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MEDIATED, COLLEGE-LEVEL NONTRADITIONAL
STUDY WITHIN FLORIDA

BY

MAUREEN ELIZABETH O'DONNELL
B.S., University of Florida, 1974

THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Arts: Communication
in the Graduate Studies Program of the College of Social Sciences
of Florida Technological University

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CHAPTER I

INTRODUCTION

This paper is intended to be an outline of the history of media's involvement with education in the United States and how it has led to the development of Nontraditional Studies (NTS)¹ at the college level. No attempt will be made to report on the myriad programs that contributed to the growth and expansion of NTS; this study will be only an overview of the events leading to the formation of NTS.

The beginning of mediated NTS ante-dated the 1971 Commission on Non-Traditional Study by approximately 50 years. Its roots are embedded in the 1920's when radio was young. This era served as a period of growth for educational radio. Educators and broadcasters alike viewed radio as an effective means of educating the public. As a testimony to this belief in educational radio, the major networks' largest departments were the education departments.² Radio's popularity lasted until around 1947 when television first became available to the consuming public. Television represented a whole new approach to the supporters of educational broadcasting; it added sight to sound. Through the joint efforts of both radio and television, the media created a new dimension for education.

The potential of the various media to teach became readily

apparent. Radio, for example, captivated audiences across the country for nearly three decades, bringing entertainment, news, and informational programs that taught Americans about everything from crop rotation to their government in Washington. Now, through radio, enlightening information was available not just to the elite, but to the masses, even to those of the masses who could not read. Later on, through the development of educational media projects such as NTS, educators and laymen alike have realized the potential of a medium such as television to be used as something other than a carrier of entertainment shows. Television can be more than just a means of occupying one's leisure time; it can be a passport to knowledge from the comfort of a favorite chair, the quiet of a library carrell, or almost anywhere a TV receiving set may be found.

As the Carnegie Commission on ETV observed nearly ten years ago, and as the research of this study will indicate:

Television has been fashioned into a miraculous instrument. The opportunity is at hand to turn the instrument to the best uses of American society, and to make it of new and increased service to the general public.³

The Carnegie Commission referred to television as a service, with one example being a type of broadcasting labeled "educational television" or ETV. Educational television programs, which this study will discuss later, are those programs aimed at the general viewing audience, with the idea being to inform as well as to entertain. ETV programs do not attempt to cover a specific body of

knowledge nor do they grant academic credit to the viewers. These latter functions are reserved for television programs designated as "instructional television" or ITV, from which the viewer might obtain specific information about, for instance, American literature prior to 1865 and for which they might also receive academic credit. Towards the aim of uplifting the general education level of the viewing public, a barrage of both educational television and instructional television programs is being developed.

These new programs are possible because the tremendous power of the media to educate is beginning to be recognized by educators and educational institutions not just in the United States but around the world. This study will focus on only one area, the State of Florida, and will report on Florida's involvement with NTS. A survey will be made of the uses of media in Florida's universities, and community colleges which will provide an overview on completely mediated NTS within the state system through December, 1976.

While this paper will spend the following few pages examining mediated educational endeavors such as educational radio, television, and the like, these will be examined only to the point of providing the reader with sufficient background for the understanding of nontraditional studies, or NTS. NTS--its growth and present-day status--will be the main focus of this study.

Significance

This study will provide a research source for both educators and public who are interested in the development of mediated NTS

throughout the college-level Florida educational system. It will be a collection of all the activities within Florida's educational system on the college-level pertaining to mediated NTS. Hopefully, a survey such as the type proposed by this study will allow easier cross-referencing and eliminate making the same mistakes as other pioneers of NTS within Florida. Too much effort is expended repeating approaches that have already proved unsuccessful; if this effort could be channeled to experiment with untried approaches, we could get a deeper insight into what makes NTS a success or failure.

Nontraditional study will be looked at more intensely later in the study, but for now a working definition of NTS is: "an unconventional system of education that emphasizes the student effectively and employs any method to deliver the lesson." Nontraditional study allows and encourages individuals isolated from college campuses to receive the education they might be denied or to which they might not otherwise have access. In NTS, the conduits for the educational information are the media, rather than just the traditional classrooms and books.

The importance of the media, especially television, is receiving growing recognition. The 1958 Conference on Teaching by Television in Colleges and Universities emphasized the importance of television when they presented three basic premises concerning the potential of television to help raise the educational level:

- (1) Television as an instrument of education has earned an established role in American education;
- (2) television's place in education needs to be greatly expanded and its effectiveness improved; and (3) the most

crucial and promising possibilities lie in improving the process of teaching and learning by television.⁴

These premises refer to the need for expanding and improving the use of television in education. This study will report on Florida's attempt at expansion and improvement of educational broadcasting through the development of mediated, college-level NTS programs.

Operational Definitions

The nomenclature of mediated education is ambiguous, causing confusion in the minds of those individuals who are interested in it. To avoid some of the confusion and to insure the continuity and consistency of this study, parameters will be established for six major elements pertinent to the contents:

(1) mediated, (2) educational television or ETV, (3) instructional television or ITV, (4) closed-circuit television or CCTV, (5) open-circuit television, and (6) nontraditional study or NTS.

Mediated, the most straightforward concept discussed here, depicts the use of almost any form of electronic technology, encompassing radio, television, and film. It certainly includes the new technology of videotape which is responsible for the development of elaborate storage and retrieval systems. These mediated tools can be used alone, in conjunction with each other, or as supplements to books and lectures.

Educational television or ETV applies to almost any sort of educational video that is fed over a television receiver (educational

broadcasting includes radio and covers essentially the same material). ETV's function is to present material for a serious purpose in an attempt to teach something to someone.⁵ ETV is the broad, unstructured term covering any educational program. There are no specific lessons or audiences that ETV attempts to reach; rather, ETV is aimed at anyone who is interested. One could categorize a show such as "Wild Kingdom" as an ETV program. ETV is the cornerstone of the different methods of using television to educate; other mediated educational concepts are variations of ETV.

An example of such a variation is instructional television or ITV. As a modification of ETV, ITV is represented by a more structured approach to lessons aimed at a specific audience. Often using electronic transmissions, ITV's purpose is to teach a specific body of information to students at home or in school, when this subject matter is part of a formal course of study.⁶ ITV has a twofold goal: to teach through the use of the media and to have a recognized credit system established by institutions using ITV.

ETV and ITV are broadcast via two basic systems: closed-circuit television and open-circuit television. Closed-circuit television, or CCTV, as its name indicates, limits the reception of its broadcasts. CCTV signals are transmitted via wire as opposed to air, and it follows logically that any receiving set must also be connected to the receiving entity by wire. Recently, several open-air CCTV systems have been inaugurated--systems such as the Instructional Television Fixed Service, (ITFS)--which broadcast on bands in the broadcast spectrum other than the conventional UHF/VHF

ones. Thus, control of reception is maintained in the CCTV system, since a down-converter must precede the TV monitor before signals can be received and interpreted. This unique system allows CCTV to control reception and utilization of its programs.⁷ (See appendix A).

The opposite of CCTV is, of course, open-circuit television which is the conventional transmission of signals over very high frequencies (channels 2 through 13) and ultra high frequencies (channels 14 through 83). Open-circuit television is the system that feeds programs to standard TV sets found in most homes.

The main topic of this study, NTS, is the most difficult concept to explain. Confusion stems from the number of broad definitions compounded by a long list of terms used synonymously with NTS such as Open University, University of the Air, University Without Walls, Extended University, and other similar titles.⁸

A feasible way to portray the NTS concept is by presenting a few generally accepted premises from pioneers in the development of NTS. Although these explanations may appear vague, they represent a cross section of the theories pertaining to NTS.

One of the broadest proposed explanations, presented in 1974 by Robert Carlisle in his report on NTS, focuses on the diverse means of delivery used by NTS.

...NTS is any kind of higher educational system other than the age-old one in which a student enrolls for courses on a campus. NTS can take college-level learning to a student at home, or at some halfway point. And NTS uses whatever devices it can find to get its messages across--anything from very independent study, to learning centers remote from a campus, or to media packages and correspondence-course requirements.⁹

The Carnegie Commission on Higher Education, one of the major financiers of educational research, stressed the importance of reaching the student who might otherwise be denied access to an education.

...that alternative avenues by which students can earn degrees or complete a major portion of their work for a degree be expanded to increase accessibility of higher education for those to whom it is now unavailable because of work schedules, geographic location, or responsibilities in the home.¹⁰

The Chairman of the 1971 Commission on Non-Traditional Study, Samuel B. Gould, reported the consensus opinion of the commission involved the effort to eliminate usual limitations on education such as time and space.

Most of us agree that non-traditional study is more an attitude than a system and thus can never be defined except tangentially. This attitude puts the student first and the institution second, concentrates more on the former's need than the latter's convenience, encourages diversity of individual opportunity rather than uniform prescription, and deemphasizes time, space, and even course requirements in favor of competence and, where applicable, performance. It has concern for the learner of any age and circumstance, for the degree aspirant as well as the person who finds sufficient reward in enriching life through constant, periodic, or occasional study.¹¹

The need for concern about people who do not have access to a higher education is represented by these statistics that emphasize the possible scope of NTS. These statistics were discussed by Virginia Trotter at the Second National Conference on Open Learning in 1975:

Our nation's schools enroll approximately 90 percent of the population aged 5 to 19. However, there are millions of potential learners who have little or no

contact with the schools - the dropout, the handicapped, the migrant, the unemployed, and the elderly.¹²

Drawing from these ideas, it appears that NTS uses any means available to deliver successfully a lesson to those individuals interested in learning. These statements indicate the importance of the student, be he registered or merely participating for his own information, and reaching him at his convenience. The ultimate goal of NTS is to inform and educate individuals who do not have access to a formalized educational system.

Background Research

The concept of using the media to further education has been bantered around by educators and laymen alike since the development of radio. In the 1920's, the potential of radio to reach the population was recognized by some educators, while others scoffed at the idea. A typical educator's view of broadcasting was: "Radio is just another gadget. It will be forgotten in a few years."¹³

The problems that faced proponents of educational radio included convincing skeptics of its value and competing with commercial radio. In general, educational supporters failed to do either, and the possibilities for formalized education via radio temporarily remained dormant.

Although attempts at formalized educational radio faltered, radio taught nonetheless. With the dawn of radio, Americans witnessed the shrinkage of their world. Radio enabled a person to sit at home in Iowa and listen to the up-to-date news from New York

or Washington. Through radio's news, documentaries, and entertainment shows, the people were no longer isolated from one another because of distance. Radio taught people about other parts of the country and the world, enabled individuals to understand the workings of the government, and could even advise farmers on harvesting time to avoid bad weather.

