# "A CAREER IN SPEECH AND HEARING - A VIDEO"

REG. NO. M-9505

# AN INDEPENDENT PROJECT SUBMITTED AS PART FULFILMENT OF FIRST YEAR M.Sc (SPEECH AND HEARING) TO THE UNIVERSITY OF MYSORE, MYSORE

ALL INDIA INSTITUTE OF SPEECH AND HEARING MYSORE-570 006

MAY 1996

DEDICATED

то

MY PARENTS, SUNITHA, SUDHAKAR, RANI, SUNIL

## CERTIFICATE

This is to certify that this Independent project entitled **"A CAREER IN SPEECH AND HEARING - A VIDEO" is** the bonafide work in part fulfillment for the first year M.Sc. (Speech and Hearing) of the student with Reg. No. M-9505.

Mysore Mat/ 1996

Dr. (Miss) S. ŇIKAM

DIRECTOR All India Institute of Speech and Hearing Mysore-570 006

## CERTIFICATE

This is to certify that this Independent project entitled **"A CAREER IN SPEECH AND HEARING - A VIDEO" has been** prepared under my supervision and guidance..

*Mysore* May 1996

NIKAM Dr. (Miss) S.

GUIDE

## **DECLARATION**

hereby *declare* that independent project this Ι entitled "A CAREER IN SPEECH AND HEARING-A VIDEO" is the. result of my own study under the guidance of Dr. (MISS) S. NIKAM, Professor and Head of the Department of Audiology. All India Institute of Speech and Hearing Mysore earlier at any University for and has not been submitted any other Diploma or Degree..

Mysore

May 1996

Reg. No. M-9505

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#### PROLOGUE

Youngsters after their 12/2nd PUC, they have to take a right decision for their future. Many prefer to do medicine and engineering and other professional and nonprofessional courses. But how many are aware of the speech and hearing field. Thus I am here to tell about a career in speech and hearing.

To start with

Communication is a means through which we exchange our ideas, thoughts and feelings.

Man is a unique creation of the nature, he is unique because of his special abilities. He is gifted with speech for communication, which is a highly developed communication system. There are other modes of communication too. They are gestures, signs, codes, etc. Here the amount of message conveyed is often restricted.

Some people however, are deprived of this special ability. Because of the lack of ability to express themselves effectively, the personal, social and financial aspects of their lives are severely affected.

Speech is the vocal behaviour, a part of language system, where hearing play a very important role. People are

not generally aware of the effect of hearing loss, when told, they seldom believe the consequences. Even now, people believe in superstitions. There are so many children who are mentally retarded, hearing or speech handicapped, etc. because of ignorance of illiterate parents.

It is very hard for normal speakers to comprehend how difficult it is to live in a culture such as ours without possessing the ability to speak in an acceptable fashion. Perhaps many of us do not even know the various types of speech and language disorders which are dealt by speech pathologist.

Speech and language disorders can be classified as follows:

- 1. Speech disorders
- 2. Language disorders
- 3. Voice disorders

Following disorders come under speech disorders:

- Dysarthria, misarticulation, apraxia, dyslalia, stuttering and cluttering.

Following disorders come under languages disorders:

- Delayed speech and language with hearing loss
- Delayed speech and language with mentally retarded
- Aphasia
- Dyslexia
- Cerebral palsy
- Autism

Voice disorders can be further classified based on their aetiology:

- 1. Organic
- 2. Neurological
- 3. Psychological

Organic voice disorders such as vocal nodules, vocal polyp, contact ulcer, aphonia after laryngectomy, etc. while those with neurological origin can be vocal fold paralysis, spastic dysphonia, whereas in psychological origin aphonia is a best example.

Voice quality in these voice disorders may be breathy, hoarse, harsh, etc.

#### For definitions see Appendix

Different studies show that 80% of Indians still do not have proper education regarding speech and hearing problems. Thus it is required to create general awareness among people regarding speech and hearing disorders and rehabilitating of such problem. This is done by speech and language pathologist.

A speech and language pathologist is a person who is professionally qualified to render services to hearing impaired and speech impaired.

The purpose of this Independent Project is to create general awareness and to provide information regarding the field of speech and hearing and to provide a guiding hand for students who would like to pursue their career in this field.

#### A CAREER IN SPEECH AND HEARING

We are a group of medical and engineering students, come to Mysore to visit the educational institutions. We have visited a couple of medical colleges, engineering colleges, Regional Institute of Education, on the way we have come to AIISH to see the way it functions and top collect information regarding the courses.

#### 1. Could you please brief us about speech and hearing field

We talk to each other through speech, but there are people who lack this ability, eg. DSL with HL/MR, etc. These people need special training, which is given by speech and language pathologist. Speech language pathologist is a person who is professionally qualified to render services to speech and hearing impaired individuals. AIISH is one such Institute which provides services to such individuals.

