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The Learning Resources Center at Oral Roberts University: a systems approach to liberal arts education

Peggy Cantrell Devonshire

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THE LEARNING RESOURCES CENTER AT ORAL ROBERTS UNIVERSITY: A SYSTEMS APPROACH TO LIBERAL ARTS EDUCATION

PEGGY CANTWELL DEVONSHIRE
THE LEARNING RESOURCES CENTER AT
ORAL ROBERTS UNIVERSITY:
A SYSTEMS APPROACH TO
LIBERAL ARTS EDUCATION

A Thesis
Presented to
the Faculty of the Department of Librarianship
San Jose State College

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts

By
Peggy Cantrell Devonshire
July 1970
ACKNOWLEDGMENTS

The investigator wishes to express her appreciation to Mr. William W. McVickar, Director of the Learning Resources Center at ... patience and help; David K. Frederick, of the Learning Resources Center; ... Catalogue by ... approved for the Department of Librarianship

[Signature]

Approved for the College Graduate Committee

[Signature]
ACKNOWLEDGMENTS

The investigator wishes to express her appreciation to Mr. William W. Jernigan, Director of the Learning Resources Center at Oral Roberts University for his patience and help; to Miss Juanita Walker, Learning Resources Librarian, for making available certain information necessary for the study; to Mrs. Ruth Peel, Head of Cataloging, for her help with the evaluation studies; to Dr. Paul McClendon, Head of the Speech Department and the original developer of the Dial-Access Information and Retrieval System at Oral Roberts University, for his help in developing the history of the system; and to various professors and students who answered questions. She is deeply appreciative for all the help and constructive criticism given by Professor Leslie H. Janke, her advisor.
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CHAPTER I

INTRODUCTION

Oral Roberts University is located at Tulsa, Oklahoma, southeast of the central business district in a residential area. It is a Christian liberal arts university controlled by a Board of Regents made up of 41 members. The land area of the university is approximately 420 acres with ten buildings located on the property. These buildings are the John D. Messick Learning Resources Center, the Health Resources Center, Timko-Barton Hall, a seven-story residence hall (Hi Rise I) which will house 600 students, another seven-story residence hall (Hi Rise II), Student Activity Center and dining commons, the Prayer Tower located in the center of the Reese Memorial Gardens, Braxton Hall, Shakarian Hall, and a total energy power plant. (See Figure 1)

The John D. Messick Learning Resources Center is the academic center of the university. This six-story hexagonal shaped building covers 4 1/2 acres, and contains the University Library of 121,000 volumes, classrooms, laboratories, administration offices, and the Dial Access Information and Retrieval System. The system was pioneered at Oral Roberts University and more recently
improved with the addition of color monitors to enable the students to see programmed material, lectures and films in color. Administrators and faculty have used this new approach to education as a cornerstone around which to build a unique and innovative educational program.

By September 1970 over 75 percent of the general education courses at ORU will be on the dial-access system. Some are being offered in the Summer of 1970. The dial-access system will never take the place of the professor, just as media will never take the place of a good book. This system enables the professor to assume a more meaningful role and helps the student take a more responsible position in the teaching learning process.

The library of 121,000 volumes in the center of the Learning Resources Center is built around "learning accessibility" and permits student access to materials at all times. It is not "locked in" to a class that meets Monday, Wednesday, and Friday at 10 o'clock. Media are there as supplements to books. The systems approach to learning at ORU has been administered from a librarian's viewpoint. Library organization and services have proved to be effective with each component assuming responsibility for its activities while functioning as part of a larger system.

Oral Roberts University opened its doors September 7, 1965 and was dedicated by the Reverend Billy Graham.
April 2, 1966. The new college graduated its first freshman class May 25, 1969. This freshman class was the first group to be exposed for four years to the learning systems approach to education.

THE PROBLEM

Statement of problem. The purpose of this study was (1) to trace the development and formation of the Learning Resources Center of Oral Roberts University; (2) to describe the form of services rendered by the Learning Resources Center of which the Library is the most important part; and (3) to determine the effects of such services and progress made during the past four years.

Importance of the study. Much interest has been shown in the Learning Resources Center at Oral Roberts University as an answer to "lock step" education, a plan which permits a student to proceed according to his own speed and need. The study will provide a statement of the activities of the Learning Resources Center, its merits, and its needs which should be of value in evaluating the Center. In a large organization it is difficult for individuals assigned to separate branches to have thorough knowledge of the central organization.
This study will be useful in providing this knowledge. The analysis of the Learning Resources Center will provide background knowledge to those who have a general interest in the electronic or automated library. If a college or university wishes to form a learning resources center in order to improve its services, a knowledge of the facilities at Oral Roberts University will be of considerable assistance. This survey may serve as a motivation to encourage more librarians to take the step in order to solve some of the common problems.

Scope and limitations. No other study has been made of these objectives nor is the information contained herein common knowledge. Some of the literature is related to the subject. The survey was limited to the description of the history, organization, and functions of the Learning Resources Center at Oral Roberts University. No attempt was made to evaluate the library in respect to the quality of service or the degree to which it meets the minimum standards for library service established by the Oklahoma Library Association and the American Library Association.

II. DEFINITIONS OF TERMS USED

Auditoria. Auditoria is an auditorium area providing for use of multi-media with rear screen
projection. Four rooms encircle a control center referred to as the "hub" which contains the multi-media equipment.

**Audio tapes.** Audio tapes are tapes that contain sound only.

**Audio-tutorial system.** Audio-tutorial system is a programming of a sequence of study activities in the voice of the instructor. The student has control of the rate he proceeds, opportunity to reply, and all of the conventional experiences involving the actual handling of specimens, doing experiments, manipulating the microscope, etc. Used in the biology laboratory for self-instruction along with a response workbook and auxiliary materials.

**Behavioral objectives.** Behavioral objectives are those that bring about behavioral changes and effect learning.

**Carrel.** Carrel is an individual study area which may or may not contain educational media.

**Dial Access Information Retrieval System (DAIRS).** Dial-access information retrieval system is an extensive distribution system that ties individual and group terminals in the Learning Resources Center to a central video and audio source.

**Educational media.** Educational media is an electronic study system which is a combination of audio and video learning devices. At ORU it covers the dial-
access system, classroom installation, auditorium installation, and the television facilities.

**Feedback.** Feedback is the returned message. The teacher must get a return message from the student as communication is a two-way process.

**Hardware.** Hardware is any single physical entity that can do a job to convey information.

**Library-college.** Library-college is an ideal of higher education which focuses upon the library as the most important element in its operation. The normal classroom emphasis with overdependence upon the lecture is replaced by learning methodology emphasizing independent library research studies.

**Library orientation.** Library orientation refers to an introductory library experience provided for new students at the beginning of each term. It consists of five or more sessions of live lectures, videotape presentations, and programmed materials on the use of the library.

**Live video tape.** Live video tape is a tape made while the performance or lecture is being given and transmitted to one or more locations for viewing.

**Programmed instruction.** Programmed instruction refers to the utilization of programmed materials (a program) to achieve the educational objectives.

**Programmed learning.** Programmed learning through teaching machines or by educational media.
Programmers. Programmers are a combination of tape recorder and a carousel for slides. It is a method of presenting audio-video programs or tape-slide productions.

Single concept film. Single concept film deals with a single concept in a field of study and may be either audio or video or both. It may be specially prepared or be an excerpt of a longer film. The film and associated lesson material are used to teach a single factor before advancing to another single concept, and may run only one or two minutes where a normal class film runs 10-20 minutes.

Slide-tape presentation. Slide-tape presentation is an audio lecture with visuals to support the audio-control and make it more understandable. It is easy to make and easy to up-date by faculty members.

Software. Software is a unit of instruction, procedure, or relationship that ties hardware and/or software units together to produce some identifiable output.

Syllabi. Syllabi is the outline of a course often including questions, that challenge students, motivate them to think, and contribute to the integration of knowledge.

System. System is an on-going process that produces some wanted operation and is thought of as whole rather than assemblage of pieces and procedures.
Video tape. Video tape has sound and picture on the same tape.

III. PROCEDURES OF THE STUDY

Sources of data. The sources of information upon which this study is based are included in two categories: primary and secondary.

1. Primary sources. Data was obtained directly from the Learning Resources Center by the writer while working in the center for two years as Reference Librarian and one year in charge of the development of the multimedia curriculum laboratory. Use was made of the archives of the Oral Roberts University and the Oral Roberts Evangelistic Association. Personal interviews were conducted with individuals who set up the library and the Learning Resources Center facilities.

2. Secondary sources. Secondary materials consisted generally of indexed books, periodicals, and reports concerning the system under study, as well as related topics. Access was gained to materials which had not been indexed at the time of writing.

Methods of gathering data. Historical facts were obtained from the Oral Roberts archives and from persons who have helped with the establishment of the present library and the educational media.
Working with the dial-access system and the various other media found within the Learning Resources Center for three years, first, as a reference librarian and later developing the curriculum library, afforded an opportunity to observe the current operations. At the same time, information was gained concerning work procedures of the various departments.

In order to up-date the information and statistics given, a visit was made to each of the various department heads, as well as the director of the Learning Resources Center. Talks were held with various professors and students using the media concerning the benefits received, items that might need to be corrected, and plans for the future.

IV. ORGANIZATION OF REMAINDER OF THE THESIS

Following a review of the literature on the development of the library systems, library college, and "lock-stepped" education, the information on the history, organization, and the operations of the Learning Resources Center are presented. The subsequent chapter describes and evaluates the facilities and program during the past five years. The final chapter summarizes the findings of the study and gives conclusions as to the future of the Learning Resources Center. Pictures of the center and its
facilities are found in the Appendix, as well as examples of the dial access and retrieval system directory, library questionnaire for faculty, and library questionnaire for students.

For many years there has been interest in the library serving as a teaching unit in the college and university. Harvie K. Branson's *Teaching With Books* published in the early '30s was a starting point about some of the possibilities that enlightened educators saw at that time. Not until the end of World War II when the University of Iowa published *The Library As A Teaching Instrument* did any academic library dedicate itself in terms of a building that could give support to a concept. Stevens' College at Columbia, Missouri had been working on the idea for many years and had even gotten the faculty members to locate their offices in the library itself. Between the time of the book statement and today, a number of academic libraries have taken steps in the direction of the teaching concept. The introduction of the closed circuit TV as well as the expansion of more traditional audio-visual concepts and machines gave rise to the belief that a library building could serve the teaching function.

CHAPTER II

REVIEW OF THE LITERATURE

For many years there has been interest in the library serving as a teaching unit in the college and university. Harvie Branscomb's *Teaching With Books* published in the early '30s was a charter statement about some of the possibilities that enlightened educators saw at that time. Not until the end of World War II when the University of Iowa published *The Library As A Teaching Instrument* did any academic library dedicate itself in terms of a building that could give support to a concept. Stevens College at Columbus, Missouri had been working on the idea for many years and had even gotten the faculty members to locate their offices in the library itself. Between the time of the Iowa statement and today, a number of academic libraries have taken steps in the direction of the teaching concept. The introduction of the closed circuit TV as well as the expansion of more traditional audio-visual concepts and machines gave rise to the belief that a library building comes before the teaching function.¹

Grand Valley State College, Oral Roberts University and Oklahoma Christian College have gone a considerable distance in providing a library-centered, multi-media approach to learning by associating their teaching program quite closely with individual study carrels, assorted hardware, and audio-visual.\(^2\)

These new learning centers and learning resources centers and the Library-College movement go hand in hand. The learning resources centers have proven that films, slides, tapes, and television can be used for instructional purposes. These centers are considered "stored" knowledge houses of all forms of printed, photographic, and electronic material. Administrative structures vary; some are integrated with the library, others are managed separately in the same building.\(^3\)

The Library-College has been described in many different ways. The mode of instruction would be changed from the classroom lecture with the library as a supplement, to the electronic carrel in the library with the teaching/learning process dependent upon the individual and independent effort of the student. Dr. Louis Shores, long enthusiastic proponent of the Library-College,

\(^2\)Ibid., p. 68.

advocated the idea of the Library-College more than 30 years ago at the Chicago World Fair. Shores in turn quoted President Harper, founder of the University of Chicago. Now he claims that over 100 institutions have a library in which the carrel has replaced the classroom as the center of learning. Antioch, Stephens, Elmira, and Florida Presbyterian are in the vanguard of this development.

The most comprehensive library that the world has ever known was a library-college. The world's first great university was integrated with the operation of a library. This was the great Alexandrian Library founded by one of Alexander's generals, Ptolemy I, soon after 322 B.C. It was partially destroyed in 391 A.D. by the Christians under the Archbishop Theophilus of Antioch.

Daniel Georg Morhof, a German disciple of Francis Bacon in the 17th century, attempted to make an all-embracing inventory of human knowledge. Morhof discusses the library in his great work Polyhistor and makes the

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library the foundation stone of his entire edifice. Thomas Carlyle, in his volume of essays, Hero and Hero Worship, published in 1848, referred to "the true university as a collection of books" in his essay "The Hero as Intellectual."8

This basic concept of the Library-College based on independent study is hardly a new one, as Oxford and Cambridge have been using it for centuries according to Dr. Branscomb. The professor has prevented the academic library from becoming the center of the campus because of the traditional system based on instruction, which is the secondary school concept, rather than the concept of inquiry, reflection and mental organization.9 As late as the 1870s the libraries were faring better than before the Civil War, but the colleges still reflected the undifferentiated curriculum.