Besides what appeared to be an innate ability to teach, advocates of educational radio were not satisfied and began to reach out to structure and formalize radio's ability to teach. One example of educational radio was the university-owned station. A limited amount of progress for educational radio was witnessed in universities, colleges, and schools which were experimenting with radio's possibilities. Between 1920 and 1930, approximately 200 institutions constructed radio stations, but by 1930 only 35 educational, university controlled stations remained in operation, the others having fallen victims to the Great Depression and the failure of the rudimentary attempts at educational radio to live up to educators' expectations.¹⁴

In spite of setbacks such as the loss of 165 stations, two incidents afforded educational radio a possible reprieve--the formation of the Federal Communications Commission and the development of Frequency Modulation.¹⁵

The establishment of the Federal Communications Commission or FCC in 1934 brought renewed hope to the supporters of educational radio. They viewed the FCC as a savior that would "encourage" the

owners of radio stations to allow more time for formalized educational radio, but proponents again yielded to commercial interests and educational radio's progress was slowed.

Frequency Modulation or FM made a new band of frequencies available. Supporters of educational radio made their bid for FM stations to be used for educational purposes. The development of FM educational stations would alleviate the problem of negotiating with AM radio stations for time to spend on educational programs. A fervent supporter of FM for educational purposes, Charles Siepmann, viewed FM as a chance to provide the country with a semieducational, national radio station, but his vision was never realized because of television.¹⁶ An analysis of the failure of Siepmann's plan was presented by George Gordon in his book about educational television.

What Siepmann could not foresee, however, was the rise of television during the late 1940's and the fact that, by 1948, radio would be $\frac{1}{2}$ for educational purposes at least - a moribund medium.¹⁷

Educators quickly made the transition from radio to television. Universities led in the development of educational radio, and when TV was developed, universities were again in the forefront. Five universities specifically aided the development of television: Iowa State University, Kansas State University, University of Michigan, American University, and the University of Iowa. As an example of the contributions made by these universities, this study will cite the advances made by the University of Iowa between 1931 and 1939 that contributed to the inception of ETV.¹⁸

Over 400 programs appeared on Iowa's W9XK featuring

engineering, botany, art, drama, and shorthand.¹⁹ These programs were described by Professor Edwin B. Kurtz of Iowa as, "a new means of furthering education."²⁰ Twenty-six years after the first broadcasts in Iowa, Kurtz recalled: "The vampire had had its first blood; the monster would work, and well too, for education."²¹

Nineteen hundred and forty-eight witnessed the rise of the American television market. With the number of TV sets in American homes growing daily, the opportunity presented itself to develop ETV and test the theories promoted by colleges and universities eager to test television's potential as an educator.

Television rapidly became one of the new educational media. Its potential tended to dwarf the efforts of audiovisual media, motion pictures, radio, slides, and tape recordings. These media could not as effectively as television convey the message or reach the masses. Television's popularity prompted the battlecry "Teach by television!" which did not receive unanimous support. Some educators viewed the possibility of being replaced by television with fear and scorn.²²

Despite the lack of enthusiasm by some educators, television was beginning to gain more and more recognition as a medium that could teach. By 1951, under pressure and attack from the ad hoc Joint Committee on Educational Television, the FCC acknowledged the need for educational television and reserved 242 broadcast channels for noncommercial or educational purposes. This number was later increased to 262.²³ George Gordon, author of Educational Television,

traced the development of ETV during this period of upheaval.

Pressure and counterpressure marked the period 1951-1952, at the end of which these specific allocations were finally announced. For a time it seemed as if no one could be quite entirely satisfied with the FCC's provisions for educational television, for these specifically forbid educational stations to engage in any kind of commercial activity which might help to finance them.²⁴

The FCC set the groundwork for the fifties to be spent experimenting with this unique entity--television. It was a period of trial and error. At the University of Minnesota, "TV was a logical, suitable way of giving credit courses in the home."²⁵ But, when their theories were put into practice, the findings revealed different results. The University of Minnesota sponsored several educational series, most of which resulted in the registrants dropping out prior to completion.

The sluggish development of ETV, as seen at the University of Minnesota, did not discourage ETV's supporters. During the middle and late fifties, interest and excitement in the potential of educational television began to flourish. By 1956, 114 institutions were enlisted for course telecasts--a major leap from two in the 1951-52 academic year.²⁶

One of the propellants for the growth of ETV was the development of National Educational Television or NET. Allen E. Koenig, editor of The Farther Vision, discussed the advantages of NET in an article concerning ETV.

Since its modest start in 1954, National Educational Television (NET) has been the primary "network" of informational and cultural programming for ETV. NET supplies

tapes and films to more than one hundred ETV stations throughout the United States.²⁷

With the support of NET, ETV began to advance and NTS began to take shape. One of the predecessors for NTS was the Metropolitan Educational Television Association or META. The concept of META was developed around 1955; its main goal was to televise credit courses.²⁸ Any success that META experienced was brief due to the lack of funds. The program could not afford to pay teachers much less the production costs of a television series. By 1959, META had run out of funds, a fate the program would share with future, similar endeavors. The significance of META was that it existed, it got on the air, and it attracted an audience.

Chicago's TV College is further proof of the power of ETV, as a look at its achievements shows. In 1974, the school's records showed that there were a quarter of a million students enrolled in courses shown by Chicago's TV College; out of this, over 80,000 have enrolled in the courses for credit resulting in an estimated 400 students receiving A.A. degrees for study entirely from television.²⁹

Criticism of the Chicago TV College centers around its overuse of the "talking face."³⁰ This effect, so called because the TV viewer sees mainly the face of the teacher, does not creatively employ the potential of television as a video medium. Television, used properly, enables the teacher to lecture while the video displays examples or emphasizes a point. Changing the video from the "talking face" also makes the program more interesting and helps retain the audience's attention.

A year after Chicago's TV College began, CBS broadcast "Sunrise Semester," an educational series that eventually expanded from a local to a national program and "Sunrise Semester," as of November, 1976, is still on the air.

"Sunrise Semester" has appeared on CBS at 6:30 A.M. every weekday for over 17 seasons. The concept of this show developed from a working agreement between CBS and New York University's Washington Square and University College of Arts and Science. CBS handled the technical aspects of the production and NYU provided the administrative staff, selected the courses to be broadcast, and chose the teachers.³¹ Working together they produced a series that drew 150 registered students in the New York area during its formative, local area. Since that time, registration has averaged 20 students per course. In 1963, "Sunrise Semester" was offered to CBS affiliates across the country featuring the first educational network show "Introduction to Ethics."³² To date, it is believed by NYU that as many as one million people watch "Sunrise Semester" in spite of its early morning air time. Most of these viewers do not receive credit for the programs, just interesting information.

"Continental Classroom" was NBC's 1958-1963 counterpart to "Sunrise Semester." "Atomic Age of Physics" was the first topic broadcast on "Continental Classroom" and it consisted of 165 lessons. Audience analysts estimated 400,000 viewed the physics program, 600,000 watched a later chemistry show, but despite the large audiences, at no time did more than 5,000 people sign up for actual

credit.³³

The lack of registration might be attributed to the inconsistencies that existed over credit hours.³⁴ Some institutions accepted anywhere from one to five credit hours for the courses, while others refused to accept any credit. This variation in credit could have been very discouraging to the potential student who opted to watch the programs for his own information rather than for credit.

"Sunrise Semester" and "Continental Classroom" faced the same antagonists--money and time. "Sunrise Semester," which is still on the air, has managed to sidestep these issues, but they are still very real and pressing. Finding funds to finance these educational shows, and other similar educational programs, has always been difficult. If money were not a large enough problem, the severe time schedule limits opportunities for re-dos and to make content corrections.³⁵

In spite of the above limitations, these shows made an impact on the development and progress of ETV and ITV. This point was emphasized by Lawrence McKune, editor of the National Compendium of Televised Education, in a comment focused on "Continental Classroom."

For the first time in the history of education, 4,905 students...in all parts of the United States, studied precisely the same course with the same teacher at the same hour, using the same outlines and the same texts...³⁶

"Sunrise Semester" and "Continental Classroom" were milestones in the development and establishment of ETV and ITV. Another network-centered approach to NTS is the Public Broadcasting System

or PBS which was established by the Public Broadcasting Act of 1967. PBS offers an alternative source of ITV and ETV programs representing a nonconventional approach to education. Two other nonconventional concepts were the Program for Afloat College Education or PACE and the Midwest Program for Airborne Television Instruction or MPATI.

The Navy instituted PACE as an experiment to aid sailors working toward a degree. This unique program was developed in the early sixties to provide college credit for voyaging sailors. The course was a compact program of 16 mm films compiled into fifteen 30-minute programs and supplemental readings.³⁷ The format of the lessons was such that all the tools needed for the course could easily be taken aboard submarines that would be isolated from land for several months.

The Navy offered their succinct learning package to any institution capable of using it, but few accepted the invitation even though the programs were well produced and interesting. When asked the reason for the lack of acceptance, institutions generally responded that they had the facilities to produce their own programs.³⁸ This response seemed to indicate that universities and colleges were stimulated to experiment with their own productions. When PACE was phased out in 1973, it had served 5,903 registrants.³⁹

While PACE took educational programs under the ocean, the Midwest Program for Airborne Television Instruction or MPATI transmitted programs from an airplane to increase the coverage area of

the signal. When MPATI was finally tested in 1972, its transmission range included six states: Illinois, Indiana, Kentucky, Michigan, Ohio, and Wisconsin. Airborne television was shown effective in reaching one to ten million people over a range of 200,000 square miles.⁴⁰

MPATI increased the range of an average transmission, making the broadcast programs available to many more people than any single TV ground station, but to be successful the programs must be watched. Getting the message to the people, and getting people to watch or listen to the message are two distinct aspects of the problem. Programs like PACE and MPATI supplied the message; the content and presentation of the program are responsible for captivating an audience.