#### 2. When did AIISH come into being ?

After independence, the Government paid special attention to speech and hearing handicapped. So, a survey was done by Dr. Martin F. Palmer, Consultant in the U.S. Department of Logopedics, Wichita University, Kansas. As a result, All India Institute of Logopedics took birth on auspicious day of 9th August 1965. The former Honourable President of India Dr. Sarvapalli Radhakrishnan laid the foundation stone for the institute on 25th July 1966. Later the name of the institute was changed to All india Institute

of speech and Hearing.

3. Which are the other thraining centres in india ?

Ans.AYJNITH, bombay and its branches in Hyderabad, Calcutta,

Bhubaneswar, New Delhi.

AIIMS, New Delhi

Post-Graduate Institute of Medical Science and

Research, Chandigarh

Institute of Nursing Sciences, Mangalore

B.Y.L Nair Hospital, Bombay

Kasturba Medical College, Manipal

ISH, Bangalore.

4. How many departments do you have in AIISH and can you please elaborate **on** them ?

Ans. We have the Department of Speech Pathology, Speech science, Audiology. Hearing Aid Trial, Bar Mold, Psychology, ENT, Electronics.

#### The Department of Speech Pathology

This department mainly deals with speech and language problems such as delayed speech and language because of hearing loss or mental retardation or loss of language after brain damage or any structural deviations

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such as in cleft palpate and cleft lip and so on. Here we evaluate and diagnose the patients and counsel the parents and family members as how to proceed further with training.

#### Speech Science Department

This department deals with patients with voice, articulation and fluency problems such as hoarse voice, misarticulation stuttering, etc.

#### Department of Audiology

This is for testing the hearing ability of an individual.

### Hearing Aid Trial

This is meant for prescribing appropriate hearing aid.

#### Ear mold

Making ear molds for an individual.

#### Electronics

Reparing the hearing aids, calibration of instruments, etc.

# 5. Why there is a Department of Psychology in this Institute and what do you do in this department ?

Ans. Many patients with speech and/or hearing problems have associated psychological problems or vice versa as in the case of hysterical aphonia, delayed speech and language cases associated with mental retardation and hearing loss, etc. where psychological evaluation is essential. In this department psychological evaluation such as administering intelligence tests, personality tests, are carried out to get a thorough knowledge on the mental status, intelligence, personality of an individual. These tests are helpful for proper diagnosis which is very essential for further therapeutic and counselling services. For eg: For a profound hearing loss child, by administering test we can say that the child has normal intelligence and delay in speech and language is because of profound hearing loss.

#### 6. Why is there a Department of ENT ?

**Ans.** This department deals with problems related to ear, nose and throat. The need of ENT department is to find out if there is any organic pathology for a particular speech and hearing disorder and, if present, proper medical treatment is given to the patient Jbo reduce the problem.

# 7. What are the types of patients you deal with in the Institute ?

**Ans.** We deal with speech, language and voice disorders. Speech disorders such as stuttering, delayed speech and language with hearing loss, etc. Language disorders such as loss of language after brain damage, delayed speech and language with mental retardation, etc. voice disorders such as - hoarse voice, aphonia, etc.

# 8. Who are the professionals who work in association with professionals in speech and hearing ?

**Ans.** Neurologists, Pediatrian, Physiotherapists,' Plastic Surgeon, Prosthodontists, Special Educators, etc.

9. What are the different courses available in this Institute ?

Ans. Bachelors, Masters and Doctorate.

Introduction of the students

Students of AIISH doing their Bachelor's and Master's.

1. Were you aware of this field before ?

Ans. Yes/No

2. If yes/no - How did you come to know about this field ? Ans.i. A Speech Pathologist and Audiologist who is working in a hospital at my place told me about this course.

ii. I came to know of this field through one of my friends who has completed this course.

iii. I came to know of this field through an advertisement in the newspaper.

4. I came to know of the speech and hearing speciality through articles in magazines.

#### 3. How did you enroll yourself in this institute ?

Ans. I answered an advertisement seeking admissions in the newspaper and obtained an application form from the Institute.

4. How many years do you need to study for your degree ?
Ans. B.Sc. - 3 years, M.Sc. - 2 years, Ph.D. - 3 years
5. To which University is this Institute affiliated ?
Ans. To the University of Mysore

- 6. How many seats are available for candidates for B.Sc, M.Sc. and Ph.D. ?
- Ans. For B.Sc. 33, For M.Sc. 23 are available, we have 5 Ph.D. fellowships. For Ph.D. each guide can take upto 5 candidates.
- 7. What are the minimum requirements needed for admission into this Institute ?
- Ans. B.Sc. : PUB (PCM/PCB) or equivalent with minimum 50%
  M.Sc. : B.Sc. (Speech and Hearing)
  Ph.D. : 60% in M.Sc./equivalent

#### 8. What are the subjects you study ?

Ans. Major subjects are: Audiology, Speech Language Pathology, Speech Science.

