ANALYSIS OF POST SECONDARY INSTITUTIONS OFFERING TRAINING TO WORK WITH THE HEARING-IMPAIRED

Ву

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CHAPTER 1

INTRODUCTION

Title V of the Rehabilitation Act of 1973 has had a great impact not only on the hearing-impaired person but also on the job opportunities for people working with the hearing-impaired. Title V has prompted employers, agencies and schools to hire and serve the hearing-impaired in a much stronger way than ever before.

The professional who works with the hearing-impaired must possess more diverse skills than those professionals who work with other handicapped individuals. Not only does the professional working with the hearing-impaired need a knowledge of deafness but the professional also needs the physical skills necessary to communicate with a hearing-impaired person (National Information Center on Deafness, 1987). Depending on the hearing-impaired person's education, the age of onset of the disability, and the type and severity of hearing loss, the person's communication skills may vary greatly. Therefore, training programs which prepare professionals to work with the hearing-impaired have steadily increased in the past decade (Salam and Kam, 1980).

Statement of the Problem

The problem of this study was that although there has been an increasing need for skilled professionals to work with the hearing-impaired, there was not adequate information available for people who might wish to pursue a career in the area of working with the hearing-impaired. The problem for this study is that the increasing demand for skilled professionals who are prepared to work with the hearing-impaired has created a need for information on programs which train people to work with the hearing-impaired.

Purpose of the Study

The purpose of this study was to compile information on post secondary institutions offering training in working with the hearing-impaired and to analyze the type of training programs.

The objectives of the study were:

- 1. To identify the post secondary institutions offering training in working with the hearing-impaired.
- 2. To determine the type of training to work with the hearing-impaired being provided in the institutions.
- 3. To compare findings to determine differences which existed between training programs.

Definition of Terms

The following terms used in this study are provided for clarification purposes.

<u>Hearing-Impaired</u>: A general term used to describe all degrees and types of hearing loss (National Information Center on Deafness, 1987).

American Sign Language (ASL): A language whose medium is visible rather than aural. ASL has its own vocabulary, idioms, grammar, and syntax-different from English (National Information Center on Deafness, 1987).

Manually Coded English: Incorporates invented signs which correspond directly to grammatical features and vocabulary of English (National Information Center on Deafness, 1987).

<u>Pidgin Sign English</u>: Pidgin Sign English merges characteristics of two languages, English and ASL (National Information Center on Deafness, 1987).

<u>Oral Communication</u>: The use of speech, residual hearing and speechreading as the primary means of communication for deaf persons (National Information Center on Deafness, 1987).

Total Communication: A philosophy which implies acceptance and use of all possible methods of communication to assist the deaf child in acquiring language and the deaf person in understanding (National Information Center on Deafness, 1987).

CHAPTER II

REVIEW OF LITERATURE

The review of literature had been divided into the following sections::

- 1. Communicating with the Hearing-Impaired
- Employment Opportunities in Working with the Hearing-Impaired
- 3. Impact of Legislation on the Training of Professionals to Work with the Hearing-Impaired
- 4. Information Needed in Choosing the Right
 Training Institution
- 5. Summary

Communicating with the Hearing-Impaired

The National Information Center on Deafness (1987) stated that

Communication is a two-way process. It involves two or more people who alternately send and receive the information. For communication to succeed, the sender and receiver need to have a shared means for sending and receiving information (p.1).

The communication process is the single most important factor in working with the hearing-impaired. The knowledge of handicapped individuals in general often provided one with enough skills to work with the handicapped individual; this is not true with the hearing-impaired person. Along with any knowledge acquired or education received concerning hearing-impairments, some type of communication skills must be developed in order for the two-way process of communication to succeed. Then communication may take place with the hearing-impaired person in various ways.

The major areas of communication are oral communication, manual communication, and total communication. Oral communication denotes the use of speech, residual hearing and speechreading as the primary means of communication for deaf persons (National Information Center on Deafness, 1987). The hearing-impaired individual which strictly depends on oral communication will not use nor depend on manual communication.