The objectives, content, and methodology of undergraduate instruction have been the subject of much controversy and discussion since the late 1920s and the early 1930s. There is still no agreement on the nature of the four-year college curriculum, but several clear

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7 Ibid.
patterns are emerging that are fairly well known. Searching appraisals and profound changes had taken place prior to this period, but the current concern with these problems began about this time.\textsuperscript{10} Antioch began with a type of independent study called autonomous courses as early as 1928.\textsuperscript{11} The first comprehensive study made of college libraries appeared in 1932 with the publication of Randall's \textit{The College Library}. W. W. Bishop wrote in the introduction that the library in the education program of the American college was just coming to be realized and they had many problems to be solved.\textsuperscript{12}

By the 1950s the library had freed itself from the medieval chains and was learning how to handle some of the many new media and other forms of communication. It was not designated as the "communications center" of the college, but it often helped with music and language disks, films and film strips, tapes, maps, prints, and other audio-visual teaching aids. The library in the modern college was slow to accept the need for additional space for faculty and students to work in groups or for space


\textsuperscript{11}Lewis Shores, \textit{loc. cit.}

for the individual to work with a single volume.¹³ Newer media in the undergraduate program continued to expand probably for many reasons such as: individual faculty initiative, influx of younger instructors who did not remember the days before motion picture and radio, broadening of interests among commercial producers and improvement in their materials, and academic competition for educational contracts from the government. Mass education begun during the war and continued internationally in behalf of world improvement and rehabilitation, and some of the talents of the best teachers became available via new media.¹⁴ These are only a few of the things that have brought about the major changes in the methods and materials of instruction used on the college campus.

The birth of television in 1948 and its quick spread across the nation in 1954 brought public support of college credit courses with Western Reserve and the University of Michigan some of the first to try the new media. Soon three noncommercial television stations got under way at the University of Houston, University of Southern California in Los Angeles, and Michigan State in


East Lansing.\textsuperscript{15} This was the beginning of one phase of the present educational media.

Brown described the practices and research in the instructional use of closed-circuit television, broadcast television, films, language and listening laboratories, programmed instruction, self instruction laboratories, large transparencies and overhead projection, and video tapes. He maintained that "the space age is no time to be timid about using the modern technology in higher education."\textsuperscript{16}

The learning systems approach to instruction has become a major educational asset as well as a liability. Educators on all levels of education have been forced to become skilled in combining teaching faculties, materials, and technological innovations to achieve the best learning conditions. Today's teacher is faced with too many students to teach, too much to teach, and too short a time to teach it in.\textsuperscript{17}

\textsuperscript{15}Ibid., p. 92.


The traditional lockstep classroom teaching method can no longer suffice for the student educational experiences. A share of the responsibility for acquiring new knowledge must rest with the student. In our society where universal education is so important, knowledge surpasses publication, and when the supply of teachers is inadequate for the supply of students, changes have to be made.  

Two recent attempts to help the mounting problem have been developed in the form of mass instruction through the multi-media and self instruction through programmed learning. School systems and colleges are offering television courses for credit, and many school systems in the United States are making regular use of the television instruction. A nationwide educational television network is sure to develop before too many years. The largest single use of the programmed instruction in educational institutions of all levels has been the language laboratories. The most hopeful change in the future is the systematic combination of all learning resources. A noticeable trend in this direction is taking place in colleges and universities across the country in what has been termed "learning centers" or "learning centers" or "learning centers" or "learning centers" or "learning centers" or "learning centers"

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18 Ibid., p. 2.
19 Ibid.
resources centers" which combine a part or all of the resources available for learning under one roof. These resources may include library of books, films, tapes, slides, records, object-models, production facilities for audio, film, video, audio-video, and the instructional materials, as well as data processing facilities.

Colleges are now challenged by demands they can not meet without change. Libraries have served the students and professors well up to this time, but changing times bring new conditions and the gap widens between the storage of knowledge and its communication in a meaningful form to the general undergraduate student. The new perspective in college teaching is the undergraduate student learning.20 This transition from passive to active concept of student learning places the library in a new position and it now gives the library responsibility for an effective role, that of student learning.

The real challenge facing American higher education is to take increasing numbers of students and educate them to an increasing level of attainment in a world of ever increasing knowledge, but with ever decreasing proportion of money and teachers.21 Colleges will have to change,

20 Jordon, op. cit., p. 51.
but there is no need for them to throw away everything at once, or change just to be changing; everything should be scrutinized. Every college and university will have to find its own answers to the challenge in light of its circumstances and purposes. There is no one answer for everyone.

According to Dr. Stafford A. North, Director of the Learning Center at Oklahoma Christian College near Oklahoma City, Oklahoma, one of the many promising future developments lies in the varied uses of recordings, particularly tape recordings. The presentation of large segments of actual course content is just beginning to be explored. During the summer of 1963 Dr. North redesigned his public speaking course into 16 lectures covering the basic principles and a workbook. The experiment worked so well that a building was completed in August 1965 for a "learning center." A carrel for all students, 710 to be exact, were installed by November and the electronic facilities were ready by January 1966. The teachers revised 15 courses the first year to be incorporated in the facilities of the Learning Center. Dr. North has been able to prove that students learn as effectively through tape-workbook method as the traditional lecture. Materials were relatively inexpensive to produce, most

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students preferred it, and it effects savings in faculty
time. 23

B. F. Skinner refers to "mechanizing of education"
as doing by machine what was formerly done by people with
the so-called computer-based teaching machines designed to
duplicate the behavior of the teachers. Nothing we know,
according to Skinner, about the learning process calls for
instrumentation as complex as computer technology. Stu-
dents can learn without teaching, but teachers arrange
conditions under which they can learn more rapidly and
effectively. An important contribution of the teaching
machine movement has been the so-called "programming" of
knowledge and skills which is a carefully arranged sequence
leading to the terminal performance. 24

Learning centers, the multi-media concept of
library services, and the student centered independent
study approach to learning, have been generally accepted
by educators. A variety of educational media are already
in the college library. The electric carrels, dial access
systems, and closed circuit TV are no longer a rarity.
For years the librarians have tried to persuade the

23 Forman, op. cit.

24 B. F. Skinner, "Reflections on A Decade of
Teaching Machines," Teaching Machines and Programmed
Learning, II: Data and Directions, ed. Robert Glaser
(Washington, D. C.: Department of Audiovisual Instruc-
tion, National Education Association of the United
faculty and the administration that the library ought to be the "heart of the school." Now, due to the revolution in educational media, it is moving to the front. Administrators are fearful of erecting a new library building today that might be technologically outmoded and obsolete by dedication day.25

The Library-College is concerned with changing the mode of instruction from the classroom lecture arrangement to the electronic carrel in the library with the teaching/learning process dependent upon the individual. Lewis Shores, originator of the idea of the Library-College, believes the campus unrest is due to the effort of the United States to educate everyone.26 Due to this, higher education has become very impersonal. The range of individual differences in "college for all" is so wide that the average presentation bores the gifted student and frustrates the poor student. Classroom teaching and classroom contact are now antiquated. Add to this the lockstep in learning mode, and the authoritarianism in curriculum and you have the main causes of the dissatisfaction on our campuses.27 Naturally Shores believes the philosophy of the Library-College would help many of the problems.

25 Ellsworth, op. cit., p. 54.
26 Shores, op. cit., p. 1548.
27 Ibid.
To protect the faculty-student intimacy there should be no more than 1,000 students, and preferably 500. The use of the systems approach with the various educational media would break the lockstep in higher education.

Combining library facilities with audio-visual retrieval system to produce a unique synthesis in modern learning resources was an idea that became a reality in September 1965 when the Oral Roberts University opened its doors for the first time. This new educational media was designed specifically to increase the efficiency of academic processes. For the first two years the DAIR system was used primarily as a classroom supplement. Use of the dial access system has now more than tripled since the library and the audio-visual departments merged to present a major part of the current curriculum via DAIR.

According to W. W. Jernigan, Director of Learning Resources at Oral Roberts University, information/education problems can be solved partly by the use of the time-saving access systems. The entire world of education can benefit by the electronic instructional media. The DAIR automatically prepares varied information for use of the student, and at

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29 Jernigan, op. cit., p. 655.
the same time presents materials in dramatic form that otherwise would be presented in a static form.\textsuperscript{30}

Many problems still exist before full utilization of the learning resources in a systems approach. Technological problems will be gradually solved, but problems concerned with economic feasibility, administrative and faculty conservation on the college level, and reluctance of the secondary and elementary levels are a long way from being overcome. Color television has appeared, but it is too costly for the average educational institution.\textsuperscript{31}

\textsuperscript{30}Jernigan, op. cit., p. 657.

\textsuperscript{31}Mc Clendon, op. cit., p. 8.
CHAPTER III

LEARNING RESOURCES CENTER

The Learning Resources Center, since February 1, 1968, known as the John D. Messick Learning Resources Center, was built upon the premise that instruction be developed around a central library. According to the Educational Facilities Laboratories, a division of Ford Foundation, it is one of the most creative facilities on any American campus today. Included in the facilities are the electronic information storage and retrieval system, the closed-circuit television operation, dial-access system, language laboratories, television studios, production and instructional materials center and the electronic computers. Oral Roberts University is regarded as one of the first universities to utilize a computerized information retrieval system on a broad scale, with the dial access in both audio and video instruction built into one center. All the latest in electronic and computer technology was combined to aid and improve instruction. The designers were interested in retaining educational techniques of the past that were most successful and in finding educational innovations that might prove more effective in giving learning results to more students in
less time. The purpose was not to save money, but to use money wisely in developing a quality education program.¹

I. THE BUILDING

The six-story library building, designed by Frank A. Wallace, A.I.A. of Tulsa, Oklahoma, is located on one of the most spectacular sites on the campus, and is not only beautiful, but of highly functional architecture. It is hexagonal in shape made of concrete, steel, and glass with soaring steel columns covered with blown cement that dominate the entire campus. This most expensive building on the campus was constructed by the Manhattan Construction Company of Muskogee, Oklahoma at a bid of $2,900,000. If it were all on one floor area, it would cover four and one half acres. The plate glass walls are a warm gray to reduce the glare and heat. The exterior is white stucco set off by black prefabricated aggregate panels with trim, and forcia of gold anodized aluminum. The glass is solarbronze from the Pittsburg Plate Glass Company, and it has a faint tint that improves the color in the offices, the lounges, and the corridors of the library. (See Figure 2)

Figure 2
John D. Messick Learning Resources Center
Oral Roberts University
Almost all the building is carpeted, except for the art and science laboratories which have hard surfaced floors. All the carpet is from the Commercial Carpet Company, New York City, and is of nylon 360D fabric. The bid was $70,000 or $4.91 per square yard. The carpet was tailored to fit exact areas shown on the blueprints. Colors vary with the room decor. The backing of the carpet changes with the location. Jute makes up the backing in the areas where the moisture is not a consideration, with polypropylene backing used in areas where moisture may accumulate. The latter will not mildew, or gather odor. The furniture of the entire building amounted to $272,763.20. It is complete with classrooms, lecture halls, library, laboratories, and other functional rooms at a total project cost of $5,058,000.

At the front of the Learning Resources Center on a covered patio is a large black marble fountain in the center of which burns the Eternal Flame. The fountain is triangular in shape to match the three-sided building which represents the concept of the university. It symbolizes the Trinity of God, God the Father, God the Son, and God the Holy Spirit. It also symbolizes the Trinity of Man who has a spirit, a mind with free will, and a body in which he lives. Three hundred sponsors each pledged $10,000 to be paid within 36 months for the fountain with the eternal flame. At the lighting of the flame October
31, 1965 the ORU campus was completely darkened and 300 Gideons led by Oral Roberts and Lee Braxton marched with lifted torches across the campus to the Learning Resources Center to light the flame.

First Floor (See Figure 3)

There are six floors equipped with the latest electronic equipment. One and one-half stories are underground and three and one-half stories are above ground. The first floor, which is entirely underground, is entered by a tunnel leading from the physical plant, by stairs on the outside of the building, and by two inside elevators.

The floor contains the laboratories for physics, chemistry, biology, and geography, classrooms, and a large closed-circuit television studio with rooms for editing, duplicating, processing, previewing, receiving, storing, distributing, cleaning, and repairing. At least one-third of the area is used for the art studios, graphic-arts area, educational media area for planning, programming, preparing slides and models, and the other media for instruction, including still photography. The complete switching area for the campus dial-access information retrieval system is also located here.
FIRST FLOOR

NORTH

L.R.C.

Figure 3

First Floor Map
Second Floor (See Figure 4)

Located one-half story underground, this floor contains three auditoriums each containing 181 seats. Two of the auditoriums are separated by folding doors and may be put together to seat 362 people. Rear screen projection is provided in each room and monitors for instructional television are available in all other classrooms.

The two audio-video language laboratories are opposite the auditorium, each containing 25 student stations, and equipped with remote control dialog system and console. An additional room contains 43 carrels with audio-video electronic facilities. The speech and drama department are located on the second floor with space allowed for testing, recording, pathology, therapy, and dramatic performance. Five performance studios are equipped to record speech and play back for study. The bookstore and the post office are also located on this floor.

Third Floor (See Figure 5)

The third, fourth, and fifth floors were designed for the library around which the Learning Resources Center was built. It was so designed that the library be a vital part of the total learning resources concept, and not merely a book collection. In order to carry out this plan, the library was not only placed in the center, but
Figure 4
Second Floor Map
was equipped with various electronic media, such as audio-visual equipment, sound system.

Current periodicals

Third Floor Map

Figure 5
Third Floor Map
was equipped with the various electronic media, such as audio-visual carrels and the IBM check out system.

The third floor was designated for the current periodicals, newspapers, and popular books. Lounge type furniture dominates this informal study and reading area. Specially designed shelves of walnut are grouped in a fan-shaped manner to display the periodicals which are laid out in alphabetical order. Offices of the administration, as well as conference rooms are found on the outer edge of the building and entered from the outside landing that goes completely around the building at the third floor level.

Fluorescent lights were hung on the acoustical ceilings and covered with dropped plastic "egg crate" panels that are not only attractive, but furnish excellent lighting for the stack and lounge areas.