The "talking face," already mentioned briefly in this study, plays a profound part in capturing the audience's attention. Good rapport with the camera and an easy, relaxed style help transform a lecturer into a "star." The teacher, if he is to be successful in ETV, ITV, or NTS, must become a performer, a metamorphosis that not everyone is capable of making. "English--Fact and Fancy," a series produced in 1965 by WETA, a public TV station in Washington, D.C., demonstrated that "an appealing figure in front of a camera lens could both captivate and teach."⁴¹

State University of New York's "University of the Air" or Univair began in 1966 to bring college credit courses to those who could not attend regular on-campus courses.⁴² The State University

of New York or SUNY, under the guidance of Samuel B. Gould, decided to open a statewide TV network, linking the public TV stations in New York's major cities. The programming goal was:

That a University of the Air be established to produce college level courses to be offered to the people of the State via educational television, radio, and motion pictures, and to coordinate such audiovisual productions with the campuses of State University offering course credit.⁴³

When SUNY created Univair there were only two programs available to be broadcast. A search began to ferret other programs from different institutions. Out of one hundred sources checked, only three programs were selected.⁴⁴ The lack of shows was a contributory reason for Univair's demise.

Adding to Univair's problem of finding suitable shows, were financial troubles. Contributions from outside sources were withdrawn and by 1971 the project was abandoned. Besides this dearth of shows and the loss of funds, Univair had a major weakness: the programs were not in themselves complete instructional systems.⁴⁵

This weakness was discussed by Harold W. Roeth, Director of Univair for five years, who criticized that too much TV could have the same effect as too much of a dull lecture. Roeth suggested two major points to help the development of future endeavors such as Univair:

1) In planning a new educational system, consider all aspects of the complete instructional system. Putting all your emphasis on one or two components-- such as TV--can spell insignificant results, or failure;

2) Institutions trying new programs have to commit

themselves to going beyond the experimental stage. And if the innovation succeeds, then they must accept it into the "mainstream" of their activity.⁴⁶

These guidelines are similar to the basic premises of the British Open University. The British Open University program consists of traditional subjects that are presented via television and radio broadcasts. Registrants communicate with assigned teachers through the mail, exchanging homework assignments and workbooks that supplement the broadcast lessons.⁴⁷

The British Open University drew the attention and interest of American educators, and by 1971 plans were formulated to adopt the British Open University system in the United States. The format had been established with innovative approaches like PACE and MPATI, as well as the British Open University. NTS was well on its way to receiving greater recognition and support from educators and from the public.

In 1971, the Commission on Non-Traditional Study met to evaluate the circumstances and possibilities of NTS and make recommendations on how to formulate and run a successful NTS program. The Second National Conference on Open Learning and Nontraditional Study was held in 1975 to update NTS's progress. At this conference, Samuel B. Gould, the Chairman of the Council for the Progress of Nontraditional Study, presented five assumptions concerning the future of NTS: (1) the need for financial support from public and private sources, (2) the deleterious effect of divisiveness in academics, (3) the continued reform of education to better fulfill

the needs of the student, (4) acceptance of NTS would be slow, and (5) NTS would meet rigid resistance from conventional educators.⁴⁸

Four of these five assumptions pertain to pitfalls facing NTS, yet more programs are continually being planned in spite of adversity. Nontraditional study is growing, converting educators and the public to the NTS methods of teaching and taking NTS to more students.

It has already been indicated in the introduction that this study is meant to be an overview of some of the events leading to the development of NTS. It would take volumes to present a complete history of mediated education detailing the many significant approaches to ETV and ITV. The purpose of this study is not to report on all the experiments involving NTS, but rather to present enough to simplify and explain the NTS concept, and to show how present-day efforts are centering more around television than any other form of mediated instruction.

The background research on the preceding pages has focused on the growth and use of NTS throughout the United States. A broad outline of the development of NTS has been presented and a few of the innovative uses of the media to teach have been discussed. Some of these uses of media, such as PACE, MPATI, and SUNY, can be credited with motivating individual schools, both state supported and private, to experiment with the potential of the media and its effects on education. The remainder of this study will focus specifically on the growth and involvement of mediated NTS within

public and private college-level institutions in Florida.

In Florida, the involvement with NTS has centered around two attempts now considered failures, and one promising success. The failures are: (1) Florida Atlantic University, the first university in Florida to be designed and built completely equipped for extensive use of the media and (2) the Graduate Engineering Education System, a microwave system of relaying mediated courses to centralized locations. The one success, which is still in the formative stages, is Florida's community colleges and their subsequent formation of the Florida Community College Television and Radio Consortium.

(Hereinafter referred to as the Consortium).

Florida Atlantic University was developed and chartered (1962) to be an upper division and graduate university in an effort to provide a channel for the influx of community college students into universities. The school was designed to be innovative and experimental, offering a curriculum that would place strong emphasis on student responsibility for learning.⁴⁹

The innovative and experimental aspects of Florida Atlantic focused on a heavy use of the media. About one million dollars was invested in electronic equipment, most of this going to equip a full-blown, RCA outfitted color television studio which, for its time, was the envy of many professional setups.⁵⁰ This equipment was intended to be used to enrich and stimulate courses.

The Brumbaugh Report, named after the leader of a special planning commission for the university, A. J. Brumbaugh, reported

the proposed purpose of the media would be to augment the curriculum. The commission viewed the media as an advantageous approach to education, predicting that it would obtain maximum results with a minimum of faculty supervision and direction.⁵¹ This system was supposed to encourage students to work independently and at their own pace. If they were motivated, students could limit actual class time by watching videotapes.

Florida Atlantic University's approach to mediated education was a failure. Faculty unschooled in the practice and potential of instructional television, misused the video equipment that was available to them. Instead of using the equipment to produce genuine instructional television programs complete with film clips, slides, graphics and special effects, the faculty simply videotaped their lectures, resulting in a "talking face" that was later played back to other classes. Student reactions were decidedly negative, not just to the boring tapes, but to the lack of interaction with the class instructor.⁵²

Today, Florida Atlantic University has revised its initial purpose. Only supplemental media units are used in its courses, and a lot of money and effort have been wasted.

The Graduate Engineering Education System was originally based at the University of Florida. The University of Florida was to be the center of this program, known as GENESYS, that was intended to be statewide. GENESYS involved graduate engineering programs that would be transmitted via microwave to various receiving centers

throughout the state.⁵³

Like Florida Atlantic University's television efforts, the GENESYS programs consisted of a "talking face." The program did not use graphics, props, supplemental video or any of the trimmings that make television, television. These courses were obviously boring, resulting in very low enrollments.

When Florida Technological University opened its doors in 1968 the base of the GENESYS operations was transferred there, hoping that the move would revitalize the system. However, the FTU College of Engineering merely continued in the same vein, using one-half inch, black and white unit, and two static cameras to produce the programs. The uninteresting video led to the same low class enrollment at FTU as at the University of Florida and soon led to the system's ultimate demise.

The microwave support system around which GENESYS was built was very expensive to operate because of the cost of leasing microwave links from International Telephone and Telegraph. The high cost of using microwave and the low response rate among students made it economically unfeasible to continue the program.⁵⁴

It seems that the critical common element in the failure of both Florida Atlantic University and GENESYS in their attempts at mediated NTS was the "talking face" type of television program. Study after study has shown that students are not in the least interested in programs of this type, which is not surprising in that today's students have grown up with fast-paced, slick

television formats.

The community colleges, conversely, did not fall into the "talking face" syndrome and are currently developing a promising system of mediated NTS using creative and entertaining educational productions. Their system is the Consortium, an attempt to unite the mediated instructional efforts of the state's community colleges, and the NTS efforts of other schools, state or private, interested in participating.

According to David L. Evans, Provost of Valencia Community College, and James F. Gollattscheck, President of Valencia Community College, the major purpose of the Consortium is:

The Florida consortium seeks to provide a vehicle for utilizing television and radio in community college education on a more comprehensive, economical, and practical basis than has heretofore been attempted.⁵⁵

The inception of the Consortium dates back to 1972 when Miami-Dade Community College completed production of an NTS television program entitled "Man and His Environment." After production, distribution became the main thrust of Miami-Dade's efforts: how to get the program to the people? Dr. Evans, then Dean of Academic Affairs at Valencia Community College, was invited to a workshop to discuss the distribution of this new NTS program. After viewing the program and being favorably impressed with the quality of the production, Dr. Evans decided that "Man and His Environment" would fit into the academic format offered by Valencia, and subsequently began planning for the debut of the program; in the fall of 1973 Valencia had approximately 300 students enrolled in "Man and His

Environment."⁵⁶

Although, with this beginning, "Man and His Environment" was off to a promising start, there were some problems:

Needless to say, especially to those who have become involved in television and radio delivery systems, the cost increased proportionately with the success. As the cost of leasing documentaries, revising study guide materials, purchasing television broadcast time, and assigning faculty time increased, it became apparent that this type of delivery system created economical problems for a single institution.⁵⁷

With the nearly prohibitive costs of using such programs, Dr. Evans presented an alternative approach to conserve money: the Consortium.

In the Valencia Community College area, there were four other community colleges which had expressed interest in "Man and His Environment": Brevard, Polk, Lake Sumter, and Seminole Community Colleges. Joining together in a consortium would allow the five schools to cut expenses by 20 percent. Instead of each individual college leasing the program and paying for broadcast time separately, they could, as a consortium, lease it as a single entity and have it broadcast jointly.

There was one major drawback in this format: where to find a television station that had a signal capable of reaching all five areas? WMFE, Channel 24, Orlando, the station Valencia had used to broadcast the program originally, lacked the signal strength to reach all five communities. The dilemma of what to do was resolved when WMFE-TV announced plans to purchase a new transmitter that would be located on what its builder called "the tallest tower in

the South," at that time still under construction. The proposed new transmitter and higher antenna location would mean an increase in the area covered by WMFE-TV's signal which, if all went well, would now include all five areas of the Consortium.

As plans were being finalized for the Consortium, a rather unusual and, for the Consortium's plans, a most unfortunate event occurred. During the installation of Channel 24's new broadcast antenna on to the tower, one strut too many was loosened on the structure, resulting in the collapse of the entire tower. The tower's falling resulted in not only loss of life but also in loss of signal for VHF Channels 6 and 9, CBS and ABC affiliates respectively, and for the hoped-for expanded coverage of UHF Channel 24.

The end result of the above was a retreat in the plans of the Consortium to the original problem of how to reach all participating community colleges in the Consortium.