The amount of speech a hearing-impaired individual obtained would vary with the person's type of hearing loss, age of onset, and educational background. Although oral communication was often considered the least noticeable or "normal" type of communication, it does not always provide the greatest extent of communication available. The National Information Center of Deafness (1987) stated that,

speechreading is the least consistently visible of the communication choices available to deaf people; only about 30 percent of English sounds are visible on the lips; and 50 percent are homophonous, that is, they look like something else (National Information Center on Deafness, 1987).

Sign Language is usually the chosen mode of manual communication for an individual who has been reared with hearing-impaired parents or in a state residential school for the deaf. In sign language, the visible movements of eye, body, hands and face replace the vocal elements of spoken language. The eyes, instead of the ears, receive the message (National Information Center on Deafness, 1987). Signs are composed of four basic characteristics of the hand(s); shape, place, orientation and movement. There are three types of sign language that are most often used; American Sign Language (ASL), Pidgin Sign English (PSE) and Manually Coded English (MCE).

American Sign Language (ASL) is a language whose medium is visible rather than aural. ASL has its own vocabulary, idioms, grammar and syntax - different from English (National Information Center on Deafness, 1987). ASL has become recognized as a language of its own. The grammar of ASL contains its own rules and usages as does the English language. Because of the difference in grammar, vocabulary and use of expressions, ASL is a very difficult language for

a hearing person to learn. The sentence structure of an ASL sentence would appear to a hearing person as a sentence full of grammatical errors and would often be unrecognizable.

Facial expressions in ASL may change the complete meaning of a sentence. A simple head-shake helps to negate a sentence; an example of this would be shaking the head while signing, "I understand," the signer communicates "I don't understand."

Pidgin Sign English (PSE) merges characteristics of two languages, English and ASL (National Information Center on Deafness, 1987). Because of the unique combination of the two distinct languages, it is difficult to make generalizations as to its "normal" use. However, the most common characteristic is that although the signs may be presented in English word order, the conceptual base of ASL sign is retained.

Manually Coded English (MCE) incorporates invented signs which correspond directly to grammatical features and vocabulary of English (National Information Center on Deafness, 1987). By matching a sign to a component of the English language, part-for-part, the system becomes codes for English as opposed to a separate language. Developed in the early 1970's, a few of these MCE systems are still used in education settings, but remain controversial among some members of the deaf community (National Information Center on Deafness, 1987).

The goal of each of the types of communication is to communicate with the hearing-impaired child or adult the message that is being conveyed. The philosophy supporting this goal most often is that of total communication, a philosophy which implies acceptance and use of all possible methods of communication to assist the deaf child in acquired language and the deaf person in understanding (National Information Center on Deafness, 1987). Total Communication allows the hearing-impaired person to use every skill he has to communicate and function in a hearing world. Although this type of communication is often non-acceptable by oralists, it has proven to be the most common and accepted type of communication used between a hearing-impaired person and a hearing person (Benderly, 1980).

Employment Opportunities in Working with the Hearing-Impaired

Employment opportunities have risen tremendously over the past decade. Public Law 94-142, Public Law 85-902 and a variety of other laws as well as the increasing number of hearing-impaired individuals had created a need for professionals who had the training necessary to work with the hearing-impaired client. In past years, the hearing-impaired person was either clustered with the mentally retarded or categorized with other handicapped people with no means of

communication; this presented no way to obtain any kind of assistance with behavioral or mental problems.

Dr. Gerald L. Davis Jr., Coordinator of the Masters of Vocational Rehabilitation counseling at East Central University, Ada, Oklahoma, (1988) stated that each year we are seeing a tremendous increase in the number of employment opportunities in the field of deafness.

A good example of the increasing employment opportunities is the staff at Tulsa Speech and Hearing Association in Tulsa, Oklahoma. In 1983, the staff consisted of only four members. In 1988, the Tulsa Speech and Hearing Association employed a staff of twelve.