Fourth Floor (See Figure 6)

The fourth floor contains the main library collection of some 100,000 books, programmed learning and teaching equipment, carrels equipped with audio-video facilities, technical services area, circulation desk with IBM checkout, reference collection, bound journals, listening laboratory for tapes and records, Pentacostal Collection, Oral Roberts Archives, and the three card catalogs for public use. Professors' and staff offices
Fourth Floor Map

Figure 6

Fourth Floor Map

There are no load-bearing walls in the interior section. Stucco columns allow the freedom needed for arrangement of the main traffic area. An extension from the main traffic area extends from the floor up to the case in the center of the dome.
are located around the outer edge of the library.

There are no load-bearing walls in the interior section. Stucco columns allow the freedom needed for arrangement of the stacks which extend out from the main traffic area. A dual spiral staircase, that extends from the third floor up to the sixth floor, is the main traffic route except for two elevators. This spiral staircase in the center of the Learning Resources Center is a focal point furnished with specially selected carpeting and custom designed furniture. A very unusual cross spans the skylight at the top of the circular stairway.

Informal study lounge chairs are grouped conveniently throughout the library. Tables with glare-free plastic tops are provided for study. The trapezoid tables around the outer edge of the stacks also provide excellent places for study away from the heavy traffic areas. Comfort was the desire of the architect in order to allow the student to get the most from the electronic media and the book collection.

Fifth Floor (See Figure 7)

The fifth floor was the area designated for the library expansion. At the present time the chapel takes up at least half of the space. Library shelving already assembled occupies the remainder of the floor. It was here that the theology collection was placed intact when
it was moved in 1969. However, due to the need for space, the A's and B's of the main library collection were moved from the fourth floor to the fifth floor this year. The theology collection, which is classified separately from the B's, is now located with them. The catalog for the theology was partitioned off in the summer, and a multi-media curriculum laboratory was added to floor also during the summer. The large colored TVs are also placed in the library, reducing the noise factor for the students. Only those programs scheduled can be used by those faculty and staff offices for the theology department, education department, and the psychology and sociology departments are to be found along the perimeter of the area. Figure 7

FIFTH FLOOR (NORTH) L.R.C.

Fifth Floor Map
it was moved in 1969. However, due to the need for space, the A's and B's of the main library collection were moved from the fourth floor to the fifth floor this year. The theology collection, which is classified mostly in the B's, is now interfiled with them. The catalog for the theology collection remains separate.

One section of the floor was partitioned off in the summer of 1969 and the new multi-media curriculum laboratory has been developed there. Many new carrels were placed on the fifth floor also during the summer of 1969 and the DAS was extended. Two large colored TV sets with six listening posts for each set were also added on this floor. The sets can only be heard through the earphones, thus eliminating the noise factor for the rest of the floor, and only those programs scheduled can be seen on the colored TV sets.

Faculty and staff offices for the theology department, education department, and the psychology and sociology departments are to be found along the perimeter of the area.

Sixth Floor

This floor is often referred to as the penthouse, as most of the area is glass. It houses the offices of the president, members of his staff, conference rooms, a large regent's conference-reception room, and lounges for
both student and staff. The view of Tulsa is excellent here from the top of the Learning Resources Center.

II. HISTORY OF THE CENTER

The developing of the library collection was begun by Dorothy Poteat in July 1962 in the Abundant Life Building which is located in downtown Tulsa and was the former location of the Oral Roberts Evangelism headquarters. A librarian of many years' experience and holding a master's degree in library science from the University of Florida, Miss Poteat came from Emmanuel College, Franklin Springs, Georgia. Ann Lancaster, a student from Emmanuel College who had worked with Miss Poteat in the library for two years, came with her. These two, plus another secretary, were the first working force for the library. During the months of July and August 1962 Miss Poteat ordered 211 magazines and 872 books, and established methods of purchasing and processing. Started on the fourth floor of the Abundant Life Building, in less than two months the collection filled seven small rooms and was moved in October 1962 to the fifth floor of the same building where it remained until July 1965 when it was moved to the present Learning Resources Center.

Juanita Walker, with a master's degree in English and education and a minor in library science from the
University of Georgia, with seven years' experience in library work, accepted the position as acting librarian in August 1962. Miss Poteat supervised in absentia with occasional visits until February 1963. At that time she recommended that Miss J. Walker and William Jesse be hired to carry out the proposed library program.

From the beginning of the development of Oral Roberts University the administration wanted the library to be the most important resource of the school, so a consultant to work with architect Frank W. Wallace seemed necessary. William Jesse, director of libraries of the University of Tennessee and a nationally known authority, was hired. He met with the university personnel for the first time in January 1963. It was his report, "A Statement of Program for a Library Building for Oral Roberts University," that provided the guidelines for the architect to develop an area to house 500,000 volumes and other essentials needed in the various services of the library. This report was presented to the administration in February 1963.

In March 1963, a committee consisting of the architect, Frank Wallace, Bill Roberts, the engineer, Manford Engle, executive vice president of the Oral Roberts Evangelistic Association, Erby Shaw, a member of the Board of Regents, and Dr. R. O. Corvin, on the administrative staff of Oral Roberts University, visited
many colleges and universities to study their campus in general and their libraries specifically. While in Florida they contacted Dr. Leonard Senger who at that time was developing at Florida Atlantic University an electronic educational media system with particular emphasis on computerization of the library. The members of the committee were impressed with his ideas and he became a consultant for the Oral Roberts University, contributing much to the idea of utilizing electronics educational media for instruction.

Miss Walker, by July 1963, had accumulated some 7,000 volumes in the library collection, but the big problem facing the library staff was the lack of sufficient bibliography from which to select a representative collection for a large liberal arts library. Selecting the books and periodicals, securing them, and processing them in order to be ready for the university to open in two years, constituted a gigantic task.

In this same month Miss Walker and Dr. J. D. Messick, former executive vice president, attended the annual meeting of the American Library Association in Chicago and met with Dr. Joseph H. Treyz, head of the new campuses program of libraries for the University of California. Dr. Treyz, who, with the assistance of a group of librarians, had developed a list of 75,000 volumes for use in the libraries of the new colleges that
were being developed under the auspices of the University of California, permitted the Oral Roberts University staff to use this list as a guide in developing their collection.

Another person contacted at the Chicago meeting was Arthur Brody, president of Bro-Dart Industries and the Alanar Processing Company, who was interested in the new program at Oral Roberts University. He was invited to come to the campus, and met with the university executive committee in February 1964. The committee entered into a contract with his company to purchase as many books as desired and have them processed by his organization.

Brody was working with Dr. Treyz and with Florida Atlantic University at the same time, so Miss Walker and Dr. Messick had the advantage of many ideas that were being considered by them. Having the list of books from Dr. Treyz, purchasing them from Bro-Dart Industries and with its subsidiary, Alanar, processing them according to the Library of Congress classification, greatly simplified the problem of developing the book collection.

William W. Jernigan, M.A.L.S., Peabody College, Nashville, Tennessee, came to the university June 7, 1965 as the head librarian. In August 1965 some 40,000 volumes were moved to the present library in the Learning Resources Center from the downtown Abundant Life Building. Although the shelving did not arrive until November, some 60,000
volumes were ready when the university opened September 7, 1965. Improvised shelves around the walls of the fourth floor in the Learning Resources Center were used until the permanent shelving became available. At the opening of the university, the Division of Learning Resources and the Division of Libraries operated separately. Mr. Jernigan was Head of the Division of Libraries which included the Central Library and the Theological Library which was housed in a separate building. However, in June 1965 Jack C. Cramer was hired to head the Theological Library, since the American Theological Library Association requires that the Theological Library be a separate entity in its own book collection, magazines, administration, and budget.

Dr. Paul I. McClendon was the Head of the Division of Learning Resources and responsible for the installation of the dial-access information retrieval system that has now become a part of the Learning Resources Center. Dr. McClendon, Chairman of the Department of Speech at Westmont College, was hired in July 1964 to seek consultative services, to formulate plans, and acquire the essential equipment for the audio-video dial access system. Engineers of the RCA Broadcast and Communications Products Division and an ORU staff headed by Dr. Paul I. McClendon designed the system at a cost of $615,135.20. Oral Roberts University's system is notable as one of the first major RCA installations made by the Instructional and
Scientific Electronics Department within RCA. In 1966 Dr. McClendon resigned as Head of the Division of Learning Resources to become Head of the Speech Department. The two divisions then came under one head, William W. Jernigan. In 1967 he became the Director of the Learning Resources Center. This was a logical merging of the two divisions to prevent duplication of services.

Other organizational changes were made during the first two years of the university's operation. A Learning Resources Librarian was placed in charge of all visuals in 1966. Mrs. Evelyn Clement was appointed the first Learning Resources Librarian. Mrs. Clement returned to school in the fall of 1968 to work on her doctorate, and Miss Walker took over the job as Learning Resources Librarian, as well as retaining her previous position as Head of the Acquisitions Department. In 1969 a merging of the Theological Library and the Central Library took place, since the Theology School was disbanded in favor of a Division of Christian Ministries. The Theological Library had 19,794 volumes in the collection and subscriptions to over 275 periodicals and journals. This collection was placed intact on the fifth floor of the Learning Resources Center and the catalog placed on the fourth floor beside the catalog for the general collection. However, in the spring of 1970 the need for space was so
great that the A's and B's of the main collection were moved up to the fifth floor and the theology collection interfiled.

III. ORGANIZATION OF THE CENTER

Each component of the Learning Resources Center assumes direct responsibility for its activities while functioning as part of a system. The Library assumes the responsibility for collecting, classifying, storing and retrieving all the information both print and nonprint. The Television Production Center assumes the responsibility for the media production, both producing and reproducing of the television tapes, and open and closed-circuit transmission. The Chief Electronics Engineer is responsible for media maintenance, including the computer dial access system and the equipment used for campus activities. The Instructional Materials Center provides the material for the media production. The Learning Resources Center houses the production studio, audio laboratories, audio-visual materials, and a department of complete graphic design along with a well equipped library. Functioning under one administrative head these four areas bring specialized knowledge and professional skills to the university along with the experience of a number of experts for each educational need. The Learning Resources Center Organization Chart shown in Figure 8
shows the interrelationship of all aspects of the operation.

Mr. William W. Jernigan is the present administrator of the entire Learning Resources program, both the Library and the Audio-Visual Media Division. He works directly with university administration in all administrative details for the university Learning Resources. Additional responsibilities are the Coordinating Director of Extended Sessions, the short semester and the summer school.

IV. LIBRARY

Acquisitions Department

The Acquisitions Department is located in the technical processing area on the fourth floor of the Learning Resources Center. Miss Walker is the Acquisitions Librarian. When the university first opened in September 1965 the library was purchasing about 2,000 books a month, but as the library was gradually increased to its present strength of almost 100,000 volumes, the purchases per month have declined.

The Acquisitions Librarian has the responsibility of selecting titles from the book advertisements, and requests from the various professors and staff. Requests from the faculty have to be approved by the departmental chairman before they are sent to the Acquisitions Librarian.
LEARNING RESOURCES ORGANIZATION CHART

Director of Learning Resources

Director of Media Production
- Staff 1
- Student Assistants 3

Chief Electronics Engineer
- Staff 5
- Student Assistants 9

Instructional Materials Center Artist
- Staff 1
- Student Assistants 6

Learning Resources Acquisitions & Receiving
- Librarians 1
- Staff 2
- Student Assistants 4

Special Collections
- Librarians 1
- Staff 1
- Student Assistants 4

Cataloging
- Librarians 1
- Staff 3
- Student Assistants

Reference
- Librarians 1
- Staff 3
- Student Assistants

Circulation Department *
- Staff 2
- Student Assistants 4

Periodicals Department *
- Staff 1
- Student Assistants 3

* Headed by staff member

Figure 8
A special acquisitions card is used to supply the required bibliographical information. These cards may be obtained from the acquisitions section at any time. Reviews of the book are cited on the card to allow for verification before the purchase order is typed up and sent out.

The purchase order is very much like the acquisitions card as it has all the needed bibliographical information plus the accounting number, Library of Congress card number, dealer, number of copies, list price, cost price, date ordered, and date received. Only the original copy is sent to the dealer. The four additional carbon copies are retained for cataloging, and for books received and processing.

Requests for film purchase and rentals follow the same procedure as that for purchasing books. These materials must also be approved by the department chairman, as well as the Acquisitions Librarian.

All purchase orders for books, films, records, microfilms, and slides plus the order forms for the rental materials are held by the Receiving Department until the books or film have been received. When the invoice is received, the order card is pulled and checked carefully. The title on the book and the purchase order must be exactly the same. Next the book is sourced and stamped, which means recording the name of the company from whom
purchased, the date purchased, and the price. The official ORU stamp is then placed on the inside and on the edge of the book. If a book is a "rush order," it is sent directly to the Cataloging Department to be quickly cataloged, and then sent to Circulation. Regular books are held until the LC cards are ordered. Upon receiving, the book is released to the Circulation Department. When the library was receiving many books from Alanar in 1965, they had to be very carefully checked since there was a great number of incompletes; many had the title and author out of order, and were inconsistent in many respects. The verification before ordering has proved to be a much better system.

Cataloging Department

The Cataloging Department at Oral Roberts University Library is an important part of the technical processing area. Its main function is the classification and organization of the learning media, both book and nonbook materials that are received into the library. The Cataloging Department is responsible for the identification and indexing of each unit before it is released to the Circulation Department. There are four card catalogs maintained by this department: the main (books, microtexts, and periodicals), theological, learning resources (audio-visuals), and the Pentecostal for the special
collection which indexes both books and non-book material found only in the Pentecostal Collection.

