DOCUMENT RESUME

ED 107 022 EC 072 491

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TITLE Minority Trainees on Speech Satellite Teams: A Manual of Organization and Instruction.
INSTITUTION California State Univ., Fresno.
SPONS AGENCY California Univ., Los Angeles.
PUB DATE 74
NOTE 130p.

EDRS PRICE MF-$0.76 HC-$6.97 PLUS POSTAGE
DESCRIPTORS Disadvantaged Youth; Exceptional Child Education; Guidelines; *Language Handicapped; *Minority Groups; *Program Descriptions; *Speech Handicapped; Speech Therapists; *Undergraduate Study

ABSTRACT

The manual provides a description of a program to encourage minority undergraduate students to major in communication disorders through paid participation in the delivery of speech and hearing diagnosis and therapy services to underserved segments of a California community. The eight bilingual or bicultural trainees worked two half days a week under the guidance of a graduate student in communicative disorders and participated in a weekly instructional session. Activities of the project included preschool screening of 1,054 children, diagnostic evaluation of 97 persons, and provision of therapy for a total of 55 child or adult clients. Summarized are lectures given trainees on topics such as speech pathology, opportunities in the department and profession, acquisition of language and related skills, bilingual/bicultural children, stuttering, cleft palate, cerebral palsy, aphasia, autism, assessment of speech and language disorders, and therapy. Briefly described are guest lectures on subjects such as congenital birth defects and Spanish/English speech variations. It is reported that six of the trainees requested admission into the communications disorders department. Appended is additional project information including a diagnostic information packet, information for clinicians, samples of a diagnostic report, and the Department of Communicative Disorders brochure. (DB)

MINORITY TRAINEES ON SPEECH SATELLITE TEAMS: A MANUAL OF ORGANIZATION AND INSTRUCTION

by

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1974

The development of this manual has been funded through a grant entitled "Developing a methodology for training speech and hearing personnel in delivery of services to the urban and rural poor," which was awarded to California State University, Fresno by the San Joaquin Valley Area Health Education Center (UCLA) in October 1973.

ACKNOWLEDGEMENTS

Special thanks go to Irma Rangel, AHEC/Communicative Disorders Project Secretary, for her diligence and skill in preparation of the manuscript. Sincere appreciation goes to the trainees, the clinicians, the faculty and staff members of the Department of Communicative Disorders, cooperating administrators and staff personnel at California State University Fresno and at the cooperating satellites.

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I. ORGANIZATION

INTRODUCTION

The Language, Hearing and Speech Clinic of California State University, Fresno, has served the city and its environs for a number of years. It operates with the prime goal of providing clinical practicum experience for the many undergraduate and graduate students in the Department of Communicative Disorders. Prior to the implementation of this project, two serious needs became apparent. First, the numbers of minority students majoring in Communicative Disorders were depressingly small. Additionally, education and training for the effective delivery of services to the urban and rural poor in the area was virtually non-existent. These problems were not unique to CSUF. At a recent national conference on minority recruitment and retention sponsored by the American Speech and Hearing Association, it was repeatedly stated that speech pathology and audiology (Communicative Disorders) departments throughout the country had a lower percentage of minority students than the minority population on campus. On those few campuses where an active recruitment program was undertaken, the numbers were increased.

In the Fresno area 25% of the population is Spanish-surnamed and 10% is Black. The number of working speech and hearing professionals in the area who are Mexican-American/Chicano or Black is minimal. The need for minority professionals is great. Large numbers of pre-schoolers are monolingual in Spanish. Some may have delays in language development. If they are delayed, the problem can be identified and remediated most effectively by a speech pathologist who is fluent in the child's first language. Older patients presenting aphasia, dysarthria,

post-laryngectomy and other voice disorders, hearing loss, etc. are often monolingual in Spanish and therapy must be given in that language to insure consistent reinforcement at home. Communication with patients and their families would be facilitated by cultural and linguistic ties between the pathologist and his/her clients.

Positions for speech pathologists are available in many parts of the state and certainly in Fresno and the surrounding counties. Each fall there are positions in some of the smaller cities and towns that remain unfilled. New opportunities are opening in hospitals, extended care facilities and community clinics to provide help for children and adults with communicative disorders. The demand for clinicians in private practice far exceeds the local supply. In summary, there is a need for qualified speech pathologists, especially those whose ethnic identification reflects the representation in the population of Fresno and the San Joaquin Valley.