The attention has become focused on agencies which serve the hearing-impaired for a variety of reasons. The laws of 1988 required many benefits for the handicapped person that were never provided in the past. The laws have also affected a trend in the direction of independence for the handicapped person. The above reasons have convinced the government to provide funds for services. The funding has become easier to obtain for services to a handicapped person than to any other group of individuals.

Impact of Legislation on the Training of Professionals to Work with the Hearing-Impaired

The amount of legislation concerning the hearingimpaired has created a need for professionals to work with
the hearing-impaired person. Several laws have been
adopted that have affected the hearing-impaired person.

P.L. 94-142, the Education of All Handicapped Children Act

This act required a free appropriate public education be available to all disabled children ages three through 21.

The laws also required that disabled children be educated with non-disabled children to the maximum extent appropriate. This law created a need for teachers, interpreters, aides and counselors in places where they previously had never been used. Many members of the staff previously working with the other handicaps were forced to either receive training to work with the hearing-impaired or be replaced by someone with the skill to do so. This also increased the need for trained professions in geographical areas that had previously never provided schooling for the hearing-impaired child, but instead sent them to a state institution.

P.L. 85-905, 1958 Education of the Handicapped Act

This law was established to produce and lend captioned films to hearing-impaired persons. The law was established to assist all ages. The law created a need for workers not only with the technical expertise to produce the films, but also with a knowledge of deaf culture and the language skills of the deaf.

P.L. 85-905, 1962

This law amended P.L. 85-905 to include research and training of persons in the use of the films as well as in the distribution and acquisition of educational material for the hearing-impaired population. This law acknowledged the need for professionals to be adequately trained in the field.

Rehabilitation Act of 1973, As Amended

The purpose of this act was to provide a broad range of service to the hearing-impaired that would enable the individual to live a more independent life and reenter the work force. The core of the Rehabilitation Act of 1973, as amended was administered through the state-federal program, Vocational Rehabilitation. This act created an awareness of the shortage of counselors, interpreters and secretaries

trained to work with the hearing impaired. In FY 1982, a new Research and Training Center on Rehabilitation of the Deaf was established at the University of Arkansas at Little Rock in order to expand the field of knowledge about the rehabilitation of deaf persons.

Rehabilitation Act of 1973, As Amended: Section 504

This act has had more influence on the hearing-impaired population and professionals working with the hearing-impaired than any other act. It has provided "a light at the end of a dark tunnel" for the hearing-impaired population as well as other handicapped individuals. It reads (as amended in 1978):

No otherwise qualified handicapped individual in the United States as defined in section 7(7) shall, solely by reason of his handicap, be excluded from the participation, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance or any program or activity conducted by an Executive agency or by the United States Postal Service.

Information Needed in Choosing the
Right Training Institution

When a person began to look for a training program to attend, one must take many different things into consideration. The communication skills taught were important

to the student. If a student had a pre-chosen mode of communication skills one preferred to learn one must look for an institution which teaches that mode.

Employment plans will also affect the student's choice of institutions. If a person planed on becoming an interpreter for the deaf, one would not want to attend a program that produces teachers or counselors. The student had to look for a program that prepared one to pass the National Registry of Interpreters Certification test.

If the person seeking the training is hearing-impaired, one must look at what support services are available. The support services may include interpreters, notetakers, tutors and special classes. A profoundly deaf person that relied on sign language would not be able to successfully complete a program without an interpreter or notetaker.

Many programs had required the student to have a three to six month internship. The student needed to be aware of this before starting the program. The internship could require one to work on a full-time basis, thus preventing the student from continuing with other responsibilities and jobs. The location of the internship is also important to the student. The student needed to be aware if there was a possibility one may have to do their internship in another town. This may be either an advantage or disadvantage for the training program.

Along with the above considerations, a variety of other features may be considered. These include social activities, available financial assistance, reputation of the training institution and cost of training. Each factor carried a different degree of importance to the individual. An individual should not be shy in requesting information on a program and should follow up by asking any pertinent questions.