The library uses the Library of Congress Classification. The media is sent from the receiving area of the technical processing section to the Cataloging Department and arranged by "rush" serials and "regular acquisitions," and subarranged by "with Library of Congress cards" and "original cataloging." The audio-visual material is considered "rush" as it is usually a part of the current academic program and is needed in the classroom or on the dial access system immediately. Subjects are assigned to each work with the headings obtained from the Library of Congress Subject Heading Text. Added entries are made for multiple authors, titles, etcetera, that might be needed. The media with Library of Congress cards are reviewed by Ruth Peel, Head Cataloger, and sent to the Processing Division after the necessary adjustments are made. Those held for "original cataloging" are completed by the cataloger and sent to the Processing Division where cards are made. The main entry card is typed from the cataloger's worksheet and all the cards needed for added entries and the shelf list are reproduced. The headings are individually typed. If there are extensive notes or tracings to be typed on the main entry, this is done by a typewriter with small type. Card pockets and labels are then added with a typewriter that has extra large type.
Before any of the media is sent to the Processing Division, temporary shelf list cards are made and filed. A shelf list card is made for each title and sent to the university Service Center for keypunching. The call number and bibliographic information are keypunched and put into the memory bank of the computer. Later print-outs are made and arranged by call number and author. If the items are other than books for ORU circulation, they are stored immediately without waiting for the return of the shelf list from keypunch. Most of the catalog cards are filed by students under close supervision by regular staff from the Cataloging Department.

A number of books are still purchased from Alanar in pre-processed form. These books are placed on specially designated shelves in processing and a temporary shelf list is made for them. After carefully checking, the 9157 IBM computer system is used by the library revising, and correcting by a staff member in the Cataloging Department, the shelf list is sent to keypunch. Upon the return of the shelf list from keypunch the books are then released to Circulation.

Gift books, of which ORU library receives a great many, are processed in the same way as the books which are purchased. Library of Congress cards are ordered for the identification and another library book card is the those available, and book plates are added to indicate the donor. The ones without LC numbers are cataloged by the library. Films, records, slides, and microforms are all
processed as related above.

In the Cataloging Department the typist types the card and pocket for the books with the LC cards. The revisor separates the LC cards and sends the shelf card to the keypunch operator. When the cards return from keypunch the IBM cards are inserted in the book and the books are then shelved by the Circulation Department. If there are no LC cards the book is sent to the Head Cataloger for original cataloging. After being completely cataloged, the books are ready for circulation, and the LC cards are filed in the public catalog.

Most of the public catalog is maintained by student help under the constant supervision of a semi-professional librarian who is in charge of filing in the catalogs.

Circulation Department

The #357 IBM computer system is used by the library to check out and return books. Each student has a plastic identification card bearing his picture and his Social Security number. Every book in the library has a computerized card with the Library of Congress number and additional information. In checking out a book the student needs to have inserted into the #357 computer both his identification card and the library book card. The computer registers on the computer tape the numbers of both cards and will print one additional card.
There are five cartridges that can be placed on the computer to punch the check-out card. Each specifies a different length of time for check out of materials. They may be checked out for 1 hour, 2 hours, 1 day, 1 week, 2 weeks, or 30 days for faculty. The book card is kept in the book and is identified by a blue arrow. The computer card is identified by a green band at the top.

When the material is returned to the circulation desk, a special return cartridge is used to indicate to the computer that the book is a normal return or return fine paid. There are two stations: one for checked out and one for returning materials at the circulation desk. The computer and punched cards are in a small adjoining room back of the circulation desk to eliminate the noise of the computer from the library. Each day the computer cards are picked up by the library personnel and registered on the magnetic tape of the #1401 computer where a circulation sheet is made up. The librarian in charge of circulation always has the circulation sheet or print out from the day before, which enables her to tell the Library of Congress number, the identification number of the borrower, the date the book is due to be returned, how long the book was checked out for, and if the book is overdue. This makes it possible for library personnel to determine whether a book is in or out of the library, when it is due, and who has the book. Processing is so complete
that the computer will print out cards for overdue books and address the cards to the borrowers. Circulation averages approximately 450 books, tapes, records, and films daily.

Open stacks are utilized for the free flow of books, as well as other educational media. Under this plan student curiosity, interest, and use of the media is expedited.

One person is in charge of the circulation desk and supervises the working of the #357 computer, the material for the circulation sheet, the collection of fees, the shelving of books and other media, as well as the reserve materials section. This same librarian also supervises all the students that help carry out the above functions for the library. All students working in circulation are provided with work scholarships.

Periodicals Department

The Oral Roberts University Central Library subscribes to 541 different periodicals. Of these 445 are paid subscriptions, 54 are gift subscriptions, and 42 are serials and subscription books.

Current periodicals are located on the third floor of the Learning Resources Center with the bound volumes on the fourth floor. These current periodicals are displayed in alphabetical order on specially built walnut shelves.
Only the latest issue is to be found in the Periodical Room on the fourth floor next to the Pentecostal Room and the Oral Roberts Archives. The Periodical Room was developed in the summer of 1969 due to the great loss of current unbound material. The librarian in charge of periodicals has her office in the Periodical Room and materials can only be had when an attendant is on duty. Hours are posted on the door.

The majority of the current periodicals are ordered through a jobber, Franklin Square-Mayfair. New subscriptions are ordered from the publisher the first year. After a year all new subscriptions are reviewed by the person in charge of periodicals and the Director of the Learning Resources Center. If they have proven to be satisfactory, they are then placed on the list that goes to Mayfair.

Checking-in of the periodicals is done on a kardex which also contains the listings of the bound volumes, so that the current periodicals and bound volumes are both contained in the same file. This has proven to be the easiest way to tell what has been received, and what is in the permanent collection. Failure to get an issue calls for an adjustment slip to be sent to jobber or publisher. This slip, sent to a publisher, usually takes about one month for service, while one sent to the jobber usually takes a three to four month period for missing issues to
arrive. The security guard of the library checks in the periodicals each day and also keeps them in order. The guard's desk is located at the front entrance of the Learning Resources Center which is on the third floor.

Of the current periodicals, 350 out of 541 are bound. Volumes for binding are sent out twice a year, at the Christmas break and during the summer months when school is not in session. Motter Bookbinding Company of Muskogee, Oklahoma is used for binding. Starting in the summer of 1969, binding slips that fit into the Bindomatic machine have been used. This is supposed to be a new, simple, efficient, time saving, and inexpensive way to denote binding instructions for each volume.

Requests for periodicals are accepted from faculty only upon approval of the department chairman. The Director of the Learning Resources Center must also approve the request before it is sent to the publisher. The title, cost, publisher, and his address must accompany the requests.

Returning from the bindery, the volumes are first cataloged and then shelved. At the present time the volumes are arranged on the fourth floor in alphabetical order, but soon are to be reshelved according to their cataloged number. Catalog cards have already been added to the card catalog for each title.
Subscription costs, which include newspapers and memberships, totaled $6,590.16 for the year 1968-1969. Serials and subscription books were $1,242.55, and the binding cost for the year was $2,399.90.

The Periodicals Department makes up two lists each year that are available to the faculty and library staff. They are the subject index for the periodicals and the holdings list of all periodicals contained in the library. The department maintains a separate list for its own use with the publisher, price, price for binding, call number based on Library of Congress classification, and the bindery code number for color of the binding.

There are 46 periodicals on microfilm, however, parts of others are on microfilm, especially the very old issues that are unobtainable in printed form.

The library subscribes to 18 newspapers. One is in German and one in French. All the local newspapers are taken, some state papers, and the rest are national and international. The current issues are kept in a special built rack on the third floor of the Learning Resources Center. Every Monday the past week's copies are removed from this rack, taken to the fourth floor, and placed in another newspaper rack for additional student use.

The New York Times is the only newspaper received in the printed and microfilm forms. The index published
by the New York Times makes it a very useful tool in the academic library.

Reference Department

The Reference Department, which is located in the center of the library area, is one of the most important links between the various media of the Learning Resources Center, faculty, and students that use its services. It also serves as an information center.

This department provides a variety of services besides the usual reference activity. Included is instruction in library use as part of the library orientation for all new students, book selection services for the Reference Section, interlibrary loan services for graduate students and faculty, vertical file services for all the students, publicity services in the way of arranging displays, exhibits and promotional materials, and public relations services by welcoming visitors and assisting with tours throughout the Learning Resources Center whenever requested.

The usual reference services consist of care and checkout of the Reference Section books located behind the desks of the two reference librarians. Books in the Reference Section have call numbers that begin with "R" followed by a second row of letters from the Library of Congress classification. A weekly reference report is
turned in to Circulation indicating the number of reference books used. On-the-floor ready reference for faculty, students, staff, or outside visitors is available at all hours when the library is open. Telephone reference services are also provided for local patrons.

One of the main duties of the Reference Department is to provide instructional services for all incoming freshmen and transfer students. This is referred to as library orientation, and is required of all new students before they receive their first semester grades. No grades are issued from Admission and Records until the completion of the five lecture and slide series specified for the library orientation. This series is a combination of live lectures given by the professional staff, tours for the new students to orient them in the use of the library, and four tests prepared, given, graded, and returned with written corrections. These tests cover the use of the library tools in the fields of current events, biography, geography, and the use of the card catalog. Numerous lectures are rescheduled on a make-up basis for those missing the orientation, or for those entering after the freshman orientation period. Another form of instructional services offered by the reference librarians is the orientation in special subject fields as requested by individual faculty members. On-the-spot instruction in the use of the library tools, or equipment, such as the
microfilm readers and the dial-access system, is provided by the department whenever needed. Book selection services consist of the checking of numerous brochures and publishers' notices concerning reference books. The Technical Processes Department is provided with a complete list of holdings and requests for standing orders of many source books. Arrangements are made with the Periodicals Department to keep holdings of many current issues of reference materials in the Reference Section.

The usual college interlibrary loan services are provided for the faculty and graduate students. Local calls are made for undergraduate students, but no interlibrary loans are attempted. Arrangements for local interlibrary loan service with the University of Tulsa and Tulsa Public Library are made by the reference librarians and picked up by the Oral Roberts Evangelistic Association messenger. Materials going to other colleges are checked out by a special IBM identification plate coded for interlibrary loans.

The vertical file is located behind the two reference desks in 15 wooden cabinets made to match the desks. There are over 3,000 pieces of material in these files. One drawer contains the special career file prepared with over 100 subject headings. Another file consists of folded maps, while a third drawer is used for examples of
art that may be photographed or used by the student in classroom demonstrations. The rest of the material is classified according to the Library of Congress subject headings with the subject heading printed in the upper left hand corner of all material received. A subject heading file is typed and filed in one of the drawers at the reference librarians' desk. The "VF" label is placed on the upper right hand corner of the material classified for this file. Alphabetically arranged in the file drawers, the pamphlets may be checked out for use in the building by the reference librarians. The materials are ordered through a planned system with regulations, records, and request letters used to secure free and inexpensive materials. No item over three dollars is purchased for the vertical file. All the materials found in this file are current and excellent supplements for student speeches, debates, and class papers. Weeding of the vertical file takes place on a regular basis.

Displays for the third and fourth floors of the library, whether in the closed cases or on the bulletin boards, are arranged by the Reference Department. There are eight areas on the fourth floor where book jackets, books, and art work are combined to form exhibits. Promotional materials concerning special weeks in the calendar are ordered and displayed. Fresh flowers and plants are often provided in the reference area.
Many visitors come to see the Learning Resources Center and the reference librarians assist in showing the various media in the library. The staff helps with conducting tours whenever requested. New students seek out the reference librarians for the location of various offices and departments in the Learning Resources Center. During the year they provide information for the various campus activities. It is also the responsibility of the reference librarians to maintain order and an atmosphere for study within the library.

At the end of each school year the Reference Department inventories the Reference Section. Student assistance is used to help check the large collection against the shelf list.

**Learning Resources Librarian**

All scheduling of media, both on the dial-access system and for classroom use, is done through this librarian whose office is located on the fourth floor of the Learning Resources Center in the library area. The librarian must be notified by noon the day before the material is to be put on the system. A form must be completed stating the title, type of media, date of use, by whom requested, the course number and date. The material is then assigned a number and scheduled into the system. A daily directory for the dial-access system is
placed in each carrel and throughout the library at designated places. Distribution of this directory is one of the main duties of the Learning Resources Librarian. An audio tape may be on the system for one day or for a week. The usual period is three days. Films and other video presentations may be scheduled for one hour or part of any day.

The library's collection of audio tapes, records, slides, video tapes, films, filmstrips, and combination kits of materials is cataloged in the audio visual file located near the office of the Learning Resources Librarian. If material is not in the library, films may be rented through this librarian in whose office are to be found the catalogs, indexes, and other aids for the renting of the materials. These request forms include the title, price, time (show) color, system, or classroom, show date, alternate date, source, requested by, and the course number plus the approval of the department chairman.

All the acquisitions for audio-visual materials and the duplication of such materials are handled by this librarian. Duplication of tapes used by the university may be purchased through the bookstore and processed through the office of the Learning Resources Librarian. Media orientation is provided for the professors at any time. At the beginning of each school year a short
A session is held by the Learning Resources Librarian to inform new faculty about the various uses of the audiovisual equipment and the uses that can be made of it in supplementing classroom lectures.

The position of Learning Resources Librarian was created in 1966 in order to have a person available at all times to counsel with the faculty. The Learning Resources Librarian is also a coordinator for the Instructional Materials Center, and supervises the photographing and processing of all materials for the dial-access system. After selection is made by the professors, with the help of the reference librarians, the material goes to the IMC for processing into a form that is suitable for the system or for classroom use.

V. SPECIAL COLLECTIONS

There are three special collections in the Learning Resources Center: the Pentecostal Collection, the Oral Roberts Archives, and the Multi-media Curriculum Laboratory. The first two are located on the fourth floor, but are housed in separate rooms off the main stacks. The Pentecostal Collection is open certain hours with an attendant in charge, but the Oral Roberts Archives is never open except by special permission from the Learning Resources Librarian. The Multi-media Curriculum
Laboratory is located on the fifth floor in a special section of the library allotted to it. It is also open certain hours with a student assistant in charge.

Pentecostal Collection

The Pentecostal Collection begun in 1962 now has approximately 7,000 volumes in monographs, periodicals, audio-tapes, phono-records, and a sizable vertical file in pamphlet materials. The acquisitions include primary and secondary materials in many different languages and from all parts of the world.