The commencement figures for June 1973 indicate that 75 students received a B.A. degree in Communicative Disorders at California State University, Fresno and 23 received an M.A. Of those, one is Black and no more than two are Spanish-speaking. The need for recruiting and retaining minority group members in the academic major and preparing them for professional careers is apparent.

In response to this need, a pilot project was funded by the California Regional Medical Programs in November of 1972. The project provided student pay rates for two undergraduate minority trainees who were instructed in the basits of the profession and assisted in the delivery of services to two satellite clinics in a poverty area. The efforts were met with success. The trainees switched their academic

majors to Communicative Disorders, and the professionals and patients involved in the project offe ed encouragement and support. The pilot project pointed up the need for an expanded version so that more bilingual/bicultural trainees would have the opportunity to learn about Communicative Disorders.

On November 1, 1973, one year after the RMP pilot venture was initiated, the San Joaquin Valley Area Health Education Center (UCLA) awarded a grant to CSUF to develop a methodology for training speech and hearing personnel in delivery of services to the urban and rural poor. The one-year grant provided for a Project Director, a full-time Clinical Supervisor to instruct and supervise in an increased number of satellites, funds for 8 minority trainees, and a number of other items to enhance the training program.

Among the objectives outlined in the Master Plan for AHEC/ Communicative Disorders project were these:

> To develop a methodology for the education and training of bilingual/bicultural trainees for the effective delivery of speech and hearing diagnosis and therapy to the urban and rural poor.
>
> To implement this methodology through delivery of speech and hearing diagnosis and therapy to the under-served population in the community.
>
> To provide incentives for an increased number of minority students entering the Communicative Disorders curriculum with the long-range goal of becoming speech and hearing professionals.

IMPLEMENTATION OF PROJECT

Selection of Satellites:

One of the earliest tasks in getting the project underway was the selection of satellites in locations where services were not readily available. Two satellites had been served on a limited basis during the

year of the RMP pilot project. The first of these was John Hale Medical Center, a private physicians building which had become a neighborhood health center in West Fresno. The physicians and health-related professionals working in the center were mostly Black; the patients were Black and Chicano and most were welfare recipients. The physician that directed the center gave his total support to the project and contributed the use of a suite of offices for diagnosis and therapy. The caseload at Hale Medical Center was mostly pre-school and school-age children with a variety of communicative disorders. The second satellite which benefitted from expanded services following the beginning of this project was Fresno Westview Convalescent Hospital. At this facility, the caseload was completely in-patient and included aphasics, dysarthrics and adult retardates.

Three new satellites were selected for service. First, a rural center was established at the Sanger Scout House. The clients were primarily pre-school children from many small towns encircling Fresno and they were almost all either Spanish monolingual or bilingual. Hinton Community Center in west Fresno boasts a large hot lunch program for senior citizens and was thought to be a good site for serving this population. Both senior citizens and neighborhood children were able to benefit from the services offered at this fourth satellite. The fifth satellite and the one which provided the largest number of full diagnostic evaluations for the project personnel was Valley Medical Center. VMC is a large urban county hospital which serves significant numbers of poor people in an extensive geographic area in the valley. This was the one satellite at which the caseload was both in-patient and out-patient. The in-patients were primarily adults who

were post-surgical or who had sustained brain injuries following stroke, traumatic accident, or drug overdose. The out-patients were adults and children with a variety of communicative disorders including vocal pathologies, dysarthria, language delays and autism.

At all of the satellites there was frequent contact with the administrators of the facilities and with cooperating health professionals. In-service workshops were given at VMC. Lectures to large groups of senior citizens were given in Sanger and at Hinton. Conferences and staffings with physicians nurses, occupational therapists and social workers were often held.

Selection of Graduate Clinicians:

Graduate students in Communicative Disorders who had had at least one previous semester of clinical practicum and who expressed a desire to work in the community were selected for the project. The Department of Communicative Disorders cooperated fully in this opportunity for well-supervised off-campus practicum for its advanced students. The types of settings at the satellites, the variety of disorders, and the ethnic mix presented by the project provided valuable experience for the student clinicians. In addition, their interaction with the trainees and the supervisor at the satellites allowed them to operate in a team setting that was quite different from the clinical experiences encountered on campus.