Summary

In order to work with the hearing-impaired, it is necessary to obtain the proper education. The type of education needed will be determined by the final goals of the students. The goals and needs of the students will affect the location in which they received their education.

The students interested in obtaining training to work with the hearing-impaired have a variety of institutions from which to choose. In the past, this was not true as choices were limited. They also have more additional employment opportunities to consider after they complete their training. The students were not limited to one field simply because they wanted to work with the hearing-impaired.

CHAPTER III

METHODOLOGY

The function of this chapter is to discuss the methodology of the study by presenting data in the following sections: (1) purpose of the study, (2) development of the instrument, (3) collection of data, and (4) analysis of data.

Purpose of Study

The purpose of this study was to compile information on post secondary institutions offering training in working with the hearing-impaired and to analyze the training programs.

To accomplish this purpose, it was necessary to: (1) develop a questionnaire which contained statements about training professionals to work with the hearing-impaired, (2) compile a list of post secondary institutions offering training in working with the hearing-impaired, (3) collect data from each of the post secondary institutions, (4) analyze and interpret the data, and (5) report the results.

Development of Instrument

The instrument consisted of questions representing types of communication skills taught, number of students enrolled in training programs, primary areas of occupational training and program degree level. The instrument was validated for content validity and face validity. The validation was performed by a professor at East Central University in Ada, Oklahoma and two professors from Oklahoma State University, Stillwater, Oklahoma. Revisions were made to the questionnaire accordingly.

Collection of Data

A completed list of post secondary institutions offering training to the hearing-impaired in a four state area was compiled. The states included in the area were Colorado, Kansas, Oklahoma and Texas. The information for the list was gathered from the <u>American Annals of the Deaf</u> (April 1986), American Deafness and Rehabilitation Association, Gallaudet University, Washington D.C. and the National Registry of Interpreters for the Deaf. Each of the institutions was requested to participate in the survey. A letter to each of the program directors explaining the research project was sent, along with the questionnaire, to the institutions. Included with each request was a stamped self-addressed

envelope to be used when returning the questionnaire. The respondents were asked to complete the questionnaire and return it with any printed information they had on their training program. Two weeks after the initial request was mailed, a follow-up letter was sent to each of the institutions that had not responded.

Analysis of Data

The data was divided by the states. The data from the institutions were compared using percentage and frequency of items. The categories included number and respondents by state, primary area of occupational training taught by responding institutions, modes of communication skills taught at responding institutions, degrees offered by responding institutions, number of enrollment at responding institutions, and comparison of number of training programs with population of states. The listings of institutions were then categorized by states with the institutions address, program director, 1987-88 program enrollment, mode of communication taught, program level and career objective included.

CHAPTER IV

FINDINGS

The purpose of this study was to compile information on post secondary institutions which offered training in working with the hearing-impaired and to analyze the type and availability of training programs. This chapter presents respondent data and the analysis of data in the following sections:

- 1. Respondent data
- 2. Mode of communication skills taught
- 3. Primary areas of occupational training
- 4. Degrees offered by institutions
- 5. Numbers of enrollment in training programs
- 6. Number of training programs in comparison with population of state

Respondent Data

A total of 20 questionnaires was sent to post secondary institutions in a four state area. A complete list of institutions in the four state area can be found on pages 20-25. The institutions address, program director, 1987-88

program enrollment, mode of communication skills taught, program level and career objectives was included on the list.

The number of questionnaires sent and returned from each state is found in Table I. There was a total of 14 surveys returned, which represented a 70 percent rate of return.

TABLE I

NUMBER AND RESPONSE BY STATE

State	Number Sent	Number Returned	Percent Returned
Oklahoma	5	4	80
Kansas	2	2	100
Texas	11	7	64
Colorado	2	1	50
TOTAL	20	14	70

PROGRAMS OFFERING TRAINING TO WORK WITH THE HEARING-IMPAIRED

COLORADO

Front Range Community College 3645 W. 112 th Ave. Westminster, Colorado 80030 Director: Kenneth Bosch, DSE

1987-88 Enrollment: 100

Mode of Communication: American Sign Language/

Pidgin Sign English

Program Level: Associate

Career Objective: Interpreting

University of Northern Colorado Greeley, Colorado 80639 Director: Elaine Unrip, Ed. D.