The Charismatic-Pentecostal revival which during the twentieth century produced 176 denominational groups throughout the world, was one of the greatest revivals in Christian history. It established publishing houses, denominational headquarters, colleges, Bible institutions, youth camps, and developed extensive missionary projects. National, international, and world conferences have been held by these groups. In the past, little effort had been made to collect or preserve materials on Pentecostalism, but with the worldwide renewed interest in charisma and the proliferation of publishing in connection with it, there was a need for research centers of Pentecostalism. So, in August 1962, Oral Roberts, R. O. Corvin, and Dorothy Poteat decided to set aside a room in the library to assimilate and store all the literature produced by
this movement. This room was to be called the Pentecostal room. Materials have been gathered from classical Pentecostal denominations, independents, and neo-Pentecostals, a term pertaining to people of historic faiths, e.g., Catholics, Episcopalians, Methodists, et al., who have embraced the charismatic experience but remained in their own churches. Works that reflect both positive and negative points of view have been included. When the decision was made to have this special collection, all available writings by or about the Pentecostal people, journals, and records of all kinds pertaining to the history of the Pentecostal movement were requested from the readers of the Abundant Life Magazine. Pentecostal leaders from 56 countries of the world helped in the assimilation of this material, and material continues to be received by the library. There are few places in the world where the literature produced by this movement has been brought together in a single research center. There is a comparable collection on the subject in the British Museum and a few small ones in Geneva and Zurich, Switzerland. Authorities say that the ORU collection is the most significant on the subject in America.

Scholars from around the world have come to use the collection for research. Dr. Walter J. Hollenweger of Zurich, Switzerland, an outstanding theologian who did a
ten volume work on Pentecostalism, has been to ORU three times to use the collection for research and he remarked that the collection was the greatest and most comprehensive on the subject of Pentecostalism in the world.

Father Kilian McDonnell, a noted theologian in the Catholic Church and a key writer of Catholic Pentecostal works, has spent many weeks doing research in the collection. Father Prudencia Damboriena, an editor of the Catholic Theological Encyclopedia, did research in the collection before publishing a late work, *Tongues of Fire*.

Scholars from a number of universities and colleges in the United States have used the collection. Some of the institutions from which they came include Tulane University, University of Georgia, Bethany Nazarene College, and Central Bible College.

Three of ORU's own professors, Dr. R. O. Corvin, Dr. Steve Durasoff, and Dr. Harold Paul did research in the collection when they were writing dissertations for the Doctorate on subjects connected with Pentecostalism. Dr. Durasoff is now in the process of producing another work on Pentecostalism and is doing research in the collection. One of the best known publishers in America has requested that he write the book, because of the availability of source materials at ORU and his authority on the subject. The work will be published as soon as it is completed.
The librarian who heads the collection is considered to be an authority on Pentecostalism and has been with the collection since it began. Others who work on the collection have been in Pentecost most of their lives and are knowledgeable in the area.

This collection has a separate catalog at the entrance to the Pentecostal Room. The material is cataloged according to the Library of Congress classification and is mainly a research collection. Duplicate books have been placed in the central library. The collection can be used only in the room under supervision and only at posted hours. A bibliography of the collection for other college and university libraries is one of the more important contributions of the Oral Roberts University Library.

Collection is still in its infancy state, because resources have been concentrated on building the main library to support the ORU curriculum. The cataloging of it was not begun until 1966, and there remains a backlog of over 1,000 works to be cataloged. However, the materials have had some organization from the beginning, so scholars could have access to them.

The Pentecostal Collection is listed in the latest edition of Ash's reference work, Subject Collections, and in the American Library Directory.
Oral Roberts Archives

These archives house important documents related to the Oral Roberts Evangelistic Association, the Oral Roberts University, and the life and works of Oral Roberts.

In it are two bound copies of all Abundant Life Magazines, The Daily Blessing, Oral Roberts University Outreach, and other publications. Two copies of each book written by Oral Roberts are housed in the archives, as well as all radio and television programs produced by Oral Roberts since May 1947 when he first went on the radio.

Legal documents, financial and statistical reports, minutes of the Board of Trustees and the Board of Regents meetings, personal and general letters, plus all other data pertinent to his person and works are included. This area is not open to the public.

Multi-Media Curriculum Laboratory

One of the newest collections added to the Learning Resources area has been the Multi-media curriculum laboratory.

The laboratory contains sample collections of the state adopted textbooks, as well as other instructional materials used from kindergarten through grade twelve. It is an innovative approach to the use of curriculum materials.
During the summer of 1969 a portion of the fifth floor was partitioned off and allotted to the Education Department for the use of a curriculum laboratory. Up to this time portions of the curriculum materials had been in five different offices around the perimeter of the fifth floor.

The bringing together of these materials in one place hopes to be one of the finest collections of instructional materials anywhere in the country. It will serve the following teacher education programs which have been accredited by the State Board of Education: elementary education, health and physical education, art, music, speech, foreign language, English, mathematics, science, and social science.

This is a new way of creating a laboratory environment on campus using the technological media and bringing the publishers, materials, and prospective teacher together. Publishers place their state adopted materials on the shelves for student use and then educational representatives from these various companies are sent to make video tapes explaining the distinguishing educational features of the material on display. The new teacher need not wait until he is on his first professional job to see and use the materials available for class instruction.

There is an open door policy at all times for the publisher to see the way his material is being used and to
up-date them whenever necessary. The shelf list has been developed.

Collection. There are now 2,013 state adopted textbooks including teacher's editions, grades K-12, in the Curriculum Laboratory. Since October 1969 approximately $2,401.19 worth of materials has been given to the Curriculum Laboratory by publishers and individuals. This includes a 1970 edition of the World Book with the two-volume World Book Dictionary, the Atlas, Science Yearbook 1969, set of the Childcraft, and the Yearbook 1970. The Economy Company gave the Curriculum Laboratory the new pacer, and then loaned the pacer-recorder which allows individualized instruction with custom tailored tapes.

The George Parker Collection of 31 McGuffy readers given this year is considered the beginning of our rare book collection. The Rasmussen Foreign Language Collection consists of 209 French, German, Russian, and Spanish books, plus many charts, given by Dr. Alice Rasmussen. The McEachern Music Collection given by Dr. Edna McEachern last year for the music education majors use adds greatly to the music section. Not only have textbooks been given to the Curriculum Laboratory, but three art supply firms, American Crayon Company, American Art Clay Company, and Binney and Smith Company, have given samples for display. These samples include paint brushes and crayons of all sizes, water colors, chalk of all colors, finger paints, clay, and colored pencils.
Card Catalog. A card catalog shelf list has been developed containing textbooks, posters, charts, kits, pictures, tapes, records, slides, film strips, and transparencies. Subject cards have been made for the textbooks and the curriculum guides. Some cards have been made for the additional curriculum materials, but they are incomplete. This card catalog indexes only the holdings in the Curriculum Laboratory. These materials are not cataloged in the University main catalog.

Textbooks have been arranged by the curriculum subject and shelved alphabetically by publisher in the section marked "Textbooks." The publisher's name is labeled under each series.

Files. The following files have been developed within the Curriculum Laboratory for use of the student teachers:

1. Curriculum guide file consisting of 75 guides or courses of study arranged under the curriculum subject and grade level.
2. Publisher's file consisting of a recent catalog from each textbook and school supply company.
3. Visual-aids catalog file consisting of catalogs with materials available in visual aids for school use.
4. Test sample file with all kinds and types of tests for school use.
5. **Picture file for bulletin board use** has 22 different subjects under which pictures are available to student teachers for lesson planning.

6. **Pamphlet file** made up of free materials on various subjects needed by a teacher and arranged according to subject.

7. **Oklahoma file** contains pamphlets, clippings, and pictures relating to Oklahoma and Oklahomans, past and present, which are seldom available in book form. This material is important for Oklahoma school use and fills a need for local interest materials.

**Reference.** The reference section has been developed by the loan of 51 books from the Theology collection. No large reference section is needed here, only the major guides, including the encyclopedias, to allow for quick use and to verify materials. These should be kept up-to-date.

**Periodicals.** A section of 64 education periodicals has also been developed in the Curriculum Laboratory for the student teacher use and evaluation. They vary from trade journals to children's magazines. Some are subscriptions, others are duplicates received by the main library, or samples for student evaluation. This gives the student teacher a bird's eye view of the many periodicals now available in the field of education.
Circulation. Some 240 books, pictures, filmstrips, globes and transparencies have been checked out from the Curriculum Laboratory this year. The check out of materials is not stressed, as in most cases there is only one copy of the material available. A limited circulation was set up for the music materials and social studies materials which were used the most.

Use. The education department has used the Curriculum Laboratory for various purposes this year. Some classes have met regularly in the laboratory, and education majors have held some of their class meetings here from time to time. Elementary music classes used the laboratory to demonstrate how to teach songs to groups of children. The social science classes have also met here to observe the use of the curriculum guides. A number of publishers have visited the laboratory to check on materials and see what use is being made of their items in the collection.

Hours open. The Curriculum Laboratory was kept open regularly on Wednesday nights from 7 to 9 P.M. and on Sunday from 2 to 5 P.M. At times when the use demanded the laboratory was kept open extra nights and on Saturday. These arrangements were made by the instructor with the librarian. At this time the use of the laboratory consisted of one to ten people using laboratory materials.
The following things have been accomplished: 1969-1970:

1. Materials gathered from various rooms have been placed in the curriculum laboratory.
2. Books have been shelved according to subject area and publisher.
3. All materials have been stamped with the Curriculum Laboratory stamp.
4. Some of the textbooks have been sourced with the date, price, and source from which obtained. This is still incomplete, but when finished it will be possible to make an evaluation of the entire collection.
5. Catalog cards have been made for all textbooks, curriculum guides, and some of the other media. The latter is incomplete.
6. Over $2,401.19 of materials has been given to the Curriculum Laboratory since October 1969. This new material was due to the contacts made by Dr. Mauldin Ray at the state OEA meeting in October. Some 130 letters were written to exhibitors asking for materials to display in the Curriculum Laboratory.
7. The following files have been developed for student use: Publisher's file, Visual-Aids catalog file, Test Sample file, Picture file for bulletin board use, Oklahoma file, Pamphlet file, and the large curriculum guide file.
8. Small reference section developed from the Theology collection.

9. Periodicals section developed consisting of 64 examples of materials available for teacher use.

10. Four collections, all gifts, have been cataloged and labeled: the George Parker Collection of McGuffy Readers, the beginning of the Rare Book Collection, the Rasmussen Foreign Language Collection, and the McEachern Music Collection consisting of the older music books still used in some public schools.

**Instructional Materials Center**

The director of this area is directly under the supervision of the Director of the Learning Resources Center. He supervises and largely produces all the illustrating material for the faculty, plus duplicating and shooting slides of flatwork and other materials. He joins the Director of Educational Media in consulting with the faculty in planning of instructional materials for courses. He develops non-academic illustrative art work for promotional and miscellaneous published materials.

Each semester six students are assigned to this area to help in many of the activities. They are usually students with an artistic inclination who make all signs and labels requested by the personnel of the Learning Resources Center.
Also in the graphics production area are student photographers who work for the Public Relations Department, student activities, and in some activities for the Educational Media Department. They process and print all the black and white materials that they photograph here in the darkroom. The color service in Tulsa is usually fast and moderately efficient, as well as economical, so no color work is done at the university. Presently three students handle the still photography and the darkroom work.

VI. STAFF

Director of Media Production

The Director of Media Production originally was referred to as the Director of Educational Media, but this was changed when Dr. McClendon resigned and Mr. Jernigan took over both the direction of the library and the learning resources in 1967.

The Director of Media Production has charge of producing and testing all the audio-video program materials. He counsels with the faculty as to their needs and what is possible to produce in the television production area. All special recording sessions are directed by him. As the advisory director for all ORU films, he not only directs the making of the films for public relations,
but is also in charge of the distribution of the films when they are completed.

The director travels with the World Action Teams from the University and films all of their activities. At the present time he is the advisor-director for the Oral Roberts television series referred to as Contact. A good portion of this series is filmed on the campus with the students adding the music and the buildings used for background.

**Chief Electronics Engineer**

One of the most important jobs in the Learning Resources Center is the maintenance of materials used in classrooms, dormitories, library carrels, or wherever needed on campus.

The Chief Engineer of Audio-Video Production has charge of this section. Along with the maintenance of the media he also directs the operation of the Learning Resources Computer Control Center, the heart, brain, and nerve center of the total electronic resources information storage-distribution and retrieval process. Every audio-video learning station is connected with the control center.

A number of trained student assistants help with the media maintenance as they do in all departments of the Learning Resources Center.
Since all important campus activities are produced on tape, film, or both, the media maintenance section has the responsibility of producing the audio, video, or audio-video combination needed by each department.

Chief of Dial Access Control

This staff member has the responsibility of making sure that the materials needed in the system are ready for use, and that the system itself is in working order. Student assistants help out greatly in this operation since manpower is needed to do such things as activate the reels and change slides. The handling of portable audio visual circulation, making sure delivery is made to the various classrooms, and that equipment is operating properly is also the responsibility of the Chief of Dial Access Control. Many times he remains in the classroom to run the equipment. He is the trouble shooter for all portable audio-video equipment in classrooms and his technical assistance is in demand constantly.

VII. SPECIAL AUDIO-VIDEO DEVICES OF THE CENTER

Dial Access Information Retrieval System

Educational media constitutes an important part of the curricula. The complete dial access information retrieval system around which the Learning Resources Center is built is a pioneer in the field of education,
and was designed to provide four major functions:
(1) production of original audio and video program materials, as well as utilizing existing materials, (2) storage of prepared audio and video materials for instruction, (3) distribution of stored materials to station locations; and (4) retrieval access of stored audio and video materials through dial access by way of the stations.