After some investigation, Dr. Evans and his colleagues discovered that the two colleges which had been cut off by the tower collapse were within the signal area of WEDU-TV, Tampa. Arrangements were quickly made to broadcast the program over WEDU-TV, Tampa, as well as WMFE-TV, Orlando. This new arrangement not only allowed the two colleges to use "Man and His Environment," but also served as a vehicle of expansion for the Consortium. WEDU-TV's reception area included four additional community colleges: Hillsborough, Manatee, Pasco-Hernando, and St. Petersburg, which were then invited to join the Consortium. When these schools agreed to

the union, a total of nine community colleges collectively founded and took part in the new, expanded Consortium. The growth of the Consortium did not stop here. Today it serves the entire State of Florida and provides easy access to NTS programs.⁵⁸ The Consortium has divided Florida into six regions, each region having a separate television station over which to broadcast. The cost of the programs is divided among the colleges within the regions that participate.

Membership in the Consortium is allegedly open to all college-level schools in Florida. As of December, 1976, twenty-four of the twenty-eight community colleges and one state university, the University of South Florida, have participated at one time or another, in the Consortium's television fare.⁵⁹

The Consortium, an organization developed out of the accidental collapse of the tall tower, provides an opportunity for more colleges to use an NTS format in a cost-effective package and still remain flexible. Dr. Evans, one of the founders and developers of the Consortium, commented on the advantages of a consortium noting that perhaps one of the unique advantages of the Consortium agreement is that each college has complete control in offering the courses within its own curriculum.⁶⁰ The colleges can select which programs will be offered and can participate in the Consortium one quarter and then choose not to participate the following quarter.

If flexibility and autonomy are the advantages of a consortium agreement, the lack of a centralized office that provides the

necessary materials is perhaps the greatest disadvantage of the Consortium as it exists in Florida. Leaders of Florida's Consortium feel that the absence of both a state and national clearinghouse for instructional television and radio materials is one of the main flaws in the Consortium.⁶¹

As a note of interest, it should be pointed out that the NTS projects at Florida Atlantic University and the GENESYS system were both sponsored and covered under the budget of the Board of Regents, whereas the community colleges in Florida are funded by the Division of Community Colleges at the State Board of Education. This difference in sponsorship is important because the state universities, under the control of the Board of Regents, make no individual profits from any of their NTS productions. Any money taken in from the distribution of the programs goes into a common fund and is divided among all nine universities, even though all of the universities did not contribute to the expenses of producing NTS programs. The community colleges, on the other hand, retain any profits from the production and distribution of their programs and are free to reinvest these funds into their own individual colleges. In other words, there is little or no incentive at the state university level for schools to branch out into NTS areas. Such ventures are costly and with no promise of individual return.

The remaining sections of this study will update the use of mediated NTS programs within Florida. The results of the surveys will show how many colleges and universities, public and private,

use an NTS format and compare the development of NTS among the three types of schools.

REFERENCES

¹After the 1971 Commission on Non-Traditional Study, the hyphen was dropped from nontraditional.

²William B. Levenson, Teaching Through Radio (New York: Farrar and Rhinehart, Inc., 1945), p. 27.

³The Carnegie Commission on Educational Television, Public Television (Cambridge: Carnegie Corporation of New York, 1967), p. 11.

⁴John C. Adams, C. R. Carpenter, and Dorothy R. Smith, College Teaching by Television (Washington, D.C.: American Council on Education, 1958), p. vii.

⁵George N. Gordon, Educational Television (New York: The Center for Applied Research in Education, Inc., 1965), p. 2.

⁶*Ibid.*, pp. 2-3.

⁷Gary Gumpert, "Closed-Circuit Television in Training and Education," in The Farther Vision, eds. A. E. Koenig and R. B. Hill (Madison: The University of Wisconsin Press, 1967), pp. 155-182.

⁸Samuel B. Gould, chr., Diversity by Design (Washington: Jossey-Bass Publishers, 1973), p. ix.

⁹Robert D. B. Carlisle, College Credit Through TV: Old Idea, New Dimensions (Lincoln: Great Plains National Instructional Television Library, 1974), p. xi.

¹⁰Rodney T. Hartnett, et. al., The British Open University in the United States (Princeton: Educational Testing Service, 1974), p. 7.

¹¹Gould, Diversity by Design, p. vii.

¹²Virginia Trotter, "Communications Technology: Extending the Reach of Universities to People," in Designing Diversity '75, ed. C. Edward Cavert (Lincoln: University of Mid-America, 1975), p. 58.

¹³William B. Levenson and Edward Stasheff, Teaching Through Radio and Television (New York: Rinehart and Company, Inc., 1945), p. 3.

¹⁴Gordon, Educational Television, pp. 6-7.

¹⁵Ibid., pp. 6-9.

¹⁶Charles A. Siepmann, Radio's Second Chance (Boston: Little, Brown, and Company, 1946).

¹⁷Gordon, Educational Television, p. 7.

¹⁸Carlisle, College Credit Through TV: Old Idea, New Dimensions, pp. vi-vii.

¹⁹Allen E. Koenig, "The Development of Educational Television," in The Farther Vision, eds., A. E. Koenig and R. B. Hill, pp. 3-9.

²⁰Carlisle, College Credit Through TV: Old Idea, New Dimensions, p. vi.

²¹Ibid., p. vii.

²²Gordon, Educational Television, p. 7.

²³Ibid., pp. 8-9.

²⁴Ibid., pp. 8-9.

²⁵Carlisle, College Credit Through TV: Old Idea, New Dimensions, p. 38.

²⁶Ibid., p. 38.

²⁷Koenig, "The Development of Educational Television," p. 7.

²⁸Carlisle, College Credit Through TV: Old Idea, New Dimensions, pp. 42-46.

²⁹Ibid., pp. 63-68.

³⁰Ibid., pp. 63-68.

³¹Ibid., pp. 53-57.

³²Beverly J. Taylor, "The Development of Instructional Television," in The Farther Vision, eds. A. E. Koenig and R. B. Hill, pp. 138-139.

³³Carlisle, College Credit Through TV: Old Idea, New Dimensions, pp. 46-53.

³⁴Ibid., p. 50.

³⁵Ibid., pp. 53-68.

³⁶Lawrence E. McKune, ed., National Compendium of Televised Education, vol. 15 (East Lansing: Michigan State University, 1968).

³⁷Carlisle, College Credit Through TV: Old Idea, New Dimensions, pp. 39-42.

³⁸Ibid., pp. 39-42.

³⁹Ibid., pp. 39-42.

⁴⁰Russell B. Barber, "The Role of Space Communications in ETV," in The Farther Vision, eds. A. E. Koenig and R. B. Hill, pp. 311-336.

⁴¹Carlisle, College Credit Through TV: Old Idea, New Dimensions, pp. 45-46.

⁴²Ibid., pp. 57-63.

⁴³Ibid., p. 59.

⁴⁴Ibid., pp. 57-63.

⁴⁵Ibid., pp. 57-63.

⁴⁶Ibid., p. 63.

⁴⁷Rodney T. Hartnett, et. al., The British Open University in the United States, pp. 7-8.

⁴⁸Samuel B. Gould, "Charge to the Conference," in Designing Diversity '75, ed., C. Edward Cavert (Lincoln: University of Mid-America, 1975), pp. 19-26.

⁴⁹Florida, The Florida Board of Regents, State University System of Florida (1970).

⁵⁰"FAU: A University in Trouble," The Miami Herald, 6 July 1969, sec. K, pp. 1 and 4.

⁵¹Ibid.

⁵²Ibid.

⁵³Thomas O. Morgan, et. al., Florida Technological University, Self-Study Southern Association of Colleges and Schools (Orlando: Florida Technological University, 1974).

⁵⁴Ibid.

⁵⁵David L. Evans and James F. Gallattscheck, "Reaching Communities Via Television and Radio: The Florida Model," Community and Junior College Journal 58 (March 1976):6.

⁵⁶Ibid.

⁵⁷Ibid.

⁵⁸Ibid., p. 8.

⁵⁹Statement by David L. Evans, Provost of Valencia Community College, in a personal interview, Orlando, Florida, January, 1977.

⁶⁰Evans, "Reaching Communities Via Television and Radio: The Florida Model," p. 8.

⁶¹Ibid.

CHAPTER II

RESEARCH METHODS

This section of the study will focus on the development of the survey and the application of the questionnaire to the various educational institutions in Florida. Since the major purpose of this study is to examine the extent of the use of mediated NTS formats in Florida's colleges and universities, a survey method of research was selected as the best means of gathering data.

The first step in this survey was to obtain a current listing of the institutions pertinent to the study. This information was found in The Florida Education Directory, 1976, a publication which contains a list of all educational institutions in Florida as well as their addresses, telephone numbers, and the names and titles of the administrators. The final list of college-level schools compiled for this study consisted of nine state universities, twenty-eight community colleges, and fifty-nine private colleges and universities.

The survey of these institutions was divided into two parts: (1) public educational institutions, and (2) private educational institutions. The rationale leading to this division was that the original outline for this study focused solely on the public institutions. Later it was decided that any NTS activities by private

schools should be included in the results of this study, since comparisons between public and private educational institutions might be both interesting and informative.

The methodology will be reported in the same way it was conducted: first public, then private schools. This section will discuss the two surveys and the individual response rates. (See appendices B, C, and D for samples of the questionnaires.)

Public Educational Institutions

The first survey was conducted on the nine state universities and the twenty-eight community colleges of Florida. An open-ended questionnaire was designed and used in order to allow as many comments and ideas as possible to be expressed. Nontraditional Study is still in its formative stages in Florida and really, in most areas of the United States, very few questions can be answered with a simple "yes" or "no." In addition, at this point in its development, NTS is known by so many varying sobriquets and is housed under such a wide range of administrative umbrellas that one seeking information in the area of mediated instruction must be determined, indeed. There are many various aspects of NTS and equally varied reasons for using media programs, and a questionnaire had to be constructed that would enable these diverse methods to be explored.

A major hurdle in the survey was deciding whom to contact. Because of the nebulous nature of NTS, it was difficult to decide what office or offices on the individual campuses would be most

likely to possess the necessary information to accurately respond to the questionnaire. The Office of Academic Affairs seemed the most likely candidate to be acutely aware of the academic policies and curricula of the various institutions. Therefore, the initial contact was made with the Vice President or Dean of Academic Affairs. These people and their offices were very helpful in responding to the questionnaire or offering directions to other offices when the school had a specific office or department in charge of NTS programs.

Once the appropriate office of each campus had been identified, the questionnaire was presented by telephone, this method providing an opportunity for immediate responses and reactions. Telephone surveys allow the surveyor to be persistent, when necessary, until contact is made and the questionnaire is answered. One difficulty, however, proved to be reaching the vice presidents of the larger institutions who were frequently unavailable at the initial time of contact. When this problem presented itself, an appointment was made with the secretary for a specific time when the individual would be available.