1987-88 Enrollment: Not Available Mode of Communication: Not Available Program Level: Not Available Career Objective: Not Available

KANSAS

Johnson County Community College 12345 College Blvd. at Quivera Overland Park, Kansas 62210-1299 Director: Mr. Bern Jones

1987-88 Enrollment: 42 Mode of Communication: American Sign Language/ Pidgin Sign English

Program Level: Associate

Career Objective: Interpreter

University of Kansas Medical Center 39th & Rainbow Blvd. Kansas City, Kansas 66103 Director: Dr. Alfred D. Larson

1987-88 Enrollment: 6

Mode of Communication: Oral

Program Level: Master of Science Career Objective: Deaf Education

OKLAHOMA

East Central University Ada, Oklahoma 74820 Director: Dr. Richard Baumgartner

1987-88 Enrollment: 25

Mode of Communication: American Sign Language

Program Level: Bachelor of Arts

Career Objective: Human Service Provider with

Hearing-Impaired Clients

Tulsa Junior College 3727 E. Apache Tulsa, Oklahoma 74115 Director: Ms. Julie Woodruff

1987-88 Enrollment: 229

Mode of Communication: American Sign Language

Program Level: Associate

Career Objective: Interpreters

University of Oklahoma
P.O. Box 26901
Oklahoma City, Oklahoma 73190
Director: Dr. Eugene Mencke

1987-88 Enrollment: 10

Mode of Communication: Total Communication

Program Level: Master of Science Career Objective: Deaf Education

University of Science & Art of Oklahoma
Box 82656
Chickasha, Oklahoma 73018
Director: Mr. Larry Hawkins

1987-88 Enrollment: Not Available Mode of Communication: Not Available Program Level: Not Available Career Objective: Not Available

The University of Tulsa 600 S. College Tulsa, Oklahoma 74104 Director: Mr. Jack Foreman

1987-88 Enrollment: 26
Mode of Communication: Total Communication
Program Level: Bachelor of Science
Career Objective: Deaf Education

TEXAS

Abilene Christian University Box 8058, ACU Station Abilene, Texas 79699 Director: Dr. Jon Ashby

1987-88 Enrollment: Not Available Mode of Communication: Not Available Program Level: Not Available Career Objective: Not Available

Eastfield College 3737 Motley Dr. Mesquite, Texas 76708 Director: Ms. Ursula Palmer

1987-88 Enrollment: Not Available Mode of Communication: Not Available Program Level: Not Available Career Objective: Not Available

El Paso Community College 919 Hunter, P.O. Box 20500 El Paso, Texas 79998 Director: Ms. Mary Mooney 1987-88 Enrollment: 60

Mode of Communication: American Sign Language/

Pidgin Sign English

Program Level: Associate

Career Objective: Interpreter

Lamar University
P.O. Box 10076, Lamar Station
Beaumont, Texas 77710
Director: Dr. Robert Moulton

1987-88 Enrollment: 50

Mode of Communication: American Sign Language/

Pidgin Sign English

Program Level: Master of Science Career Objective: Deaf Education

McLennan Community College 1400 College Dr. Waco, Texas 76708

1987-88 Enrollment: Not Available Mode of Communication: Not Available Program Level: Not Available Career Objective: Not Available

Southwest Collegiate Institute Avenue "C" Big Spring, Texas 79720 Director: Ms. Helene Bonura

1987-88 Enrollment: 8

Mode of Communication: American Sign Language/

Pidgin Sign English

Program Level: Associate

Career Objective: Interpreters

Tarrant Community Junior College 4801 Marine Creek Parkway Ft. Worth, Texas 76179 Director: Mr. Michael Cinatl