Parts of the system are aids in instruction, motivation, and learning. These are: the audio-video dial access individual study carrels which are found throughout the Learning Resources Center; monitors for the closed circuit television system which may be found in every classroom, the auditoria, and the lounges; the activated podiums in the auditoria for instruction; the audio-visual lectern with carousel slide projectors, overhead transparencies, and tape recorders; language laboratories; the performance analysis studio for study and evaluation through audio and video record-playback; science laboratory facility for production and display to groups studying science; "Group Tutor" electronic system invented by Dr. John K. Tuel; and the radio station KORU fully equipped FM that provides spiritual and cultural programs.

Dial-access study carrel. The students at Oral Roberts University have access to a wide variety of teaching-learning programs prepared by the faculty for use when needed. To use these programs the library has
130 individual study stations called carrels; some are located in clusters that give the effect of the electronic library, an extension of the printed word. There are 90 audio-video student stations, five miscellaneous stations, and an additional 30 audio-only student stations in the library. The electronic library is tapped by the student seating himself in the individual study carrel which is equipped with a TV viewing screen, earphones, and a telephone-type dial. At the control panel he dials a number selected from an index of recorded lessons which is placed daily at the side of each carrel, as well as at other places throughout the library by the office of the Learning Resources Librarian. There are three types of numbers on the schedule: 100's indicate audio only, 200's indicate radio only, and the 500's indicate both audio and video. (See Appendix) The computer processes the call in the system control center and automatically triggers playback equipment. This may be audio tape recorders, TV film, or tape recorders which have been preloaded with the lesson material. The tape rewinds automatically when finished. The switching system can be used to distribute "live" programs from the TV studio, or other programs originating in the laboratories and classrooms. In addition the system can distribute broadcasts or TV programs received off the air. Should trouble arise with the equipment there is a telephone located in each
carrel cluster, and in many of the classrooms, that is connected directly with the dial access control area. Most classrooms in the Learning Resources Center have a large screened television set with the dial access capability. This audio-video program selector switching system makes it possible for one or all of the 130 student remote locations to select any one of 51 pre-recorded audio programs of 12 audio-video programs during any hour of the day, or any day of the week, depending upon whether the carrel is equipped for television.

**Auditoria.** This is an area on the second floor with four rooms encircling a control center referred to as the "hub" which is provided with multi-media equipment. The auditoria contains two activated podiums that are remote control panels from which an instructor can control a television rear screen projector, a tape recorder/playback unit and public address system. The instructor has the option of recording on the audio tape recorder while instructing the class, or may play back a recording over the public address system from the audio tape recorder, or may talk directly into the public address system. The five library orientation lectures are taught in this manner, and are recorded on tape as they are being given over the public address system to the students by the reference librarians. Those students not attending the lectures may listen to them at a later date over the
system. There is also a program selector on the podium that enables the instructor to dial any program already on the central system and it will be distributed to two 23 inch color monitors or two 23 inch black and white monitors in each section of the auditoria. The sound is fed through the mixing console.

Language media. The language laboratory is part of the system with 60 student carrels, 30 of which are audio, and the other 30 both audio and video. This is one of the most up-to-date facilities of its kind available. In each student carrel is a program selector dial, a tape recorder/playback unit, a microphone, and a headset equipped with a selector switch. The student carrels are connected into a network, the nerve center of which is the instructor's electronic monitoring console. It has a switchboard and tape decks, making it possible to play tapes and send a program to all, or to any combination of carrels. The instructor at the console can listen in or can have a two-way conversation with any student. This dialogue may be recorded either by the teacher, by the student, or both at the same time. The equipment makes individualized instruction practical. It permits the student to work individually on his own exercise, and at his own preferred speed and time. Should the instructor find the necessity of teaching one or several lessons at one time, or even different levels of progress within one class, the system
can provide ten different programs simultaneously at various levels of difficulty.

Audio-visual Lectern. Each classroom is equipped with a unique desk that was designed to utilize the maximum learning potential for any given subject. This multi-media desk or lectern is equipped with a 35mm slide projector, Wollensack 1500 audio tape recorder, overhead transparency projector, and a self-storing folding lectern. The slide projector is easy to operate, allowing the professor to advance, reverse and focus slides by remote control. Each teacher is provided with a 35mm slide tray that fits all of these machines. This enables him to have the tray available before class, and ready for use in the projector when he begins the lecture. Upon request slides are made by the Instructional Materials Center. The audio tape recorder is located inside of the desk. A microphone can be plugged in at desk-top level for use if the professor is seated, or mounted on top of the folding lectern if he prefers to stand. The overhead projector may be used for illustrations from books, magazines, maps, or original art work prepared by the Instructional Materials Center. It may also be used as a drawing board, or for working chemical equations without the professor losing eye contact with his class.

Convenience, flexibility, and function are all combined into one unit that can be easily operated, and
yet is permanently mounted in the instruction desk ready at any given moment.

**Science media.** There have been two types of science media developed at Oral Roberts University: the auto-tutorial laboratory in biology, and the portable TV demonstration cart and monitor. The former has proven very successful, and the latter has almost been dropped completely due to the lack of color.

The auto-tutorial laboratory in biology was developed by the science department with the cooperation of the Glencoe Press of McMillian Company in California, and the professors of biology from Meramec and Florissant Valley Community Colleges in St. Louis. It is a series of 16 tapes used to direct the students through their biology laboratory experiments. Each tape represents one week of laboratory work. The tape instructs, describes, directs, speculates, and gives directions for various experiments and workbook exercises that would normally take place in a regular laboratory session. The student has several opportunities each day to come and work on the materials. The models and materials required to complete the tape objectives are displayed each week in the laboratory area. These may be in the form of 2 X 2 slides, super-8 film loops, models, components for laboratory experiments and other demonstration items. The equipment was installed in a circular shape cluster
of 12 booths. During the week the same tape is on the dial access system, so the students who do not require the other auxiliary materials, may proceed with this material through the system. It is also possible to check out the auto-tutorial tapes from the circulation desk in the library. The portable demonstration cart and monitor consisted of two transistorized modularized Vidicon cameras mounted on a portable console, with a display, a microscope, a video switch, and an amplifier. One camera was attached to the microscope to provide closeups of experiments which the students could view on a 23 inch TV monitor, and the other camera was used for televising charts and other written material. This material was then fed into the electronic system's control room for locations elsewhere, or they were recorded on video tape for later use. The 23 inch monitors were provided with necessary switcher to allow switching the monitors to either of the Vidicon cameras. This facility was designed for portability to be moved to any location in the building for demonstrations or instructions. Due to the lack of color on this demonstration cart, it has lost its popularity.

Performance analysis studio. This is another unique feature of the system. Students in drama, speech, and music perform before the camera which is a video
recorder that captures the performance on magnetic tape, enabling the immediate playback for the student, and his instructor. The performance is evaluated on the spot.

Group Tutor. A special feature included in the Learning Resources Center is a group tutor which was designed by Dr. John K. Tuel, Chairman of the Department of Behavioral Sciences. This electronic system can perform the role of a live tutor asking questions of the students, and then telling them if they are correct. An instructor presents material orally or visually on a rear-projection screen, and then student's responses are graded instantly by the system indicating whether the response is correct or incorrect. This system does not take the place of the instructor, but helps to motivate the student.

The tutor is a printed circuit board installed in the instructor's console podium. It produces a pacemaker pulse that operates a stepping circuit, and the circuit canvasses the response of the student in the classroom in a brief interval of time. A responder unit is at the desk or study carrel of the student, and shows up by means of a colored light on the professor's console. A red light indicates a wrong answer and a gold light the correct answer. The responder unit may be turned on for red or gold by the professor and this indicates to the student if he is right or wrong. The record of the student's answers
is made on an IBM electric typewriter wired to the console. This record is recorded as an "x" for a correct answer and an "o" for an incorrect answer.

EVALUATION OF THE FACILITIES AND PROGRESS DURING THE PAST FIVE YEARS

1. BOOKS, PERIODICALS AND MICROTEXT

The Oral Roberts University Library opened to student use in September 1965 with a collection of 75,000 volumes. Now, in its fifth year of operation, it has 115,097 volumes of books and bound periodicals and 33,892 units of microtexts. The library currently subscribes to 667 periodical titles. See Table 7 for complete inventory of materials in the library.

The selection of titles was made from the California College lists, Choice, and other standard tools under the guidance of the acquisitions librarian and supplemented by the faculty's requests. See Table 11 for analysis of the titles in each LC classification in relationship to course offerings of the university.

A questionnaire was sent to the faculty to evaluate the collection in relationship to support of course offerings in each department. (See Questionnaire in Appendix.) Eighty percent of the responses indicated the collection well supported the curriculum; thirteen
CHAPTER IV

EVALUATION OF THE FACILITIES AND PROGRESS
DURING THE PAST FIVE YEARS

I. BOOKS, PERIODICALS AND MICROTEXT

The Oral Roberts University Library opened to student use in September 1965 with a collection of 25,000 volumes. Now, in its fifth year of operation, it has 115,097 volumes of books and bound periodicals and 33,876 units of microtexts. The library currently subscribes to 667 periodical titles. See Table I for complete inventory of materials in the library.

The selection of titles was made from the California College lists, Choice, and other standard tools under the guidance of the Acquisitions Librarian and supplemented by the faculty's requests. See Table II for analysis of the titles in each LC classification in relationship to course offerings of the university.

A questionnaire was sent to the faculty to evaluate the collection in relationship to support of course offerings in each department. (See Questionnaire in Appendix) Eighty percent of the responses indicated the collection well supported the curriculum; thirteen
### TABLE I

LIBRARY COLLECTION AND TRANSACTIONS  
April 1970

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>Number of Volumes Held at End of Previous Year</td>
<td>110,097</td>
</tr>
<tr>
<td>2</td>
<td>Number of Volumes Added During Year (without subtraction of volumes withdrawn)</td>
<td>6,000</td>
</tr>
<tr>
<td>3</td>
<td>Number of Volumes Withdrawn During Year</td>
<td>1,000</td>
</tr>
<tr>
<td>4</td>
<td>Total Number of Volumes Held at End of Year (Sum of Lines 1 and 2, minus 3)</td>
<td>115,097</td>
</tr>
<tr>
<td>5</td>
<td>Number of Reels of Microfilm Held at End of Year</td>
<td>1,050</td>
</tr>
<tr>
<td>6</td>
<td>Number of Physical Units of Other Forms of Microtext (e.g., number of microcards, microprints, or microfiche cards) Held at End of Year (Estimate if necessary)</td>
<td>32,826</td>
</tr>
<tr>
<td>7</td>
<td>Number of Periodical Titles, Excluding Duplicates, Being Received at End of Year</td>
<td>667</td>
</tr>
<tr>
<td>8</td>
<td>Number of Other (nonperiodical) Serial Titles, Excluding Duplicates, Being Received at End of Year</td>
<td>134</td>
</tr>
<tr>
<td></td>
<td>Interlibrary Transactions. (Exclude requests not filled or still pending and transactions between library units of your institution. Estimate if necessary)</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Number of Items Borrowed (Including nonreturnable items received)</td>
<td>81</td>
</tr>
<tr>
<td></td>
<td>Number of Items Lent by your Library:</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Nonreturnable Items Supplied</td>
<td>-0-</td>
</tr>
<tr>
<td>11</td>
<td>Returnable Items Supplied</td>
<td>27</td>
</tr>
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</table>
TABLE I (continued)

Non-book Media

<table>
<thead>
<tr>
<th>12. Number of Titles</th>
<th>5,403</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. Number of Items</td>
<td></td>
</tr>
<tr>
<td>Slides</td>
<td>21,063</td>
</tr>
<tr>
<td>Tapes</td>
<td>6,084</td>
</tr>
<tr>
<td>Records</td>
<td>1,352</td>
</tr>
<tr>
<td>Filmstrips</td>
<td>234</td>
</tr>
<tr>
<td>Motion pictures</td>
<td>105</td>
</tr>
<tr>
<td>Pictures (prints, paintings, etc.)</td>
<td>222</td>
</tr>
<tr>
<td>Kits (programmers, tape-slide units, record-filmstrips, etc.)</td>
<td>433</td>
</tr>
<tr>
<td>Scores</td>
<td>316</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>29,809</td>
</tr>
</tbody>
</table>

percent, fair; and six percent, poor. Those who checked "poor" were all from specific areas of the foreign language department, an area that has been a little more difficult to build than others due to the specialized nature of the materials.

Each member of the faculty was asked to specify strengths and weaknesses pertaining to his subject area. For the most part, the strengths of the collection indicated were good in general coverage, breadth and
DISTRIBUTION CHART OF LIBRARY COLLECTION

Percentage of Course Offerings (Credit Hours) Correlated with Percentage of Library Title in Broad Area Classification (LC)

PERCENTAGE OF TOTAL

<table>
<thead>
<tr>
<th>Course Offerings</th>
<th>Library Titles</th>
</tr>
</thead>
</table>

TABLE II
variety, and current works. Some individual remarks were: "Excellent in selection and quality," "Good balance in author's works and criticisms," "Good coverage in specific areas, e.g., music, theory, genetics, evolution, etc.," "Special Pentecostal Collection excellent for research."

The weaknesses indicated in the collections were: need for more primary materials, lack of back issues in many periodicals, need for older works in a number of areas, and filling in of lacks in current developments.

The library staff was aware of a number of gaps pointed out in the questionnaire, but had been unable to fill them because of unavailability of some titles from known sources. One of the chief reasons for certain area deficiencies was lack of communication. When a library budget cut was made to bring our library expenditures more in line with other libraries of comparable size, a few of the professors failed to continue sending in book requests, which resulted in shortages in some areas. The library is endeavoring to correct the deficiency.

A questionnaire to determine student evaluation of the collection was given to a number of students selected at random as they came into the library. (See Questionnaire in Appendix) In reply to the question "Are you able to find in this library most of the works you need?", 91 percent checked "yes" and nine percent "no". Students interviewed, some of them transfers from much larger
colleges, said that the library was most adequate, especially since it had only been in operation for a short time.