Once contact was established, a double-sided system of data gathering began. First, all questions and responses were recorded via a telephone patch on audio cassette tapes. While the recorder was running, random notes were written by the interviewer, thereby providing a backup system of recording the data in case of technical malfunctions. Overall, the system provided the necessary information while leaving the interviewer free to pay full attention to the

responses and, therefore, to provide cogent feedback.

Response Rate of Public Educational Institutions

Response rate for public institutions was 100 percent; all thirty-seven schools that were contacted answered the survey questionnaire.

Private Educational Institutions

Because there are fifty-nine private universities and colleges in Florida, it was determined that a pre-survey might be useful to isolate the schools which were involved in some form of mediated NTS, prior to making telephone contact. A brief, close-ended questionnaire was mailed to each school's Office of Academic Affairs, composed of only two questions regarding the school's involvement in NTS. Once it was determined that a school was involved in mediated NTS, the usual survey method was used.

In order to guarantee the highest possible response rate, a second survey was mailed to institutions who had not responded to the first.

Response Rate of Private Educational Institutions

A total of fifty-one private schools responded to the mailing, resulting in an 86.44 percent response rate.

Combined Response Rate

The combined response rate for both public and private institutions was 91.66 percent, with eighty-eight out of ninety-six

institutions responding to the questionnaire. Of the schools responding, twenty-eight are involved in mediated NTS. Just how they use mediated NTS will be discussed in the next section.

CHAPTER III

RESULTS

The results of the surveys conducted among college-level, educational institutions in Florida concerning their use of mediated NTS will be reported in this section. The information will be presented in three groups: (1) state universities, (2) community colleges, and (3) private colleges and universities.

State Universities

Results of the survey show that 56 percent of Florida's universities participate in an active NTS format that is developed around the media. This means that, out of nine state universities, five conduct nontraditional, mediated courses. The medium most frequently used by these five schools is television; only the University of South Florida has done NTS experiments with radio. The use of mediated NTS is a relatively new approach among Florida's universities; most of the formats have been developed since 1972. In an effort to expand further NTS in Florida, individual universities have initiated steps to produce their own mediated programs and plans for distributing these programs to other interested schools.

As of the time of this research, the University of South Florida and Florida Technological University are the only

universities that have produced complete NTS programs. Both of these institutions have invested time and money to establish further the media, especially television, as a viable means of instructing. Exact estimates of the production costs for such mediated programs are difficult to make since costs depend on the type of production. Actual costs to produce an NTS program, excluding the expense of the technical equipment needed to produce a television program, vary anywhere from a few hundred dollars to several thousand dollars. Dr. William Mitchell of the Open University at the University of South Florida estimated that the average price for an NTS production was \$20,000.⁶²

None of the programs produced at these universities have yet been distributed to other institutions. The distribution process has been delayed at the University of South Florida because of questions involving the rights to the program and the individual rights of the faculty involved in the production of the program. Florida Technological University has recently completed its first NTS production and is in the process of completing the study guide that accompanies the program. While the study guide is being finished, various ways to distribute the program are being investigated.

It is not only a large investment to produce an NTS program, it can also be expensive to lease NTS programs and to buy broadcast time from television stations. Despite these costs, the majority of the universities are using NTS formats. The University of West

Florida and Florida State University initiated mediated courses in an attempt to extend their individual universities to more students and bring college courses closer to the public. The University of South Florida also started to use mediated NTS in an effort to reach the public, in addition to seeing NTS as a cost-effective approach to education. Florida International University and Florida Technological University began using mediated NTS because of the general reaction that it was an up-and-coming trend in education.

Other reasons for using mediated NTS can be witnessed in the advantages of the nontraditional format over the traditional classroom format. The visual effect of television itself, and the ability of television to introduce material that normally would not be available to students are advantages mentioned by the University of North Florida. The University of South Florida sees the advantages of NTS as being more convenient for the student. This convenience would pertain specifically to individuals who have full-time jobs and find it difficult to schedule classes around their other activities. The advantages mentioned by Florida International University are that it reaches a greater audience than the traditional classroom, it reaches the housebound individual as well as serving as an extension of the university. Florida Technological University listed three NTS advantages that include extending the university to the students, permitting students to study at their own pace, and attracting the highly motivated student who eventually become the

better students in the traditional classroom. Florida State University would not commit itself to either the advantages or disadvantages of NTS.

While interviewing the five universities, two disadvantages were prevalent. The first centered around the faculty. When the university decides to offer a course, the faculty may feel that they do not have an active role in developing it and this makes it more difficult for the faculty to get interested in teaching or supervising these courses. The second dealt with the lack of interaction between student and instructor, and a fear on the part of the student that this lack of interaction will result in his falling behind in the course work. Some institutions, in an effort to overcome this, have scheduled regular seminars during the course. These seminars provide an opportunity for the students to ask questions and to discuss the contents of the course. David Wilson, Associate Director of the Media Center at Florida International University, expressed the opinion that this lack of interaction was not an innate disadvantage.⁶³ Some students do not need the student-instructor interaction and are capable of learning, given all the materials, independently. For those who do not need the interaction, Mr. Wilson supports the idea of seminars.

The process of selecting a topic for an NTS program, whether it is a program to be leased or to be produced, is similar among the universities. Committees consisting of faculty members are consulted and asked to advise the administration as to what programs would

be effective. Production companies often promote individual NTS programs by sending publicity released to the schools. If the schools indicate that they are interested, additional information is sent and these committees, in a group effort, select or reject the programs. Florida State University was the only university that did not comment on whether or not faculty were involved in selecting the programs. The important point here is that the four universities that responded to the question did say that some members of the faculty were involved, to some degree, in selecting the mediated NTS courses to be offered or produced by the schools.

The faculty who are involved in production or supervision of NTS courses receive compensation for their efforts. Florida Technological University and the University of South Florida give their faculty release time, while Florida International University and the University of North Florida are paid on the basis of an overload. Florida State University did not know of any compensation for the members of their faculty involved with NTS.

Three of the five universities reported generally positive attitudes about NTS from the faculty. Only Florida State University and Florida Technological University have indifferent reactions from the faculty, owing to the novelty of NTS programs or just a general lack of awareness.

Past research has indicated that a mediated course is better received if it has supplemental material to accompany the mediated portion of the program. All five universities have faculty who are

available to students, at specific times, to answer any questions or to clarify any areas of confusion. All five of the universities who use mediated instruction also use books to supplement material; three use films; two use slides; two use audio tapes; one uses records and three use other material such as study guides and handbooks. (See chart 1.) In addition to the availability of a faculty member and the supplemental material, all five universities require that the student travel to campus a minimum of two times to take a midterm and a final examination. The scheduling of any additional class sections is up to the faculty member who is in charge of the program.

Mediated NTS is a new approach for these universities. It is still in its formative stages with few guidelines on which to rely, and yet all the universities which use mediated NTS plan to continue and to expand their NTS formats.

Even some of the universities which do not offer any mediated courses are experimenting with various forms of NTS. Earlier, this study discussed Florida Atlantic University and how its NTS approach includes mediated units that are used as supplemental material. The University of West Florida also uses media to supplement lectures and traditional classes.

Community Colleges

As of December, 1976, twenty of the twenty-eight community colleges, 71.4 percent, participated in a mediated NTS format. All the community colleges focus the majority of their work with the

CHART 1

USE OF SUPPLEMENTAL MATERIALS FOR MEDIATED NTS IN UNIVERSITIES IN FLORIDA

Use Books	Use Films	Use Slides	Use Audio Tapes	Use Records	Use Study Guides
Florida International University Florida State University	Florida International University		Florida International University		Florida International University
Florida Technological University University of North Florida	Florida Technological University	University of North Florida			Florida Technological University
University of South Florida	University of South Florida	University of South Florida	University of South Florida	University of South Florida	University of South Florida

medium of television. Only Brevard, Broward, and Hillsborough Community Colleges have experimented with radio as the medium for NTS, but this approach is not as developed or as complete as the NTS programs that are centered around television. Of the twenty participants, six have produced at least one NTS program: Daytona Beach, Hillsborough, Miami-Dade, Pensacola, St. Petersburg, and Santa Fe. Four other community colleges, Brevard, Broward, Edison, and Florida Junior College at Jacksonville, have developed limited productions to be used as mediated assisted instruction, but these are not the complete productions that constitute a mediated course. Only Miami-Dade has distributed the programs it produces. In addition to distributing its own productions, Miami-Dade also develops the study guides and media packages that accompany many NTS programs that schools within and outside Florida use. To date, these programs that Miami-Dade assembles have gone to over one-hundred colleges and universities throughout the country.

Reasons behind the community colleges using mediated NTS vary. Eight of the community colleges (Florida Junior College at Jacksonville, Hillsborough, Valencia, Seminole, Lake-Sumter, Daytona Beach, Polk, and St. Johns River) based their reasons for starting on the ability of mediated NTS to reach the people who were unable to go to campus, or who could not otherwise have contact with a college curriculum. Six of the community colleges (Miami-Dade, Edison, Gulf Coast, Santa Fe, Central Florida, and Broward) started to use mediated NTS because they viewed mediated NTS as the way of

the future. Today's society is audio-visual oriented and by the time a person gets to college he is television oriented. NTS is a way to reach the changing population of college students. The numbers of students aged 26 to 35 enrolling in college are increasing. Mediated NTS makes it easier for this age group, especially if they are working, to go to college. Brevard, St. Petersburg, and North Florida Community Colleges initiated mediated instruction because of the positive effect of the medium of television. Television has the ability to make information more understandable; it provides, in some cases, superior material than would be available in a traditional classroom. Two community colleges, Tallahassee and Pasco-Hernando, started using mediated NTS because the Consortium made the material easily available. Pensacola Community College began experimenting with NTS because they built a television studio on campus and they wanted to use their own facilities.

The advantages of mediated NTS are just as diverse as the reasons for initiating the programs. Some community colleges gave more than one advantage. The most consistently mentioned advantage was that mediated NTS reached the students. Florida Junior College at Jacksonville, Hillsborough, Tallahassee, St. Johns River, Seminole, Daytona Beach, and Broward said that the ability of mediated NTS to extend the college to the people, who might otherwise not have the opportunity to attend classes, is the major advantage. Florida Junior College also joined Valencia, Lake-Sumter, Miami-Dade, and Polk, mentioning that mediated NTS was an advantage

for the motivated student who was capable of disciplining himself to study independently. Four colleges (Hillsborough, Lake-Sumter, North Florida, and Pensacola) found that the flexibility of scheduling was an advantage of NTS. Another four community colleges (St. Petersburg, Central Florida, Brevard, and Edison) said the quality of the production was the advantage. The fact that television can be eye-catching and dramatic has a positive effect on its teaching abilities. Pasco-Hernando noted that mediated NTS helped expand its curriculum. It allows courses to be offered that otherwise could not be offered. The effectiveness of mediated NTS to teach is the advantage mentioned by Santa Fe Community College.