1987-88 Enrollment: 75

Mode of Communication: American Sign Language

Program Level: Associate

Career Objective: Interpreter

Texas Christian University Stadium at Cantey Drives Ft. Worth, Texas 76129 Director: Dr. Ann Lieberth

1987-88 Enrollment: 52 Mode of Communication: Total Communication Program Level: Bachelor of Science Career Objective: Deaf Education

Texas Tech University
Box 4266
Lubbock, Texas 79409
Director: Dr. Cynthia Jones

1987-88 Enrollment: 40
Mode of Communication: American Sign Language
Program Level: Bachelor of Science
Career Objective: Deaf Education

Texas Woman's University
P.O. Box 23775, TWU Station
Denton, Texas 76204
Director: Dr. David Holmes

1987-88 Enrollment: 75
Mode of Communication: Total Communication
Program Level: Bachelor of Science
Career Objective: Deaf Education

University of Texas at Austin Austin, Texas 78712

1987-88 Enrollment: Not Available Mode of Communication: Not Available Program Level: Not Available Career Objective: Not Available

Modes of Communication Skills Taught

The questionnaires returned indicated 43 percent of the training institutions taught strictly American Sign Language (ASL) as the primary mode of communication. Twenty one percent taught a combination of ASL and Pidgin Sign English. Seven percent taught strictly Pidgin Sign English and seven percent taught strictly Oral Communication skills. The remaining 21 percent taught the concept of Total Communication. The actual numbers are represented on Table II.

Primary Area of Occupational
Training Taught by Responding Institutions

The primary area of occupational training after completion of the programs was divided almost equally between educators of the deaf and interpreters for the deaf. Fifty percent of the programs focused on training deaf educators with 43 percent training interpreters for the hearing-impaired. Seven percent prepared their graduates to work in the field of Human Service providers with deaf clients. See Table III.

Degree Offered by Responding Institutions

The largest number of institutions, 43 percent responded offering an Associate degree. Twenty one percent offered a

Bachelor of Science with seven percent offering Bachelor of Arts degrees. Twenty nine percent focused on the graduate student with a Master of Science degree. See Table IV.

TABLE II

MODES OF COMMUNICATION SKILLS TAUGHT
BY RESPONDING INSTITUTIONS

Mode of Communication	N = 14	Percentage*
American Sign Language	6	43
Signed English	1	7
Total Communication	3	21
Oral Communication	1	7
American Sign Language/Signed English	3	21

^{*}Percentages do not total 100% due to rounding

TABLE III

PRIMARY AREAS OF OCCUPATIONAL
TRAINING TAUGHT BY RESPONDING INSTITUTIONS

Careers	N=14	Percentage
Interpreter for the Deaf	6	43
Teacher of the Deaf	7	50
Human Service Provider	1	7

TABLE IV

DEGREE OFFERED BY RESPONDING INSTITUTIONS

Program Level	N	Percentage
Bachelor of Arts	1	7
Bachelor of Science	3	21
Master of Science	4	29
Associate	6	43

NUMBERS OF ENROLLMENT IN TRAINING PROGRAMS

The number of students enrolled in the training programs varied from six to 229. For classification purposes, enrollment in training programs was divided into categories of 1-50, 51-100, and 101-over. Fifty seven percent fall into the 1-50 range, 36 percent in the 51-100 range and seven percent in the 101-over range. See Table V.

TABLE V

NUMBER OF ENROLLMENT IN RESPONDING TRAINING PROGRAMS

Enrollment in Training Program	N = 1 4	Percentage
1-50	8	57
51-100	5	36
101-over	1	7

Number of Training Programs in Comparison with Population of State

The largest ratio of institutions to the population of the state can be found in Colorado with a ratio of 1 institution: 1,569,000 population. Texas follows closely behind with a ration of 1 institution: 1,349,182. The ratio for Kansas is 1 institution: 1,139,000 and Oklahoma is leading with 1 institution: 560,600 people. See Table VI.