Students from neighboring institutions have often complimented the ORU library staff indicating they have been able to find materials, especially current items, which are not available from other local libraries. In turn, ORU students have found it necessary to use neighboring libraries for some of the older works not available at ORU. Since the ORU library is located near a number of other libraries materials not in the ORU collection may be secured on inter-library loan.

II. AUDIO-VISUAL COLLECTION

In addition to the book and microtext holdings, the Oral Roberts University Library has a collection of 29,849 units of cataloged audio-visual materials, to support the curriculum. (See Table I for statistics on audio-visual holdings) Part of the audio-visual collection was obtained from commercial sources, but much of it originated with the faculty for course work and was prepared by the University's Educational Media Production Center. Locally prepared software is retained for the library collection at the discretion of the faculty member or student submitting it, in consultation with the Learning Resources Librarian.
In a questionnaire, the faculty was asked to evaluate the audio-visual collection in terms of good, fair, poor in regard to support of course offerings in their field. Fifty-three percent of the responses were checked "good," 38 percent, fair, and 9 percent, poor. They pointed out that some courses lend themselves to audio-visual use better than others. To determine if technical difficulties caused some faculty members to refrain from "newer" media utilization, they were asked on the questionnaire if they had had sufficient help in locating, preparing and displaying the media. Eighty-five percent of the responses were checked "yes" and 15 percent "no".

III. ELECTRONIC EDUCATIONAL MEDIA

Currently, Oral Roberts University is the only institution in the nation that has as sophisticated a dial access audio and video system. Also, color has recently been added in the form of two film chains, six VTR's, and 20 color monitors. This again affirms ORU facilities as being in the vanguard in higher education instructional technology. Throughout the year this system has been used in many ways to help the professor to teach his course and the student to learn material what the professor is attempting to teach.

The following is a summary of recent activities in the Learning Resources area for the school year 1968-69,
and notes on the present year's activities:

1. Overall growth and effectiveness of the "newer media" continues to improve.

2. During the past 12 months, the most pronounced transaction of media utilization has been taking place. Before the school year 1968-69, the DAIRS was primarily used for enrichment materials, review lecture tapes, and classroom films. Today the system distributes over 20 hours of course content material, composed primarily of general education courses such as the humanities and freshman English 101. Additional series are available in history, statistics, and Psychology 151. Projected plans and production call for a complete video tape series of all Bible survey courses and the remainder of the general education courses put in some mediated form.

3. For the most part student attitudes run high and only a small vocal minority object to the "newer media".

4. Grades and performance levels show a marked improvement since the introduction of mediated materials. From a selected group of students the following reactions to the humanities lectures were superior to those of the previous years: 49 percent equal and one percent inferior. Over 65 percent of those responding prefer the DAIRS presentation to a regular classroom presentation, 18 percent indicated it was not as good, and the remaining 17
percent said there was no factor.

5. Evidence of the use of the dial access information and retrieval system is shown by the following figures:

a. thirty-nine (39) faculty and staff members have used the dial access information and retrieval system during the survey period.

b. thirty-one (31) have abstained. (Many of these have used other forms of media.) This indicates about a 15 percent increase from last year.

c. there has been heavy use of audio channels by the English, humanities, and social studies departments. A marked increase in utilization has been made by the education and religion departments.

d. both the social studies and the mathematics departments have increased utilization on the video channels. Nearly all other departments continue light to normal usage, except social studies (humanities) which has greatly increased.

e. two major DAIRS course offerings have been added for 1969-70. They are freshman English 101 and Psychology 151.

During the survey period, 1,621 audio programs and 496 video programs were processed through the dial access information and retrieval system. In addition to this, all closed-circuit television programs and special non-scheduled tapes (both video and audio) were in access during this period. This is nearly a 100 percent increase from last year's total of 1,248 programs. Also added were summer and mini-semester course offerings on the DAIRS.
6. Motion picture films were used in classrooms as indicated:

a. of the films acquired from commercial sources:

(1) 431 were used during the survey period.

(2) 25 faculty members used one or more films.

(3) 19 faculty members used five or more films.

(4) 45 faculty members did not report using any motion picture materials during the survey period.

b. the super-8 film library for individual carrel use is being developed and expanded. For the first time this year students have access to individual cartridge machines in the library.

7. Television for self-evaluation was used as follows:

a. students enrolled in storytelling techniques for primary education have been utilizing video tapes for critique sessions.

b. the speech department has also used the area for basic speech courses and analysis of speeches given outside of class.

c. the psychology department has scheduled several tapings of simulated counseling sessions to be used in the classroom for evaluation at a later date. A talk-back facility is available so that the tape could be stopped and started at the command of the professor. The professor of the course reports that the innovation has greatly improved teaching efficiency.

d. the Math Education Methods course has used the system for evaluation purposes.
8. Telecommunication and media instruction: About 70 percent of the activity in the television studio area is related to telecommunication laboratory and student television projects produced both for classroom evaluation and for all student usage in the dial access information and retrieval system. About 14 hours per week is now on the regular schedule for these television activities.

A-V labs are also conducted to introduce student teachers to the production of TV materials.

9. Language Laboratory facilities: The language laboratory is being utilized at almost a full capacity. There has been some consideration given to the possibility of expanding the laboratory. A short wave receiver has been added to this area which enables the language department to monitor foreign broadcasts.

10. Instructional materials production:

a. forty faculty members have had materials prepared for their classroom lectures.

b. eighteen faculty members have had five or more projects developed by the Instructional Materials Center.

c. thirty-five faculty members have not requested any work from the Instructional Materials Center this year.

These figures indicate there has been over a 15 percent cut of faculty involvement this year over last. Also there has been a cut from 203 individual jobs in 1967-68 to 116 in 1968-69. This is due primarily to the large
amount of prepared material that is now being used repeatedly. However, it is anticipated that increased utilization will take place as the program picks up.

11. In the auto-tutorial biology laboratory the mediated lab tapes continue to impress science faculty members as a real asset to their teaching effectiveness. The advantages of the auto-tutorial laboratory over conventional laboratory sessions is considerably higher than was initially expected.

12. Closed-circuit TV: this year, 1969-70, the use of CCTV was decreased. This is probably due to the fact that CCTV does not offer any greater benefits than the DAIRS. However, future experimentation will continue in this area.

13. Media activities by departments:

a. the education department continues to use TV for evaluation purposes and to take television cameras into the Tulsa primary classrooms and video tape student teaching activities. These tapes are played back for discussion and evaluation techniques. Further micro-teaching situations are developed in the closed circuit television teaching area.

b. the English department has just completed its first semester of DAIRS for required English courses. The department plans to use more closed-circuit television and mediated materials in the presentation of English courses.

c. the music department has used the tape-slide format for some audio-visual presentations. The art department has made a number of super-8 film loops that deal with various areas in that department.
d. video taping facilities for the athletic department have been used very successfully. Added applications of video taping have been used for specialized courses such as yoga, and have been considered for other specialized areas. Super-8 loops and other AV materials are being introduced in a greater degree in the physical education division.

e. the department of social science (humanities) is moving the fastest in its utilization of media. Projections for this department are to add personnel to aid the faculty in organization and bringing material together for media use.

f. a second language laboratory is now being considered to handle the need of a growing language department. A course in intermediate Spanish is being used which utilizes a series on 16mm films.

g. the mathematics department has introduced elementary statistics into the DAIRS.

h. the psychology department indicates that they will expand their use of television as it relates to the counseling sessions and class analysis.

i. major projections are being made in the religion department. The large survey courses are being taught by DAIRS.

j. the science department is exploring new areas of media utilization. Because of the fine success of auto-tutorial this department will continue to move ahead in innovative methods. Many other forms of media are being used in this area: i.e., 8mm film loops and closed-circuit TV.

k. the social studies department is the largest in using the dial access information retrieval system for a reply in the classroom lecture materials. A large number of 8mm film loops dealing with subject fields in this department have been purchased and added to the library this year.
IV. ORGANIZATION OF LIBRARY HOLDINGS

In the ORU Library, Library of Congress classification and subject headings are used in the cataloging of all library materials, both book and audio-visual, with one or two minor exceptions. Musical performances on audiotape and phonorecord are classified with a system unique to the ORU Library. Four card catalogs are maintained for the holdings: main (book and microtext), theological, learning resources (audio-visuals), and Pentecostal (for the special collection).

In the questionnaire used for this study the faculty was asked to evaluate the cataloging of library materials by indicating whether or not materials were cataloged adequately and with sufficient speed to meet their needs. Ninety-six percent of the responses were "yes". They were also asked if they were properly notified of acquisitions. Eighty-seven percent of the responses were "yes". Some of them added remarks about having difficulty understanding Library of Congress Classification and in the retrieval of some of the media. At the beginning of the school year, there is library orientation for the new faculty members as well as the students, but the questionnaire revealed the need for additional help. The Cataloging Department is well aware of some deficiencies in media organization, but since the
librarians are doing pioneer work in much of this field, they have had to make the improvements, for the most part, only as their own research makes them possible. There are often visitors, sometimes from foreign countries, who come to the library to observe the developments in media cataloging.

V. LIBRARY USAGE

An actual head count of users in the library on days selected at random in 1969 indicated an approximate average of 650 students and faculty members using the library. The study carrels with the DAIRS often had maximum use on weekends, and especially during evening hours after six o'clock.

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<thead>
<tr>
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<tbody>
<tr>
<td><strong>Books</strong></td>
<td></td>
<td></td>
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<tr>
<td>Regular book circulation</td>
<td>41,843</td>
<td>49,492</td>
<td>12,892</td>
</tr>
<tr>
<td>Reference</td>
<td>5,631</td>
<td>5,174</td>
<td>8,895</td>
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<tr>
<td>Reserve</td>
<td>13,672</td>
<td>17,062</td>
<td>9,833</td>
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<tr>
<td>Pentecostal Collection</td>
<td>942</td>
<td>1,103</td>
<td>*</td>
</tr>
<tr>
<td>Seminary</td>
<td>8,600</td>
<td>10,250</td>
<td>3,343</td>
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<tr>
<td>Periodicals</td>
<td>4,486</td>
<td>4,524</td>
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<tr>
<td></td>
<td>75,174</td>
<td>87,605</td>
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**Media**

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<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Visuals circulated from library</td>
<td>8,124</td>
<td>7,661</td>
<td>2,788</td>
</tr>
<tr>
<td>Film rentals</td>
<td>406</td>
<td>426</td>
<td>270</td>
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<tr>
<td>Phono records</td>
<td>3,200</td>
<td>5,288</td>
<td>2,240</td>
</tr>
<tr>
<td>Scores</td>
<td>111</td>
<td>266</td>
<td>--</td>
</tr>
<tr>
<td>Audio tapes</td>
<td>5,296</td>
<td>1,216</td>
<td>1,347</td>
</tr>
<tr>
<td></td>
<td>17,137</td>
<td>14,857</td>
<td>6,645</td>
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"System"

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<tr>
<th></th>
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<tbody>
<tr>
<td>Dial access (spot checking of system utilization)</td>
<td>90,000</td>
<td>21,389</td>
<td>11,014</td>
</tr>
<tr>
<td>Grand Total</td>
<td>182,311</td>
<td>123,851</td>
<td>52,622</td>
</tr>
</tbody>
</table>
The library staff consists of four professional librarians, two semi-professional librarians, four in-service trained librarians, two stenographers, one typist, and 34 student assistants. The professional librarians have faculty status, participate in the faculty meetings, forums, committee work, and enjoy the same privilege, for the most part, as faculty. The Director of the Library is also Learning Resources Director and has been careful to see that professional librarians retain equal status with the faculty.

VII. LIBRARY-FACULTY RELATIONSHIPS

Included in the questionnaire sent to the faculty was a request to evaluate faculty and professional librarian relationship by checking good, fair, or poor. Ninety-eight percent of the responses were checked "good" and two percent "fair". The same request was made concerning the non-professional staff including student help. Eighty percent of the responses were checked "good" and 20 percent "fair".

A similar questionnaire to rate the library staff was given to the students selected at random (both professional and non-professional). Fifty percent of the responses were checked "excellent," 45 percent "good," and
five percent "fair". A number of students wrote comments in praise of the library staff's cordiality and friendliness.

VIII. LIBRARY ORIENTATION

Library orientation is required of all students who score less than 80 on the Library Qualifying Examination which is administered to all new students during Orientation Week. All students are given five or more sessions of live lectures, videotape presentations, and programmed materials on the use of the library. Their skills are tested by using the card catalogs, indexes, and other tools in solving problems and responding to programmers.

Further training in library use is given in freshman English through two programmed lectures prepared by the Reference Librarian. In other classes, especially at the time term papers are assigned, live lectures are given upon request. For upper classmen, a videotape titled "Special Reference Books in the Field of English Literature" has been prepared. Programmed kits on library use are also available for review for any student or faculty member.

Library orientation appears to have been helpful to students, and many work independently in developing their library skills. In the questionnaire distributed in the library, students were asked if they understood the card
catalog and LC Classification well enough to meet their needs. They responded 100 percent positively. They were also asked to evaluate the library orientation program. Sixty-four percent indicated it had helped them, while the remaining 36 percent objected to its being too detailed, boring, and lengthy.

IX. EQUIPMENT

Computer

Circulation, including statistics and fine notices, is done by the computer. Also, most cataloging data, except for tracings, are stored on the computer and made available to the library staff and users in periodic printouts. As yet, there is not sufficient memory on the computer to store all cataloging data to enable the library to eliminate the card catalogs. Recently the computer has been reprogrammed but there are still many areas needing further adjustments. The greatest need in the use of the computer for libraries today is better communication between the librarian and programmer. The ORU Library is no exception. Although most of the ORU librarians have some knowledge of the computer, ORU has had too few professional librarians to allow the programmer all the time needed to communicate with the librarians and the librarians with the programmer. The
Director is endeavoring to hire a librarian with a knowledge of the computer operation. There is adequate seating space for all the student enrollment and plenty of carrels with DANS. Study carrels have been added with increased enrollment.