Selection of Trainees:

The eight minority trainees were selected from the general undergraduate student body. The Education Opportunity Program office provided a list of minority students who were undecided about a major

field of study and who could work a maximum of ten hours per week for standard students rates. The prospective trainees had to be free either two mornings or two afternoons each week at the satellites in addition to being free from 12-2 on Fridays for the instructional sessions.

The qualifications for trainees were: that they be at least second semester freshman and not yet juniors; that they be interested in the field of speech and hearing; that they have either a bilingual and/or a bicultural background; that they have a reasonable grade point average (C); and that they be able to devote at least 10 hours per week to the program.

When the final selection was made, there were two males and two female native Spanish speakers from the Mexican-American/Chicano segment of the population, and three Black females and one Black male student. All trainees attended the weekly instructional sessions at which material related to speech and hearing was presented, clinical cases were staffed and questions were answered. The trainees were also assigned to work with clinicians at the satellites on a regular basis.

Although all eight trainees participated during the spring semester, only two were able to work on a regular basis during summer session. Most of the others left the Fresno area for more lucrative summer employment so that they could return to school in the fall with fewer financial problems.

Publicizing the Project:

Three major means of public relations were employed in order to notify the public of the expanded satellite services. First, letters

were written to the administrators of health and welfare agencies, minority church groups and community centers. The letters were accompanied by an information sheet suitable for posting. Letters were also sent to over 100 house staff physicians at Valley Medical Center.

A second means of publicizing the project was the posting of large signs in both English and Spanish at all of the satellites and in several other co y centers.

Third, a media release was developed and submitted to the campus Community Relations Office. Subsequent to this, the Fresno Bee, the Clovis Independent, the Reedley Exponent, the California Advocate, Grapevine, and CSU Fresno published the release in whole or in part. One of the trainees wrote an article for the EOP News which described the project. The California Advocate, minority press of the San Joaqu Valley, accompanied the article with pictures of the staff and clients and repeated the clinical schedule in later issues.

The satellite schedules were announced to Headstart and preschool personnel and to the speech and hearing departments of the city and county school systems. Phone calls and visits to hospitals, nursing homes, social workers and physicians in the county were also attempted to publicize the service.

The project concept was described to colleagues in speech and hearing and in other clinical disciplines at conferences sponsored by the American Speech and Hearing Association, the California Speech and Hearing Association, and the California S te University and Colleges Council on Clinical Personnel.

PRE-SCHOOL SCREENINGS

Although most public schools in the San Joaquin Valley have access to the services of speech pathologists, the pre-school population remains underserved. Pre-schoolers are often enrolled in Headstart or City Pre-school classes. If these are located at a public school, the school speech pathologist may be able to serve some of the children with communicative disorders. Generally, however, the school clinicians have enormous caseloads and are unable to accommodate children below first grade level. Other pre-schoolers are in private nursery schools, day care centers or at home. Their evaluation and possible remediation must be initiated by the parent who often lacks transportation or information about resources.

In an effort to provide the trainees and clinicians with an understanding of normal speech and language development, and with secondary goals of sharpening clinical skills in screenings procedures and in serving the pre-school population, the AHEC/Communicative Disorders project personnel agreed to screen over 1,000 pre-schoolers in poverty areas in the county. In-service workshops and small group conferences with administrators, teachers and nurses connected with the county Headstart program and with the city Early Childhood Education Department attempted to describe normal acquisition of language and to clarify the screening and referral procedures. (Appendix A)

Screenings were done by a team consisting of a supervisor, graduate student clinicians and bilingual/bicultural trainees. The pre-school administrators notified the classroom teacher of the scheduled visit and the teacher was asked to have name tags ready for the children. A corner of the classroom was selected, the tape recorder was

plugged in, and the teacher was asked to send over two children at a time. The children were shown a series of pictures and were asked to describe what was happening in the pictures. Most children responded elaborately; some needed prompting and/or modeling. Because no constraints were imposed through formal test procedures or through insistence on Standard English, the children could respond in their first language, the one in which they could communicate most effectively. A number of four and five word sentences of adequate complexity and variety were generated by the children and provided enough of a spontaneous language sample so that many aspects of communication could be assessed. When reportedly monolingual Spanish children did not offer a verbal response to either the English-speaking clinician or the bilingual trainee, additional informal means were employed. The trainees would take a short walk with the child in an attempt to elicit conversation. If that did not work, the Mexican-American Inventory of Receptive Abilit , (MIRA), a regionally developed vocabulary comprehension test was utilized.

