school	_____	_____
Graduate degree	_____	_____

VITA²

Johnny Mac Allen

Candidate for the Degree of
Doctor of Education

Thesis: AN ANALYSIS OF THE PERCEPTIONS OF TRADITIONAL AND
LONG-DISTANCE STUDENTS TOWARD TELECOURSES

Major Field: Higher Education

Biographical:

Personal Data: Born in Burlington, Colorado, August
25, 1937.

Education: Attended Burlington High School in Burling-
ton, Colorado; received Bachelor of Science degree
in Liberal Study from Central State University in
1978; received Master of Arts degree from the Uni-
versity of Oklahoma in 1979; enrolled in doctoral
program at the University of Oklahoma College of
Education, 1979-83; completed requirements for the
Doctor of Education degree at Oklahoma State Uni-
versity in December, 1984.

Professional Experience: Program Director, KLOE Radio
& TV, 1962-68; Public Service Director, KBAT Radio,
1968-69; Production Director, KAKE Radio & TV,
1969-70; Assistant Production Director/Announcer,
KTOK Radio, 1970-72; Production Director, KWBB
Radio, 1972-73; News Director, KOCY/KXXY Radio,
1973-77; News Director, KFNB Radio, 1977-79; Guest
Lecturer/Graduate Assistant, The University of
Oklahoma, 1977-79; Instructor/News Director, KGOU
Radio, The University of Oklahoma, 1979-80; Coor-
dinator, Public Information. Relations, Rose State
College, 1980-83; Newspaper Columnist/Reporter,
1983-84; Assistant to the Superintendent/Marketing
Specialist, Oklahoma City Vocational-Technical
District 22, 1984.

Professional Organizations: Kappa Tau Alpha Honorary
Journalism Society; Phi Delta Kappa Honorary

Education Society; Alpha Epsilon Rho Broadcasting Society; Sigma Delta Chi; National Public Relations Society of America; and the National Platform Society. Named to Who's Who in the South and Southwest for 1982-83 and re-named for 1983-84.