Dura Mach 10 Typewriter

The Dura Mach 10 is used in Cataloging for card reproduction. A paper tape is cut as the main entry is typed, and the added entries are automatically reproduced from the tape master. Sometime in the future, plans include the addition of a typewriter, similar to the present one, that will be "online" with the computer and eliminate a number of manual operations. The library staff prefers the typewriter with the master tape in lieu of all other card reproduction methods they have used. Their choice is based on the following factors: (1) the cards reproduced are clearer and produce neater prints, and (2) according to tests made, the staff believe it to be more economical to produce cards in this manner than with the other duplicating methods they have used.

X. MISCELLANEOUS POLICIES OF THE LIBRARY

In the University Library, the policy of open stacks has been practiced since the opening day of the institution. The library hours are as follows:

Monday-Friday - 8:00 A.M. to 9:45 P.M.
Saturday - 9:00 A.M. to 9:45 P.M.
Sunday - 2:00 P.M. to 5:30 P.M.
Regular circulation for students is two weeks with renewal privileges and 30 days for faculty. There is adequate seating space for all the student enrollment and plenty of carrels with DAIRS. Study carrels have been added with increased enrollment.

One of the resources of the library is aesthetics. There is an array of color and design from the carpeted floors and modern furniture to the bright new looking books to enjoy in the comfort of air conditioning.

The learning systems approach to instruction has been established at Oral Roberts University in Tulsa, Oklahoma, which was one of the first to establish a systems approach to learning on a university campus. Investigations were made in regard to (1) the history and development of the Learning Resources Center; (2) the form of services offered by the system; (3) the effects of the services upon the student body; and (4) the evaluation of the facilities and progress made during the past five years.

Data for the study was secured from two sources: namely primary and secondary. The primary material was obtained by: (1) talking to many of the persons who set up the Learning Resources Center, (2) evaluation of the library facilities by questionnaires to the faculty and students, and (3) by working directly with the media as
CHAPTER V

SUMMARY AND CONCLUSIONS

I. SUMMARY

The learning systems approach to instruction has become a major educational asset. It has established new requirements and brought new demands on the college library and on librarians. This study was concerned with the Learning Resources Center at Oral Roberts University located in Tulsa, Oklahoma which was one of the first to establish a systems approach to learning on a university campus. Investigations were made in regard to (1) the history and development of the Learning Resources Center; (2) the form of services offered by the system; (3) the effects of the services upon the student body; and (4) the evaluation of the facilities and progress made during the past five years.

Data for the study was secured from two sources: namely primary and secondary. The primary material was obtained by: (1) talking to many of the persons who set up the Learning Resources Center, (2) evaluation of the library facilities by questionnaires to the faculty and students, and (3) by working directly with the media as
a librarian for three years at the Learning Resources Center. Secondary material consisted of indexed books and periodicals on the subject matter under study and materials not indexed at the time of writing.

II. CONCLUSIONS

The Oral Roberts University Learning Resources Center generally fits Shores' concept of the Library-College. He pictures the Library-College as an institution which has the library at the hub, the classrooms adjacent to the stacks, and the place where the reference librarian actively serves as a subject specialist. At ORU the library is the learning resources center with all learning materials and methods, including: books, programmed materials, dial-access equipment, tapes, films, records, paintings, and several other types of non-book materials. Although the classrooms are not adjacent to the stacks, they are in the same building, with the offices of professors around the perimeter of the building.

Television, film, and sound equipment have been combined in the Learning Resources Center to create what has been called the "electronic library". Students have dial-controlled access to the teaching/learning programs which have been prepared primarily by the faculty, with the help of the complete production facilities in the Learning Resources Center.
Plans are in process to have more than 130 student stations or carrels within the Learning Resources Center. A few will allow only for sound production, but most will provide for sound as well as closed-circuit television. Thirty group stations within the library area now provide audio and video communication. Live programs, disk recordings, slides, filmstrips, sound tapes, video tapes, films, radio and television programs are all carried on the system. A computer triggers the playback equipment when the student dials the choice of program required from the electronic carrel in the library.

Enthusiasm and awareness of educational media continues to increase at Oral Roberts University. There are now 30 course credit hours available through the dial access system, as well as some units in other courses. Some of the courses available by the dial access system are: humanities series, elementary statistics, general psychology, political science, American history, Oklahoma history, and English composition.

The dial access system has been expanded to the campus Student Center, the Hi-rise dormitories, and the music department. The cable has also been laid in the southern part of the campus which includes the University Retirement Village. Originally the system was limited to the Learning Resources Center, but with the addition of the general education courses put on the audio and video
tape it seemed necessary to provide dial stations in the dormitory lounges and various other study areas. More color stations will be added when needed.

Fifteen 23 inch color monitors were purchased in 1969 and placed in various places throughout the Learning Resources Center. The original plans and installation of the cable assumed that color would some day be part of the system, so installation was no problem.

Plans are being made to adapt the language laboratory to the cassette type of recording and play-back equipment. The cassette may then be used in the master control room in such a manner as to make it impossible for the student to erase the recorded material on the master tape.

The dial access information and retrieval system at ORU may not be the complete answer to the Library-College concept developed by Shores, but its basic end is to individualize education. It breaks the tradition in higher education of classroom-centered teaching. Students like the system, and they like the availability of the library in its central location on the campus. They also appreciate the fact that all media may be checked out at the circulation desk in the library after it is taken off the system.

The library supports most of the curriculum areas very satisfactorily, and the library materials are
adequately cataloged and made available to the user. Faculty use of media is gradually increasing and with encouragement more course work will be added to the system. Although the total operation of Oral Roberts University is not without shortcomings, the progress that has been made toward the "total media approach to education" is most encouraging.
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B. PERIODICALS


BIBLIOGRAPHY

A. BOOKS AND PAMPHLETS


B. PERIODICALS


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"'Group Tutor' Invented by Prof.," *Tulsa Tribune*, October 6, 1967.


**F. TAPES**


## APPENDIX A

**DIAL ACCESS AND RETRIEVAL SYSTEM DIRECTORY**

- *new entries* TO Feb. 6, 1968

Dial 100 series for audio
Dial 212 for KORU
Dial 500 series for video

<table>
<thead>
<tr>
<th>DIAL CODE</th>
<th>TITLE OF TAPE</th>
<th>COURSE NUMBER</th>
<th>PROFESSOR</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>111</td>
<td><em>Poetry of William Wordsworth</em></td>
<td>Eng 101</td>
<td>Apperson</td>
<td>All Day</td>
</tr>
<tr>
<td>113</td>
<td><em>The Poetry of Robert Frost</em></td>
<td>Eng 101</td>
<td>Apperson</td>
<td>All Day</td>
</tr>
<tr>
<td>115</td>
<td><em>The Nature of Poets</em></td>
<td>212</td>
<td>Voight</td>
<td>All Day</td>
</tr>
<tr>
<td>117</td>
<td><em>Strategy in Science Teaching II</em></td>
<td>Ed 125</td>
<td>Shealy</td>
<td>All Day</td>
</tr>
<tr>
<td>122</td>
<td><em>Culture and Language</em></td>
<td>Soc 110</td>
<td>Nelsen</td>
<td>All Day</td>
</tr>
<tr>
<td>124</td>
<td><em>American View of the Caribbean</em></td>
<td>Collog</td>
<td>Durandoff</td>
<td>All Day</td>
</tr>
<tr>
<td>131</td>
<td><em>Wordsworth</em></td>
<td>Eng 217</td>
<td>Voight</td>
<td>All Day</td>
</tr>
<tr>
<td>133</td>
<td><em>The Reconstruction II</em></td>
<td>Hist 102</td>
<td>Sexton</td>
<td>All Day</td>
</tr>
<tr>
<td>137</td>
<td><em>Culture</em></td>
<td>Soc 110</td>
<td>Nelsen</td>
<td>All Day</td>
</tr>
<tr>
<td>142</td>
<td><em>Writing About Literature</em></td>
<td>Eng 102</td>
<td>Voight</td>
<td>All Day</td>
</tr>
<tr>
<td>144</td>
<td><em>The Social and Economic World</em></td>
<td>Rel 102</td>
<td>Hayman</td>
<td>All Day</td>
</tr>
<tr>
<td>146</td>
<td><em>Towards an Understanding of Literature</em></td>
<td>Eng 102</td>
<td>Apperson</td>
<td>All Day</td>
</tr>
<tr>
<td>151</td>
<td><em>Meeting in the Old Testament</em></td>
<td>Rel 222</td>
<td>Durandoff</td>
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</tr>
<tr>
<td>152</td>
<td><em>Strategy in Science Teaching I</em></td>
<td>Ed 195</td>
<td>Shealy</td>
<td>All Day</td>
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APPENDIX A

DIAL ACCESS AND RETRIEVAL SYSTEM DIRECTORY

*new entries for Feb. 6 1969

Dial 100 series for audio  Dial 212 for KORU
Dial 500 series for video

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<td>Eng 212</td>
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<td>*117</td>
<td>Strategy in Science Teaching II</td>
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<td>Culture and Language</td>
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<td>124</td>
<td>American View of the Carribean</td>
<td>Colloq</td>
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<td>Michael - Wordsworth</td>
<td>Eng 212</td>
<td>Voight</td>
<td>All Day</td>
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<td>133</td>
<td>The Reconstruction II</td>
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<td>Modern Spanish Unit 12, Pt. 1</td>
<td>Sp 102</td>
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<td>Modern Spanish Unit 12, Pt. 2</td>
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<td>Modern Spanish Unit 13, Pt. 2</td>
<td>Sp 102</td>
<td>Rasmussen</td>
<td>All Day</td>
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<td>500</td>
<td>Lecture #9 - Harmony Programmer</td>
<td>Mus 102</td>
<td>F. Jones</td>
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<td>Germany and Austria 1850-1914 #5 Programmer</td>
<td>Hum 214</td>
<td>Sexton</td>
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<td>171</td>
<td>The Renaissance: Rebirth or Growth #5</td>
<td>Hum 112</td>
<td>Sexton</td>
<td>Even Hours</td>
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<td>501</td>
<td>Film - The Renaissance (used with 171)</td>
<td>Hum 112</td>
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<td>502</td>
<td>Sight &amp; Sounds of New Orleans - film</td>
<td>Mus 102</td>
<td>F. Jones</td>
<td>All Day</td>
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</tbody>
</table>
APPENDIX B

LIBRARY QUESTIONNAIRE FOR FACULTY

In preparing an evaluation of the library as a member of one of the Ad Hoc Self-Study Committees for North Central Accreditation, I have found it impossible to do a good job and be sufficiently objective without asking you to do what I had hoped very much to avoid. Yes, I am asking you to complete one more questionnaire! I am just as tired of the surveys as you are, but sometimes there seems to be no other way to obtain the needed data. Please do this one for me. It would help so very much.

You are not required to identify yourself but the data would be more useful for library evaluation if you did, or at least submit the name of your department.

Please do not hesitate to make any remarks you like to be more specific. In the statistical type questions, only rough approximations or estimations are expected. If any of the questions are not clear, please feel free to contact me.

Please return the form as soon as possible.
LIBRARY SELF STUDY FOR NORTH CENTRAL ACCREDITATION

1. How would you evaluate librarian-faculty relationships?
   Good ___ Fair ___ Poor ___
   Remarks:

2. How would you evaluate the non-professional library staff (including student help) in library services, efficiency, and attitude?
   Good ___ Fair ___ Poor ___
   Remarks:

3. At present, we have a professional reference librarian only two days a week. Has this schedule limited the use of library resources by you and your students?
   Yes ___ No ___
   If yes, to what extent? Much ___ Some ___ None ___
   Remarks:

4. How well does the library collection support the courses of study you teach?
   Good ___ Fair ___ Poor ___
   Remarks:

5. What do you consider the greatest strengths in the collection in regard to your subject areas?
6. What do you consider the greatest weaknesses in the collection in regard to your subject areas?

7. Are library materials cataloged sufficiently well to meet your needs? Yes____ No____

8. Are library materials cataloged and made available with sufficient speed to meet your needs? Yes____ No____

9. Are you promptly notified of new materials added to the collection in your subject areas? Yes____ No____

10. Evaluate the "new media" ("system," tapes, slides, etc.) in regard to potential or returns in your course offerings.

   - Good____ Fair____ Poor____

11. Have you had sufficient help in the location, preparing, and use of the new media? Yes____ No____
12. Have you found the media display equipment to be usually in good operating order? Yes____ No____
Remarks:
---

13. Have you experienced any significant difficulties in the use of the media software or hardware not covered in the above questions? Yes____ No____
Remarks: Be specific.
---

14. Approximately, how many times in the calendar year (1969) have you had prepared or originated media or audio-visuals for instructional purposes?

15. Approximately, how many days in the calendar year (1969) have you scheduled materials in the dial access system?

16. Approximately, how many book order requests have you turned in during the calendar year (1969)?

17. Approximately, how many media or audio-visual order requests have you turned in during this calendar year (1969)?
18. Approximately, how many interlibrary book loans have you activated during the year 1969?

19. Approximately, how many film or other media rentals have you activated during the year 1969?

20. Approximately, how many library books have you used (checked out or otherwise) in the year 1969?
APPENDIX C

LIBRARY QUESTIONNAIRE FOR STUDENTS

1. Are you able to find most of the works you need from our library? [ ] yes [ ] no

2. Do you understand the card catalog and classification of books well enough to meet your needs? [ ] yes [ ] no

3. How would you evaluate the library staff in service, efficiency, and attitude? [ ] excellent [ ] good [ ] fair [ ] poor

4. Do you feel the library orientation course helped in location of materials? [ ] yes [ ] no
APPENDIX D

PICTURES OF FACILITIES AT

ORAL ROBERTS UNIVERSITY
Student Assistant at the Bank of Prerecorded Audio Tapes in Control Room
Learning Resources Center
Front Entrance at Third Level
Foreground - Fountain with Eternal Flame