A 5 x 7 card was kept for each child and it contained the name, the school, the date of screening and all language responses. The responses were also tape-recorded for possible future comparison. The trainees and clinicians had been trained in recording verbalizations and took turns eliciting verbalization and noting responses. All pertinent behavior was also noted on the card. . . voice problems, suspected hearing loss, apparent tongue thrust, developmental errors, dysfluencies, language dominance, teacher comments and recommendations. The teacher was consulted during and after the screening, was asked for input, and was given immediate feedback on the findings. Written reports were

sent to the administrator within a few days after the screenings. Each class took no more than 45 minutes to screen.

Trainee eliciting spontaneous language sample from pre-schooler in Headstart program

The results of the screenings indicated that most of the 1,000 children had adequate speech and language. These children were mostly poor and were from families receiving public support. The frequently stated findings that children like these are "nonverbal" or "deficient in language" was not confirmed in this population. In a typical pre-school class of 17 or 18 children, two or three were recommended for evaluation in greater depth. Of these two or three, at least one usually turned out to have adequate speech and language. (He/she might have been shy or resistent during the screening process.) No more than

one or two children in each class demonstrated an identifiable problem in the diagnostic evaluation that followed. Those that did appeared to have either a true language delay or deviation, or unintelligible speech because of multiple articulation errors, or a voice disorder, or noticeable dysfluencies. These problems occurred with approximately the same frequency.

Many screening attempts have limited usefulness because of the lack of follow-up remedial services. The AHEG/Communicative Disorders project remained committed to follow through on all children identified in the pre-school screenings. All were given the opportunity to undergo full diagnostic evaluation at any one of the five satellites. Those children for whom therapy was recommended were scheduled for twice weekly sessions. All services were free of charge. Frequent contact was made with pre-school teachers and administrators concerning individual cases and general integration of handicapped children into the classroom.

CLINICAL COORDINATION

Clinic at the satellites was conducted according to the basic procedures established for the Language, Hearing and Speech Clinic on campus. The graduate student clinicians were registered for a section of clinic, thus fulfilling academic requirements for the major and gaining hours of practicum for professional certification. Cases were referred either directly to the satellites or were channeled from the campus clinic to one of the sites. The referrals generally came from physicians, social workers, nurses. Often they were self-referrals when the existence of the satellites was publicized in the media or by word of mouth.

The Intake Procedures:

All individuals requesting help were given a clinical information packet. It contained a questionnaire form, a release of information form and media permission form for signature. (See Appendix B) The questionnaire form was generally filled out by the parent or guardian prior to seeing a child for a diagnostic evaluation. The form asked for information on past medical history, developmental history, speech development, and gave the parent an opportunity to express what he/she felt was the cause of concern.

A counterpart of this form was also given to adults seen for diagnostics. The pertinent information requested was for medical history, a brief statement of the problem, and dates and places of previous speech evaluation and therapy, release forms and permission to films, tape or photograph the client for educational purposes.

A file was made for the client and the records were kept in the campus clinic office under the control of the Clinic Secretary. The Project Secretary and Clinic Secretary worked closely together on integrating the clinical activities at the satellites into the university program. As the Project Secretary firmed up the clinical therapy schedule, she gave copies of the information to the Clinic Secretary for her records. All forms and correspondence utilized the California State University letterhead where the grant personnel maintained offices.

At Valley Medical Center, an additional record-keeping system had to be developed to conform with VMC procedures. The referring staff physician would send an order for an evaluation and subsequent therapy. An entry had to be made in the clients' medical charts with both date and description of goals and progress. These entries were necessary for

both in-patients and out-patients with clinic records at the hospital.

The Clinicians' Role:

In addition to performing diagnostic evaluation and therapy, the responsibilities of the clinicians included writing diagnostic reports, lesson plans, and final summaries for clients in therapy. (See Appendix B). When participating in staffings, the clinicians also shared in the responsibility of providing information to the trainees concerning individual cases and particular disorders. A limited amount of client and parent counseling was also done under supervision.