TABLE VI

NUMBER OF TRAINING PROGRAMS IN COMPARISON WITH POPULATION OF STATE

State	Number of Institutions	Population*	Ratio
Colorado	2	3,138,000	1:1,569,000
Kansas	2	2,278,000	1:1,139,000
Oklahoma	5	2,803,000	1:560,600
Texas	11	14,841,000	1:1,349,182

^{*}Population figures from the National Data and Information Statistical Abstract, 1988 edition

CHAPTER V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This study was designed to compile information on post secondary institutions offering training in working with the hearing-impaired and to analyze the training programs.

Numerical findings related to reactions of respondents related to the institutions were reported in Chapter IV.

This chapter presented a summary of the findings, conclusions from the findings and recommendations for further study.

Summary

The purpose of the study was to compile information on post secondary institutions offering training in working with the hearing-impaired and to analyze the training programs.

A questionnaire was developed which contained questions concerning the post secondary institution training programs. The questionnaire was validated for content and face validity by a professor from East Central University in Ada, Oklahoma and two professors from Oklahoma State University in Stillwater, Oklahoma.

The next step was to compile a list of post secondary institutions in the four state area of Colorado, Kansas, Oklahoma and Texas offering training to work with the hearing-impaired. The list consisted of twenty institutions within the four state area. A total of 14 institutions participated in the survey which represented 74 percent of the sample of the chosen area.

Data for the study was analyzed using four areas: type of communication skills taught, primary areas of occupational training, program degree level and program enrollment.

Conclusions

Each of the four states included in the research had at least two institutions which offered training to work with the hearing-impaired. It is recommended for further study as to why the large variance between states in the number of institutions available.

The occupational demand to work with the hearing-impaired are in the fields of Deaf Education and Interpreting. These areas provide the greatest demand for workers.

The major areas of difference among programs training people to work with the hearing-impaired are in the fields of communication skills taught and primary areas of occupational training.

Recommendations

As a result of this study, the following recommendations for further research are suggested:

- 1. Further study should be performed using data concerned with careers of students graduating from the institutions in the four state area of Colorado, Kansas, Oklahoma and Texas.
- 2. The study should be increased to include institutions in Louisiana, New Mexico, Arkansas and Mississippi which offer training to work with the hearing-impaired.
- 3. Copies of this study should be disbursed to the State Department of Education, Oklahoma Association of the Deaf, Oklahoma Registry of Interpreters for the Deaf and Oklahoma School for the Deaf.
- 4. Further study should be performed to discover the reason why the number of institutions varies so greatly between states.

BIBLIOGRAPHY

- Benderly, Beryl Lieff. <u>Dancing Without Music</u>. Garden City, New York: Anchor Press/Doubleday, 1980.
- Crammatte, A.B. <u>Deaf Persons in Professional Employment.</u>
 Springfield, IL: Charles C. Thomas, Publisher, 1968.
- Davis, Gerald L. Personal Interview, Ada, Oklahoma. March 5, 1988.
- Delk, M.T. and Schein, J.D. <u>The Deaf Population of the U.S.</u> Silver Springs, Maryland: National Association of the Deaf, 1974.
- DuBow, S. "Public Law 94-112." <u>American Annals of the Deaf.</u> 1977, 1225, 468-469.
- Duncan, Jack G. "Recent Legislation Affecting Hearing-Impaired Persons." American Annals of the Deaf. 1984, 129(2), 83-91.
- Fant, L. Amelsan. Silver Spring, MD: National Association of the Deaf, 1972.
- Gallaudet College and the National Technical Institute for the Deaf. <u>College & Career Programs for Deaf Students</u>. Washington D.C.: Gallaudet Press, 1986.
- Higher Education and the Handicapped Resource Center.

 <u>Hearing Impaired Students In Postsecondary</u>

 <u>Education</u>. Washington D.C. 1986.
- Johnson, Robert. <u>Becoming An Interpreter For Deaf People</u>. Washington D.C.: Gallaudet Press, 1987.
- McLoughlin, William. "The Deaf, the Law, and Higher Education." Volta Review. 1982, 84(6), 275-283.