Over half of the community colleges using mediated NTS listed the lack of interaction among students and between students and teachers as the major disadvantage of NTS. This lack of interaction can lead to the non-disciplined student falling behind in the course work and, therefore, not getting everything out of the course that he should. Edison said that the bad quality of some of the productions is a disadvantage. Tallahassee's major complaint was that the hours involved in instruction of an NTS course are not equivalent to the hours spent in a traditional classroom. The lack of availability to programs is a disadvantage according to Pasco-Hernando Community College. Obtaining broadcasting time is the major difficulty for Daytona Beach. The cost of mediated NTS programs and the time involved in the production of them are the complaints of Pensacola and Brevard, respectively. Polk Community

College said the disadvantage of NTS is the disorganized state of registration for the course. It is often weeks after classes begin before the faculty know who are enrolled in the NTS courses.

Finally, Gulf Coast Community College and Miami-Dade Community College did not comment on any disadvantages.

The actual selection of a program has many steps from the time the first publicity release is received to final approval by the by the administration. Seventeen of Florida's community colleges allow the faculty to have some input on the adoption of each mediated NTS program. Faculty involvement is generally that of consultants, giving their opinions on the contents of the programs as they apply to their specific fields. Pensacola Community College and Florida Junior College at Jacksonville are the only colleges that do not receive faculty input before a program is selected. Gulf Coast Community College had no comment.

The faculty reactions range from the positive (Florida Junior College, Hillsborough, Miami-Dade, Tallahassee, Pasco-Hernando, Valencia, Seminole, Lake-Sumter, Daytona Beach, and Polk), through the indifferent (Pensacola, Broward, Brevard, Central Florida, and Santa Fe), to the negative (Edison, St. Johns River, St. Petersburg, and North Florida). (See chart 2.) Comments noted that there was a positive attitude among the faculty who had had contact with the mediated NTS, but those who did not understand NTS were skeptical and concerned that they would be replaced by television.

CHART 2

FACULTY REACTIONS TO MEDIATED NTS AMONG
COMMUNITY COLLEGES IN FLORIDA

Positive Reactions	Indifferent Reactions	Negative Reactions
Daytona Beach	Brevard	Edison
Florida Junior College	Broward	North Florida
Hillsborough	Central Florida	St. Johns River
Lake-Sumter	Pensacola	St. Petersburg
Miami-Dade	Santa Fe	
Pasco-Hernando		
Polk		
Seminole		
Tallahassee		
Valencia		

In the area of supplemental materials, the twenty community colleges participating in NTS use books, three use audio tapes, two use films, two use slides, two use radio (after the broadcast of a program students can call the instructor and ask questions, and these questions will be heard and answered over the radio for the benefit of others taking the course), one uses records, and fifteen use some form of study guide or workbook. (See chart 3.)

St. Petersburg and Santa Fe are the only colleges that do not require students to travel to campus to take their exams. Instead, these colleges administer the exams through the mail. As supplemental material, Miami-Dade has a unique system entitled "RSVP." This is a computer based system that is programmed by the faculty with information about student's past performances in school and individual characteristics, such as whether the student would rather work in a group or independently. This information is used to analyze a student's progress. The computer grades the examination and then sends out a notice as to which areas the student needs to concentrate harder.

Of the twenty community colleges presently using NTS, all twenty plan to continue offering NTS courses. The NTS approach is a significant part of education and the more people that see NTS programs, the more people that will become involved with NTS formats. Only two colleges, North Florida and Pensacola, said they did not foresee any expansion in the use of mediated NTS.

At the time of the survey, there were eight community

CHART 3

USE OF SUPPLEMENTAL MATERIALS FOR MEDIATED NTS AMONG COMMUNITY COLLEGES IN FLORIDA

Use Books	Use Films	Use Slides	Use Audio Tapes	Use Records	Use Study Guides
Brevard Broward Central Florida Daytona Beach Edison Florida Junior College Gulf Coast Hillsborough Lake-Sumter Miami-Dade North Florida Pasco-Hernando Pensacola Polk St. Johns River St. Peters- burg Santa Fe Seminole Valencia Tallahassee	Brevard Tallahassee	Brevard Tallahassee	Brevard Hillsborough Valencia	Brevard	Broward Central Florida Daytona Beach Florida Junior College Gulf Coast Hillsborough Lake-Sumter Miami-Dade North Florida Pensacola Polk St. Johns River Santa Fe Tallahassee Valencia

colleges not participating in mediated NTS programs. Four of these colleges (Palm Beach, Florida Keys, Indian River, and South Florida) do not use NTS and have no plans on doing so, mainly because of lack of facilities. Okaloosa-Walton Junior College is hoping to develop and produce a mediated NTS program on its own in the immediate future. Manatee, Lake City, and Chipola have participated in NTS programs in the past, but the programs presently available are either not suitable to the college's purposes or have already been presented by the school.

Private Colleges and Universities

Of the fifty-one responses received from the fifty-nine private institutions in Florida, only four used mediated NTS. (See chart 4.) Actually, this figure is "three" since Nova University and Nova College, while listed separately, are one and the same. The DiBacco School, Nova College, Nova University, and the University of Tampa all use mediated NTS. Only the DiBacco School produces its own programs, although Nova College/University is in the process of developing plans to produce programs. It should be noted that the College of the Americas has an extension located in Florida and this college does, generally, offer mediated NTS courses but it was temporarily not operating at the time of this survey.

As is obvious from their designation, private schools are funded and operated quite differently from public, tax-supported institutions; in addition, private schools vary widely among themselves in their own operation and administrations.

CHART 4

RESPONSES FROM PRIVATE COLLEGES AND
UNIVERSITIES IN FLORIDA

INSTITUTION	Use NTS		Produce NTS		NR*
	Yes	No	Yes	No	
American Bible College and Divinity School					X
Baptist Bible Institute		X		X	
Barry College		X		X	
Bauder Fashion College		X		X	
Bethune-Cookman College		X		X	
Biscayne College					X
College of Boca Raton		X		X	
Clearwater Christian College		X		X	
College of the Americas	X			X	
Community College of St. Augustine					X
DiBacco School	X		X		
Eckerd College		X		X	
Edward Waters College		X		X	
Embry-Riddle Aeronautical University		X		X	
Flagler College		X		X	
Florida Baptist Institute		X		X	
Florida Beacon College		X		X	
Florida College		X		X	
Florida Institute of Technology		X		X	
Fort Lauderdale College of Business and Finance		X		X	
Florida Memorial College		X		X	
Florida Southern College		X		X	
Genesys School of Graduate Studies		X		X	
Heed University		X		X	

*No Response

INSTITUTION	Use NTS		Produce NTS		NR*
	Yes	No	Yes	No	
Hobe Sound Bible College		X		X	
International College for Hypnosis Studies					X
Jacksonville University		X		X	
Jones College		X		X	
Lakeland College of Business and Fashion		X		X	
Liberty Bible College		X		X	
Luther Rice Seminary		X		X	
Miami Christian College		X		X	
Morris College of Business		X		X	
Nova College	X			X	
Nova University	X			X	
Palm Beach Atlantic College		X		X	
Pensacola Christian College					X
Prospect Hall College		X		X	
Providence Christian College		X		X	
Ringling School of Art		X		X	
Rollins College		X		X	
St. John Vianney Minor Seminary		X		X	
St. Leo College		X		X	
Seminary of St. Vincent de Paul		X		X	
Shelton College		X		X	
Southern College					X
Southeastern Bible College		X		X	
Spurgeon Baptist Bible College		X		X	
Stetson University		X		X	
Tampa College		X		X	
Temple Heights Christian College		X		X	
Trinity College					X
University of Miami					X
University of Sarasota		X		X	
University of Tampa	X			X	
Walden University		X		X	
Warner Southern College		X		X	
Webber College		X		X	
West Pensacola Baptist Bible College		X		X	

*No Response

The DiBacco School is an example of how private schools can vary. Since, in their own words, they are "an alternative school," and there are no textbooks written that apply to their particular method of study, they have developed their own programs to complement their teaching system.⁶⁴ The DiBacco School uses videotape and cinematography in the production of the programs which are shown to the students in a theater. Video accounts for a large portion of the courses' contents, since no supplemental books or study guides are used. The advantage of this system, according to DiBacco, is that the students have the opportunity to progress at their own rates. No disadvantages of the mediated NTS approach have yet been witnessed at the DiBacco School.

The University of Tampa uses one mediated NTS course which is directed toward the graduate level. It is an education course which can fulfill the requirements for renewing a teaching certificate. This course is used because it is of value to students; it is cost-effective as well as convenient. The only supplemental material for this course are study guides and faculty-conducted seminars. Before any commitment can be made on whether or not the university will continue using mediated NTS courses, a study must be conducted to establish the success and worth of the NTS approach.

The Nova College/University system is similar to that of the public schools. They started using NTS because it adds flexibility to the program and enables the school to reach those who are homebound. Disadvantages develop if the school does not provide

adequate backup and supplemental materials. There are also problems getting taped programs and buying air time. Supplemental materials used by Nova include books and study guides. Students are required to go to campus only to take exams. Nova is planning on continuing and expanding their use of mediated NTS. As was previously stated, they are in the first stages of producing a mediated NTS program.

Comparison of Results

Community colleges in Florida that use mediated NTS represent the largest percentage, 71.4 percent, state universities are second with 56 percent, and only 7.8 percent of private colleges and universities in Florida participate in mediated NTS. Out of the schools responding to the survey, 22 percent of the state universities produce their own NTS programs, 21.4 percent of the community colleges and 1.96 percent of the private institutions. (See chart 5.)

CHART 5

COMPARISON OF RESULTS

Type of School	Number of Schools	Number of Responses	Number Using NTS	Number Producing NTS	Percent of Responses Using NTS	Percent of Responses Producing NTS
Universities	9	9	5	2	56	22
Community Colleges	28	28	20	6	71.4	21.4
Private Colleges and Universities	59	51	4	1	7.84	1.96

REFERENCES

⁶²Statement by Dr. William Mitchell, Director of Educational Resources at the University of South Florida, in a telephone interview, December, 1976.