Diagnoses were generally performed by a team with one clinician assuming the responsibility of writing the diagnostic report. This report was turned in to the supervisor for editing no later than one week following the evaluation session. After final typing, it was sent to referring and other professional agencies with client release permission. (See Appendix C)

The lesson plan for a client enrolled in therapy was a detailed guideline and description of the goals of therapy and the activities necessary for the client to attain these goals. In addition to planning relevant activities using relevant materials, the clinicians developed home assignments for maximum carry-over. The initial summary was a statement of the client's status at the beginning of the semester. It was not sent out but was kept for later inclusion in the final summary. The final summary was the report that was completed at the close of the semester. This report, after indicating the status of the client at the beginning of the semester, gave a detailed account of the therapy procedures and progress. The final summary included recommendations that had been agreed upon by the student and the supervisor concerning the clinician

client and his particular situation. This report was also sent to authorized agencies that were designated by the client and/or his parents, as well as the referring agency. (See Appendix D)

Clinicians were evaluated by the supervisor (See Appendix E) and, in turn, assessed the quality of supervision (See Appendix F).

The Trainees' Role

The clinical responsibilities of the trainees were varied. They were called upon to act as cultural facilitators between the clients and the clinicians where variation in cultural behavior may have presented difficulties. The bilingual trainees were also interpreters for non-English speaking parents of clients, obtained language samples from monolingual Spanish children, and developed Spanish language therapy materials. The trainees were encouraged to ask questions of each clinician and to make suggestions in inter-personal relationships where this was applicable. The trainees were often called upon to record behaviors noted during diagnostic evaluations and to chart behavior during therapy. They assisted in carry-over drills of skills that had been established in therapy.

The Referral System:

After a client was evaluated, referrals could be made to other professionals. All voice cases were sent for a laryngological checkup with an accompanying examination form that provides helpful information for the speech pathologist. If a hearing problem was suspected, the adult or child was evaluated by one of the faculty audiologists at the campus audiological suite. Exchanges of reports and insights with other professionals were encouraged and, although initiated only by the Project Director or Clinical Supervisor, these were shared with the

trainees and clinicians. With the cooperation of a faculty audiologist hundreds of children were screened at the pre-schools which could not provide their own testing. Over 100 senior citizens were screened for hearing problems at Hinton Community Center. The results of both screening groups were sent to the administrator of the particular pre-school or community center.

CLINICAL DATA

The following represents the numbers of individuals seen as part of the AHEC/Communicative Disorders project. All screenings, diagnostics and therapy were done under the direct supervision of the Clinical Supervisor or the Project Director. Trainees assisted clinicians in all types of activities.

		Spring semester 1974	Summer session 1974
Pre-school Screenings		1054 children at 37 schools	0
Diagnostic evaluations			
Hale Medical Center		17	3
Fresno Westview Convalescent Hospital		6	4
Sanger Scout House		16	6
Hinton Community Center		9	2
Valley Medical Center		26	8
TOTAL DIAGNOSTICS	97		
Clients in regular therapy			
Hale Medical Center		13	12
Fresno Westview Convalescent Hospital		6	5
Sanger Scout House		3	7
Hinton Community Center		4	2
Valley Medical Center		9	11
TOTAL CLIENTS IN THERAPY DURING EITHER OR BOTH SESSIONS	55		

More than 15 of the clients seen for therapy and diagnoses were adults.

The children were primarily pre-schoolers or hospital in-patients. The diagnosis included the following:

Aphasia
Autism
Cerebral Palsy
Cleft Palate
Delayed Language
Dysarthria
Hearing Impairment
Laryngectomy
Mental Retardation
Multiple Articulation Problem
Parkinsonism
Stuttering
Vocal Nodules

TEAM STAFFINGS AND INSTRUCTIONAL MEDIA

On occasion, during the spring semester and once weekly during the summer session, clinical staffings were held. The staffings included the student clinicians, the Clinical Supervisor, the Project Director, and the trainees. Staffings were held to discuss various pathologies after the trainees had had a chance to observe first-hand, to outline goals for a particular client and to discuss the program of a particular client, in conjunction with a special method of therapy.