Other subjects are: Psychology, Linguistics, Acoustics and Electronics, Anatomy and Physiology, Pathology, Statistics and Research Methods, Neurology, Pediatrics, Otorhinolaryngology, Adminstration and Organization.

#### 9. Can you elaborate on your library facilities ?

Ans. We have a library which has developed into one of the most informative centres in India, in this field. The library is capable of providing the latest information in the form of books and journals. At present the library has approximately eleven thousand books and subscribes to around 100 specialized journals (foreign and Indian), which covers all the aspects of this field. The library also has project reports, independent projects, dissertations done by Master's students, doctoral thesis, etc. It also has an audio-visual cell with slides, films and pre-recorded educational cassettes.

# 10. Do you have theory alone or is clinical practicum also done ?

Ans. Yes 1 We have clinical work too. Along with this we have to present a case in clinical conference in B.Sc. III year and present an article in Journal Club in I M.Sc. Along with this we have postings in K.R. Hospital and visit old age homes, etc.

11. Do you handle cases independently and from when ? Ans. In Ist year we have to observe senior students, from second year onwards we interact with cases under the supervision of the staff.

12. What types of problems you generally deal with ? Ans. All speech, language and voice disorders.

13. What is the scope for you after you finish your studies? Ans. We can work in rehabilitation centres, hospitals, deaf schools and other special schools, work in industries as industrial audiologists or engage in private practice.

14. Do you think you have selected the right course for yourself and why ?

Ans. Yes 1

I was always been interested in the rehabilitative field and I think I can do justice to this profession. I feel I have chosen the right profession.

## DETAILS - VIDEO FILM

#### EPILOGUE

Speech and language are the two important aspects of communication. Speech is the vocal behavior/ the main aspect of the language system especially to the human beings allowing their best possible communication where hearing plays an important role.

Most of us are endowed with this ability. However/ some section of the population as defective hearing or speech or no speech or voice disorders.

Hearing is the main sensory system allowing us to develop our speech and language. It helps us to monitor our speech with the help of auditory feedback. Speech and hearing plays a significant role in our daily life. But most of us do not have adequate information on the same. Thus this project aims at increasing general awareness regarding the field of speech and hearing and to provide a guiding hand to students who would like to pursue their career in this field.

Here an attempt has been made to provide a brief but adequate information on speech and hearing field and functions of it. To provide a guiding hand for students/ this project has also provided information regarding different training centers in India/ courses available/ how to enrole into these Institutes/ seats allotted/ minimum admission requirements/ library and other facilities/ last but not the least the scope of this field.

It is hoped that this primer provides sufficient information and insight into the speech and hearing career.

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#### APPENDIX

Androphonia: Wherein females have low pitched (male) voice.

Aphasia: wherein the individual losses his/her speech and language skills partially or totally due to sudden brain injury.

Apraxia where the person car. involuntarily do some activities but if he is asked to do voluntarily he is unable to do the same.

**Cerebral palsy:** It is a congenital disorder, due to non-progressive brain damage, children exhibit difficulty in walking, eating, dressing and all other activities. They may have severe speech problems characterized with misarticulations and voice problems.

**Cleft palate and cleft lip:** Where the lip/palate is not completely developed. Children develop delayed speech and language problems, misarticulation and hypernasal voice due to the above deficit.

**Cluttering:** This is a different form of dysfluency where the individual speaks in very fast and disorganised sentence structures with slurring or omissions of syllables and sounds as the specific feature. He is usually unaware of his problem.

Delayed speech and language: Where speech and language is not matched with an individual's chronological age. This may be due to hearing loss or mental retardation or any other sensory deprivation or due to other psychosocial problems or inadequate speech and language stimulation in early life.

**Dyslexia:** refers to those who are unable to interpret written and printed language although their vision, intelligence and speech are unimpaired.

**Dysarthria:** Dysarthria is a neurological condition where articulation and/or voice may be partially as severely affected.

**Misarticulation:** Wherein children are not able to produce the largest sound because of which their speech is not intelligible.

**Puberphonia:** It is a mutational disorder, wherein males have high pitched (female) voice.

**Stuttering:** Which is a fluency disorder wherein an individual's flow of speech is interrupted abnormally by blocks, repetitions, prolongations of sounds, syllaman

or articulatory posture or by avoidance and struggle behaviours. This may be consequent of anxiety.

Spastic dysphonia: Abnormal voice is the effect of hyperadduction of vocal folds, characterized by squeezed, strained, sluttering like, effortful with periodic breaks in phonation with a tendency to be monopitch, reduced in loudness, occurs only during voluntary phonation, during communication and not while singing, laughing or crying.

**Vocal nodule:** Localized swelling or thickening seen on the junction of anterior and middle thirds of vocal cords. It can be unilateral or bilateral caused due to abuse of voice.

**Vocal polyp:** is benign tumours of larynx and can be a result of continued abuse or single trumatic episode. Seen on the function of anterior and middle thirds of vocal cords and it can be redunculated senssile.