⁶³Statement by David Wilson, Associate Director of the Media Center at Florida International University, in a telephone interview, December, 1976.

⁶⁴Statement by Beula DiBacco, Director, DiBacco School, in a telephone interview, January, 1977.

CHAPTER IV

SUMMARY

Mediated NTS is a relatively new approach to education and, as such, is not yet fully understood or accepted by educators. The numerous designations given NTS in different locations--"Open University," "Instructional Television," etc.--tend to add to the confusion regarding just what is NTS? When NTS is mentioned, the response is often raised eyebrows indicating that most individuals are unaware and uninformed about the modern educational methods of mediated teaching. Even supporters and promoters of mediated NTS appear not to be completely familiar with the concept or the potential of mediated instruction.

The lack of an established definition for NTS leads to confusion when planning courses. Because mediated instruction is still in the developmental stages, the present should be a time of experimentation, a trial-and-error period that will enable the discovery of possible pitfalls of using and producing NTS programs as well as isolating reasons why one system is an effective form of instruction while another system is a failure.

It would seem that contemporary experiments should stress the importance of the video media, especially television. All twenty-nine of the Florida schools that responded affirmatively to

participating in mediated NTS use television as the medium. Television is today the primary means educators are using to reach the public, and to do this successfully educators need to familiarize themselves with the potential of the visual medium. Making shows interesting as well as informative can facilitate learning. A smooth format in an NTS program helps capture and retain the audience's attention. Props, graphics, supplemental video and a professionally directed script can mean the difference between an effective NTS program and an ineffective one. Today's society is accustomed to fast-actioned, slick television productions and NTS productions must be able to compete with standards set by network television.

Educators tend to overlook the necessity of a slick production. They often view mediated instruction as an advantageous approach to education, but fail to consider the ramifications of producing for television. First of all, it is expensive. If one wants a quality production, quality equipment is necessary. Building and equipping a modern studio is a very high dollar investment, especially since there is no guarantee of getting a return on the investment. Second, one needs a production staff who understand the powers and limitations of television. Too often, sponsors of mediated NTS productions overlook the need for skilled media personnel who know how to use the visual effects to captivate the audience's attention. Media people can also help negotiate with television stations that will later be used to broadcast the

programs. Last, there needs to be an orientation period that will introduce and explain mediated NTS to all participants. Faculty members who have little or no orientation to mediated instruction are skeptical of its effectiveness and fear that the video teacher will replace them. This attitude, which has dogged the steps of NTS since its inception, is still prevalent today, and was reflected in the responses of many of those interviewed for this study. The individuals who are most enthusiastic are those, logically, who control the NTS programs and have an active part in developing programs and systems of distribution. Students, especially those who have been previously exposed to "talking face" educational television programs, tend to avoid mediated courses. Students need to be acquainted with the new techniques of NTS in order for different--and, hopefully, positive--attitudes toward NTS to be developed. The public should also be acquainted with mediated NTS; after all, it is to the viewing public that the programs are aimed. Additionally, the college population is gradually changing. The average age of students has gone from the traditional 18 to 22 age bracket to the 26 to 35 age bracket. Traditional educational scheduling cannot be adapted to the individual timetables of the masses since most of these new students are also full-time employees, mothers, etc. Broadcasting NTS programs over local television stations enables the new population of students to participate conveniently in college courses. Mediated NTS can also serve as a vehicle to introduce the public to the university system.

The lack of farsighted planning and orientation contributed to the failure of Florida Atlantic University and GENESYS within Florida's university system. These are classic examples of misusing television. This study previously reported that both Florida Atlantic University and GENESYS relied on the "talking face" and neglected the potential of video effects of television. These projects, both sponsored by the Board of Regents, were responsible for a setback in the development of other mediated NTS programs among Florida's universities. Mistakes made by Florida Atlantic University and GENESYS should be examined and analyzed to eliminate the chances of repeating them; in other words, Florida should try to learn from its mistakes.

Like most NTS projects throughout the United States, Florida's NTS programs are disorganized. Only the Consortium has consolidated the energies and efforts of a group of schools into a centralized area. Perhaps the Consortium is the reason that the community colleges appear to have the most organized approach to NTS as well as having the highest percentage of schools using NTS. If the other institutions in Florida could cooperate with one another, then the mediated NTS system would have a much better chance for positive progress.

APPENDIX A

Instructional Television Fixed Service System

Following the completion of the research for this thesis, two institutions within Florida began planning to use ITFS: Daytona Beach Community College and Florida Technological University. Daytona Beach Community College began using ITFS to distribute six NTS programs in January, 1977; while Florida Technological University's program, "The Biology of Man," will begin on March 28, 1977.

The ITFS system is controlled by Volusia County which has developed the system in Florida and linked it to five neighboring cable companies in an effort to increase coverage area as well as to make the system cost-effective. The ITFS system in Florida is new and relatively untested, but the outlook is good for it becoming a widely used means of distribution for NTS programs within Florida.

APPENDIX B

Telephone Questionnaire

UNIVERSITY:

NAME:

TITLE:

1. Does _____ produce any mediated nontraditional study courses? Yes _____ No _____
 - 1A. Approximately how many per year?
 - 1B. Does your office control and manage mediated instruction?
 - 1C. Do you have additional responsibilities in other areas?
 - 1D. Does _____ distribute these mediated courses to other institutions? Yes _____ No _____
 - 1E. How are these courses distributed?
 - 1F. How is the mediated portion of the course shown to the students?
 - 1G. How is the production of the course funded?
 - 1H. What was the approximate cost to produce the course?
 - 1I. What do you consider the major problems involved in producing a mediated course?
 - 1J. How are the lesson teachers selected?
2. Does _____ use any mediated courses that are distributed by other institutions? Yes _____ No _____

- 2A. Does your office control and manage these courses?
- 2B. How are these courses selected?
3. Did _____ have a mediated course which it no longer uses?
- 3A. Under which office did it function?
- 3B. What were the contributing elements in its failure?
4. Are there any tentative plans to offer mediated courses?
Yes _____ No _____
- 4A. What method do you plan to use to get the program?
- a. produce own
 - b. use others
5. Why did you start using mediated instruction?
6. What are the advantages of mediated NTS?
7. What are the disadvantages of mediated NTS?
8. What is the faculty's general attitude toward using mediated courses?
9. What arrangements are made for faculty supervising or producing the course?
10. How are the faculty involved in selecting the topic of the courses?
11. Are there regularly scheduled classroom sessions?
12. Do you have any comparable statistics on the grades of those who took the mediated course and those who took the traditional course?
13. How do the mediated courses compare?

14. Do you use any of the following to supplement the mediated part of your course?
- a. books
 - b. films
 - c. audio tapes
 - d. slides
 - e. records
 - f. other
15. Do you plan to continue using mediated instruction? WHY???
16. Do you plan to expand the use of mediated instruction?

APPENDIX C

Mail Questionnaire

600 Brookside Road
Maitland, Florida
January 11, 1977

Dear Administrator,

I am a graduate student at Florida Technological University and I am conducting research for my thesis. My study deals with the use of mediated, college-level, credit nontraditional studies within the State of Florida. The type of courses that I am researching are those that are presented over television or radio and are accepted as credit toward obtaining a college degree.

I would appreciate it if you would answer the questions at the end of this letter and return the completed questionnaire in the envelope provided.

Thank you for your help.

Sincerely,

Maureen O'Donnell

1. Does your institution participate in a program that enables students to obtain college-level credit by television or radio programs?

Yes _____ No _____

2. If yes, does the school produce these programs?

Yes _____ No _____

APPENDIX D

Follow-up Mail Questionnaire

600 Brookside Road
Maitland, Florida
January 26, 1977

Dear Administrator,

Thank you for your response to my original questionnaire concerning nontraditional study within the State of Florida. The preliminary results indicate that out of the forty-nine responses received so far, three schools use a nontraditional study format. These results apply only to private schools.

In case the first survey did not reach you, I have enclosed a duplicate questionnaire and a self-addressed envelope. I would appreciate you taking a few moments to complete it and mail it to me. If you have already completed and returned a questionnaire, I would appreciate you responding again so that I can double check and validate my data.

Thank you for your cooperation.

Sincerely,

Maureen O'Donnell

1. Does your institution participate in a program that enables students to obtain college-level credit by television or radio programs?

Yes _____ No _____

2. If yes, does the school produce these programs?

Yes _____ No _____

APPENDIX E

Chart of Advantages and Disadvantages

<u>Advantages of NTS</u>	<u>Number of Responses</u>
Reaches people	8
Student convenience	7
Flexibility of schedule	5
Visual effects	5
Extends university	2
<u>Disadvantages of NTS</u>	
Lack of interaction	13
Lack of availability	1
Lack of faculty input	1
Poor production	1
Non-equivalent hours	1
Lack of supplemental material	1
Disorganization	1
Amount of time to produce	1
Obtaining broadcasting time	1
Cost	1

BIBLIOGRAPHY

- Adams, J. C.; Carpenter, C. R.; and Smith, D. R., eds.
College Teaching by Television. Washington, D.C.:
American Council on Education, 1958.
- Allen, G. W. Chipola Junior College, Marianna, Florida.
Telephone Interview, December 1976.
- Allen, Walter. Lake-Sumter Community College, Leesburg, Florida.
Telephone Interview, December 1976.
- Arnold, Robert. Florida Technological University, Orlando,
Florida. Interview, December 1976.
- Barnett, R. Les. Jacksonville University, Jacksonville, Florida.
Telephone Interview, December 1976.
- Belford, Jules. College of Boca Raton, Boca Raton, Florida.
Correspondence, January 1977.
- Bishop, Walter. North Florida Junior College, Madison, Florida.
Telephone Interview, December 1976.
- Blake, Garth. Florida State University, Tallahassee, Florida.
Telephone Interview, December 1976.
- Bowman, Clark. Eckerd College, St. Petersburg, Florida.
Correspondence, January 1977.
- Bracy, Randolph. University of North Florida, Jacksonville,
Florida. Telephone Interview, December 1976.
- Caffey, William. Liberty Bible College, Pensacola, Florida.
Correspondence, January 1977.
- Callahan, J. W. Television in School, College, and Community.
New York: McGraw-Hill Book Company, Inc., 1953.
- Carberry, Robert. Flagler College, St. Augustine, Florida.
Correspondence, January 1977.