During the staffing the student clinician gave all the pertinent information concerning a particular client, ~~his~~ age, diagnosis, semesters in therapy, mediating conditions and ~~his~~ progress to date. The clinician

would also state the goals he wished to reach during the semester and his procedures for obtaining these goals, as well as his rationale for procedures. The trainee and the student clinician were encouraged to ask questions and to make suggestions concerning each client. Because the Clinical Supervisor was present, some procedures and goals were modified before therapy. The staffings gave the student clinicians and the trainees an opportunity to become familiar with all of the cases; those that they were personally involved in and those which they could observe occasionally.

Written into the grant was a provision for a media specialist. This media specialist went to the satellites to videotape screening, diagnosis and therapy. The student clinicians demonstrated some of the clinical procedures ~~that he was~~ being utilized at the time of the filming. ~~And~~ following this demonstration the clinician gave a brief summary of the client, ~~the~~ including diagnosis, ~~and~~ age, progress made and goals to be reached. These videotapes were shown during some of the staffings to provide a description of various pathologies and in some instances to point out the amount of progress made by a particular client and to demonstrate various clinical procedures.

The exchange of information in the staffings plus the observation of clinical videotapes maximized the learning experience for the trainees.

II. INSTRUCTION

The following lectures represent the core of the Friday instructional sessions for trainees. The lectures were given primarily by the Clinical Supervisor who also used videotapes, slides, blackboard and informational handouts to complement the presentation. The trainees asked many questions and, as the semester progressed, were able to relate pathologies to patients with whom they had had experience.

The content was meant to be very basic and uncomplicated, to take full advantage of the knowledge that the trainees had acquired in the process of growing up. It was hoped that they could learn the material in a relaxed and unpressured manner so as to motivate their interest in the pursuit of the major. Since the objective of the project was recruitment, it was assumed that more detailed coverage of the material would be received in the basic core course for which the trainees would register next semester.

ABOUT SPEECH PATHOLOGY

The Department of Communicative Disorders includes three majors: Speech Pathology, Audiology and Education of the Deaf. We are most interested in this particular project in recruiting you into the fields of Speech Pathology or Audiology. Our main focus will be on Speech Pathology although we will arrange later in the semester for visits to the audiology suites and perhaps talks by audiologists. Speech Pathology is the profession concerned with problems in communication. . . in speech and language.

Let's start with old age and work backwards. Many old people have suffered strokes or heart attacks and as a result have lost the ability to communicate normally. They may have trouble understanding

what is said to them or they may have trouble finding words. They are not stupid; they know what things are; but because of the damage to the brain, the ability to find the right words and to put them together in the right way has been impaired. For example, if you showed them a book, they might say "yes . . . I know that . . . you read it . . . it has printing. . . it has pages," but they will not remember the simple name, "book." As a result of this, many become frustrated and ashamed. As speech pathologists, we help them to improve their language skills and, at the same time, build their confidence and hope. Other senior citizens suffer muscle and nerve diseases that may paralyze some parts of their bodies. They have no trouble remembering words but their pronunciation is sluggish, slow and monotone and makes what they say hard to understand. Other older people become hard of hearing or deaf and we help them to preserve the clearness of their speech and also make sure they learn to read lips.

Children are sometimes born with birth defects. They may be mentally retarded. We work with the family and the educational institution to help them develop language skills to their fullest potential, so that they can take care of themselves and not become institutional cases. Some children have cerebral palsy and need help with improving their muscular coordination for speech, much like the old people with paralysis. Some children are born with cleft palate and require both surgery and speech therapy to have speech that is understandable. Some children are deaf or hard of hearing and need special help in learning speech and language skills and lip reading. Some children stutter. Adults too. With all the millions of words written about stuttering, it remains one of the big mysteries in our

field. We know no definite causes for it. It has been noticed that tension and stress seem to make it worse. Some people, however, live under the most stressful conditions imaginable and don't stutter. Others have a relatively easy time of it and do stutter. It remains a puzzle, but when a parent brings a child to us and asks for our help, we try to help. Some children have so many articulation errors that we can't understand them. They need our help too. And sometimes, little kids, for some unknown reason, do not develop with the speed and competency that as they should. Instead of talking your ear off in long sentences ~~like~~ as 4 or 5 year old kids usually do, they are still using one and two word sentences only and can't really put words together into phrases. They need the aid of a speech pathologist and need it quickly so that they can attempt to catch up with their peers in time for school.