- Moores, Donald F. Educating the Deaf: Psychology,
 Principals, and Practices. Boston: Houghton Mifflin Company, 1978.
- National Information Center on Deafness. <u>Communicating</u>

 <u>With Deaf People: An Introduction</u>. Washington

 D.C.: Gallaudet Press, 1987.
- National Information Center on Deafness. <u>Deafness</u>: <u>A Fact Sheet</u>. Washington D.C.: Gallaudet Press, 1987.
- National Center for Law and the Deaf. Educating the Hearing Impaired Child: A Legal Perspective. Washington D.C.: Gallaudet Press, 1986.
- Rehabilitation Act of 1973, as Amended. Title V, Section 504 (PL-93-112). 29usc 794 (Supp. V), 1981.
- Salam, James M. and Kam, S. "The Impact of 504 on Schools for the Deaf." American Annals of the Deaf. 1980, 125(2), 103-108.
- Sclesinger, I.M. and Namir, Lila. <u>Sign Language of the Deaf:</u>

 <u>Psychological</u>, <u>Linguistics</u> and <u>Sociological</u>

 <u>Perspectives</u>. New York: Academic Press, 1978.
- Siple, Patricia. <u>Understanding Language Through Sign Language</u>. New York: Academic Press, 1978.

APPENDIXES

APPENDIX A

POST SECONDARY INSTITUTIONS OFFERING TRAINING TO WORK WITH THE HEARING IMPAIRED SURVEY

PROGRAMS THAT OFFER TRAINING TO WORK WITH THE HEARING-IMPAIRED

	Date:
Name	e of Institution:
	ector of Training Program:
Pers	son completing survey: Position:
1.	Does your institution offer a training program in working with the hearing-impaired? Yes No (If yes please complete the remainder of the survey)
2.	How long does it take to complete your program?
3.	How many students are currently enrolled in your program?
4.	How many students completed your training program in the 1986-87 school year?
5.	How many students completed your training program in the 1985-86 school year?
6.	What type of certificate/diploma/degree (please specify by name) will the student receive after completion of your training program?
7.	What is the primary occupation/occupations your students are trained for after completing your program?
8.	List the types of communication taught to your students. (eg. ASL, PSE, Oral, etc)
9.	Which is the primary type of communication taught to your students?
10.	Please list any support services offered to your students. (eg. social groups, scholarships, interpreters for the hearing-impaired, etc.)
11.	Please circle the areas that your training program includes:
	a. Manual Communicationb. Interpreting for the Hearing-Impairedc. Oral Communicationd. Interpreting for Deaf/Blind

e. Deaf Education f. Speech Therapy g. Deaf Culture h. Audiology i. Counseling the Hearing-Impaired j. Other
If you have further information you would like to add, please do so on the lines below. If extra space is needed, please continue on the back of this form.
·
If you have printed information on your program, please return it with this survey.
Please return survey to:

Cathy Campbell 519 W. McKinley Sapulpa, Oklahoma 74066

ATIV

Mary Catherine Campbell Candidate for the Degree of Master of Science

Thesis: ANALYSIS OF POST SECONDARY INSTITUTIONS OFFERING TRAINING TO WORK WITH THE HEARING-IMPAIRED

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Education: Completed Bachelor of Arts in Counseling/Services to the Deaf from East Central University, Ada, Oklahoma, 1985: completed requirements for Master of Science in Occupational and Adult Education at Oklahoma State University, Stillwater, Oklahoma in July, 1988.

Professional Experience: Job Placement Specialist at Tulsa Speech and Hearing Association, Tulsa, Oklahoma, 1984-1985, Job Developer, Oklahoma Occupational Training Associates, 1985-1986; Dislocated Worker Program Coordinator, Central Vocational Technical School, Sapulpa, Oklahoma, 1986-present.

Professional Organizations: American Vocational Association, Oklahoma Vocational Association, National Employment and Training, Association, Oklahoma Employment and Training Association, Oklahoma Registry of Interpreters for the Deaf, Tulsa Speech and Hearing Association.