- Carlisle, R. College Credit Through TV: Old Idea, New Dimensions. Lincoln: Great Plains National Instructional Television Library, 1974.
- Carroll, Jack. Brevard Community College, Melbourne, Florida. Telephone Interview, December 1976.
- Cavert, C. Designing Diversity '75. Lincoln: University of Mid-America, 1975.
- Cooper, I. M. History of Broadcasting: Radio to Television. New York: Arno Press and the New York Times, 1971.
- Cross, K. P., and Valley, John R. Planning Non-Traditional Programs. Washington: Jossey-Bass Publishers, 1975.
- Cryer, Clarence. Florida Memorial College, Miami, Florida. Correspondence, January 1977.
- DiBacco, Beula. DiBacco School, Lake Worth, Florida. Telephone Interview, January 1977.
- Donaldson, William. Tallahassee Community College, Tallahassee, Florida. Telephone Interview, December 1976.
- Drake, S. J. Fort Lauderdale College of Business and Finance, Fort Lauderdale, Florida. Correspondence, January 1977.
- Draughon, Walter. Baptist Bible Institute, Graceville, Florida. Correspondence, January 1977.
- Eberhardt, James. Florida Keys Community College, Key West, Florida. Correspondence, January 1977.
- Evans, David L., and Gollattscheck, James F. "Reaching Communities Via Television and Radio: The Florida Model." Community and Junior College Journal 58 (March 1976):6-8.
- Evans, David L. Valencia Community College, Orlando, Florida. Interview, January 1977.
- Fields, Jim. Hillsborough Community College, Tampa, Florida. Telephone Interview, December 1976.
- Florida. The Florida Board of Regents. The State University System of Florida (1970).
- "FAU: A University in Trouble." The Miami Herald, 6 July 1969, sec. K, pp. 1 and 4.

- Floyd, Maria. Bauder Fashion College, Miami, Florida.
Correspondence, January 1977.
- Francis, Ella. Lake City Community College, Lake City, Florida.
Telephone Interview, December 1976.
- Fusselle, Warner. Palm Beach Atlantic College, West Palm Beach,
Florida. Correspondence, January 1977.
- Garrett, Louis. Florida College, Temple Terrace, Florida.
Correspondence, January 1977.
- George, Carl. Genesys School of Graduate Studies, Gainesville,
Florida. Correspondence, January 1977.
- Glass, Deborah. Nova College, Fort Lauderdale, Florida.
Interview, January 1977.
- Gordon, George W. Educational Television. New York: The Center
for Applied Research in Education, Inc., 1965.
- Gould, Samuel B., chr. Diversity by Design. Washington:
Jossey-Bass Publishers, 1973.
- Graham, Paul. Palm Beach Junior College, Lake Worth, Florida.
Telephone Interview, December 1976.
- Hancock, Raymond. Providence Christian College, Riverview, Florida.
Correspondence, January 1977.
- Harris, Hugh. Florida Baptist Institute, Lakeland, Florida.
Correspondence, January 1977.
- Hartnett, R. T.; Clark, M.; Feldmesser, R. A.; Gieber, M.; and
Soss, N. M., eds. The British Open University in the
United States. Princeton: Educational Testing Service, 1974.
- Henry, Daniel. Barry College, Miami, Florida. Correspondence,
January 1977.
- Hicks, Fred. Rollins College, Winter Park, Florida.
Correspondence, January 1977.
- Holden, Clarence. Polk Community College, Winter Haven, Florida.
Telephone Interview, January 1977.
- Hooks, William. Valencia Community College, Orlando, Florida.
Telephone Interview, December 1976.

- Howell, Lloyd. Edward Waters College, Jacksonville, Florida.
Correspondence, January 1977.
- Johnson, Kermit. Manatee Junior College, Bradenton, Florida.
Telephone Interview, December 1976.
- Kelly, J. T. Miami-Dade Community College, Miami, Florida.
Telephone Interview, January 1977.
- Keys, James. Bethune-Cookman College, Daytona Beach, Florida.
Correspondence, January 1977.
- Koenig, A. E., and Hill, R. E. The Farther Vision. Madison:
The University of Wisconsin Press, 1967.
- Leaming, Charles. Florida Beacon College, Largo, Florida.
Correspondence, January 1977.
- Levenson, W. B. Teaching Through Radio. New York: Farrar
and Rhinehart, Inc., 1945.
- Levenson, W. B.; and Stasheff, E. Teaching Through Radio and
Television. New York: Rinehart and Company, Inc., 1954.
- Livesay, George. Clearwater Christian College, Clearwater,
Florida. Correspondence, January 1977.
- McDonald, John. Shelton College, Cape Canaveral, Florida.
Correspondence, January 1977.
- McFaddin, Ronald. Webber College, Babson Park, Florida.
Correspondence, January 1977.
- McKune, L. E., ed. National Compendium of Televised Education,
vol. 15. East Lansing: Michigan State University, 1968.
- McNamara, Charles. St. John Vianney Minor Seminary, Miami,
Florida. Correspondence, January 1977.
- McNichols, Walter. Heed University, Hollywood, Florida.
Correspondence, January 1977.
- Mainrod, Hugh. Miami Christian College, Miami, Florida.
Correspondence, January 1977.
- Meyer, Robert. Santa Fe Community College, Gainesville, Florida.
Telephone Interview, December 1976.
- Miller, John. Florida Institute of Technology, Melbourne, Florida.
Correspondence, January 1977.

- Mitchell, William. University of South Florida, Tampa, Florida.
Telephone Interview, December 1976.
- Morgan, Thomas; Harden, Richard; Newan, Samuel; and Smith, Harry.
Florida Technological University. Self-Study Association of
Colleges and Schools. Orlando: Florida Technological
University, 1974.
- Morris, William. Morris College of Business, Melbourne, Florida.
Correspondence, January 1977.
- Motzel, L. Embry-Riddle Aeronautical University, Daytona Beach,
Florida. Correspondence, January 1977.
- Newton, Earle. College of the Americas, Pensacola, Florida.
Correspondence, January 1977.
- Office of Academic Affairs. University of Florida, Gainesville,
Florida. Telephone Interview, January 1977.
- Office of Coordinator of ITU. Seminole Community College,
Sanford, Florida. Telephone Interview, December 1976.
- Office of Dean of Learning Resources Center. Gulf Coast Community
College, Panama City, Florida. Telephone Interview,
December 1976.
- Office of Director of Admissions and Records. South Florida Junior
College, Avon Park, Florida. Telephone Interview,
December 1976.
- Office of Director of Business Education and Television Instruction.
Florida Junior College at Jacksonville, Jacksonville, Florida.
Telephone Interview, December 1976.
- Office of the Registrar. University of Tampa, Tampa, Florida.
Telephone Interview, January 1977.
- Olsen, Arnold. Spurgeon Baptist Bible College, Mulberry, Florida.
Correspondence, January 1977.
- O'Neill, John. University of Sarasota, Sarasota, Florida.
Correspondence, January 1977.
- Owens, B. Luther Rice Seminary, Jacksonville, Florida.
Correspondence, January 1977.
- Pace, Joseph. Prospect Hall College, Fort Lauderdale, Florida.
Correspondence, January 1977.

- Palm, Edward. Hobe Sound Bible College, Hobe Sound, Florida.
Correspondence, January 1977.
- Patch, James. Jones College, Orlando, Florida. Correspondence,
January 1977.
- Patch, James M. Tampa College, Tampa, Florida. Correspondence,
January 1977.
- Perkins, Robert. Ringling School of Art, Sarasota, Florida.
Correspondence, January 1977.
- Perry, Thomas. University of West Florida, Pensacola, Florida.
Telephone Interview, December 1976.
- Peterson, Robert. St. Leo College, St. Leo, Florida.
Correspondence, January 1977.
- Pollock, Arthur. St. Petersburg Junior College, St. Petersburg,
Florida. Telephone Interview, December 1976.
- Pruitt, Lenn. Lakeland College of Business and Fashion, Lakeland,
Florida. Correspondence, December 1976.
- Ratzlaff, Leslie. Warner Southern College, Lake Wales, Florida.
Correspondence, January 1977.
- Rhoades, James. Okaloosa-Walton Junior College, Niceville,
Florida. Telephone Interview, December 1976.
- Ritterhoff, Robert. Central Florida Community College, Ocala,
Florida. Telephone Interview, December 1976.
- Roger, Thomas. St. Johns River Community College, Palatka,
Florida. Telephone Interview, December 1976.
- Rose, Glen. Broward Community College, Fort Lauderdale, Florida.
Telephone Interview, December 1976.
- Rowe, Barbara. Stetson University, Deland, Florida.
Correspondence, January 1977.
- Schaffer, Ronald. Temple Heights Christian College, Tampa,
Florida. Correspondence, January 1977.
- Schubert, M. Florida Atlantic University, Boca Raton, Florida.
Telephone Interview, December 1976.
- Shofner, David. Pensacola Baptist Bible College, Pensacola,
Florida. Correspondence, January 1977.

- Siepmann, C. A. Radio's Second Chance. Boston: Little, Brown and Co., 1946.
- Simmons, G. Florida Agricultural and Mechanical University, Tallahassee, Florida. Telephone Interview, December 1976.
- State of Florida Department of Education. Florida Education Directory 1975-76. Tallahassee: Department of Education, 1975.
- The Carnegie Commission on Educational Television. Public Television. New York: Carnegie Corporation of New York, 1967.
- The Committee on Television of the American Council on Education and the State University of Iowa. Teaching by Closed-Circuit Television. Washington: American Council on Education, 1956.
- Thigpen, Don. Daytona Beach Community College, Daytona Beach, Florida. Telephone Interview, December 1976.
- Turner, Bernard. Walden University, Naples, Florida. Correspondence, January 1977.
- Turner, Hugh. Pasco-Hernando Community College, Dade City, Florida. Telephone Interview, December 1976.
- Voll, Urban. St. Vincent de Paul, Boynton Beach, Florida. Correspondence, January 1977.
- Wade, Ben. Florida Southern College, Lakeland, Florida. Correspondence, January 1977.
- Walker, C. Pensacola Junior College, Pensacola, Florida. Telephone Interview, January 1977.
- Widman, R. P. Indian River Community College, Fort Pierce, Florida. Telephone Interview, December 1976.
- Wilson, David. Florida International University, Miami, Florida. Telephone Interview, December 1976.
- Williams, Fred. Southeastern Bible College, Lakeland, Florida. Correspondence, January 1977.
- Zaganczyk, Joe. Edison Community College, Fort Myers, Florida. Telephone Interview, December 1976.