Speech pathologists work with all of these kinds of problems, and then some. Speech pathologists work also in a variety of settings, in public or private schools, in university clinics, in community clinics, in hospitals, in extended care institutions, and in industry. Our services are necessary with old people, with adults, with college students, with school-age children, and with pre-schoolers. You can do clinical work with patients, or teach, or do research, or write, or any combination of these.

The profession has an organization, the American Speech and Hearing Association, which has upwards of 15,000 members. I think that about 250 of them are Black, a handful are Chicano. We have to change that situation, and I hope you are part of the change. The Association certifies qualified speech pathologists and audiologists with something

called the Certificate of Clinical Competence. You get it after you have worked for a year in the field following your M.A. degree. We encourage all of you to get the M.A. and work for CCC. Perhaps some of you will be motivated to get a Ph.D.! You can be a school speech pathologist in California without an M.A., but the credential that you need for it is about 3/4 of the way to the M.A. and we encourage all students to go all the way so that they have many job alternatives in the future. It is not an easy major but it is a marvelous one. Ask the students in it. They work hard and are thoroughly dedicated. A Communicative Disorders major will give you the opportunity to have a respected profession that will allow you to help peoples to change their lives for the better. And there are especially terrific opportunities for minority students and minority professionals.

It used to be that teachers in schools would send us all the Black kids and Chicano kids and tell us they have a speech disorder. We must develop our skills so that we can separate a real speech disorders from a language difference. Black kids and Chicano kids have a language reflecting their culture. It's theirs, it's beautiful and it is every bit as good as standard English or any other language. Most of these kids become bilingual anyway and learn the language of the power system. If they have real disorders, ~~like~~ such as the kind I described to you earlier, we must correct them. If they can rap and talk up a storm and be completely understood by their friends and family, they don't have a disorder. We have to find a way of letting others know that, a way that isn't hostile or nasty but helpful and informative. Everytime I want to chew out a doctor or teacher for what I think is a narrow

attitude, I remember that the child may be the one that bears the brunt of his resentment towards me . . . and I'm not about to make things tough for anyone because I have irritated someone. We'll talk more about all of these in later sessions.

OPPORTUNITIES IN THE DEPARTMENT AND THE PROFESSION

Susan J. Shanks, Ph.D. Department Chairperson

The curriculum in the Department of Communicative Disorders is undergoing much change this year. How have these changes come about?

In the past four years the interest in Communicative Disorders has been increasing. Graduates in Education have had problems getting teaching jobs, and therefore have looked for other fields to prepare them for employment. Thus, we've had to restrict the number of students coming into Communicative Disorders to the classes that can be offered. The State has also legislated credentials which are pending. Universities are preparing credential programs for approval for September 1974. Advising students has been difficult because the faculty does not know how many students could be accepted in the new program and exactly what the program would be.

We've been hesitant to enlarge our program too much. Manpower statistics indicate fewer Speech Pathologists, Educators of the Deaf and Audiologists will be able to find employment in ten years unless more opportunities for work become available. However, there is a definite need for minority speech pathologists, audiologists and educators of the deaf, to work with persons of all ages who have communicative disorders. The profession needs more minority qualified specialists. The community is demanding service for people of all social strata.

Many feel the minority graduate can work more effectively with the minority persons who need help.

Through the grant which is funding your instruction, the Department is trying to interest more minority students in our program and prepare for the community needs. The curriculum also must be revised to include information relevant to the minority population.

We are attempting to make these changes in the easiest way possible. The modification in curriculum has been difficult at times. By fall 1974, the new curriculum should be established.

How does the curriculum allow you to train for the Communicative Disorders profession?

Presently in California, the Ryan Credential, pending approval, will allow students to obtain jobs working with children having Communicative Disorders in grades K-12 in the schools. Graduates with an M.A. in Speech Pathology & Audiology follow a curriculum which prepares them for clinical work in hospitals, like Valley Medical Center and nursing homes like Westview. The sequence of courses students follow to be qualified for school and clinical work is similar. Ryan and clinical programs also prepare students for Headstart jobs. In the future a sequence of courses will also be planned for training Audiologists for School employment if a credential introduced in the legislature is approved. (See Appendix G)

How does the future of the Department and the profession appear in view of these changes? The growth in numbers of majors progressing through the department is limited but expansion in quality of education is definitely occurring. Because of more emphasis on prevention of

deafness and the already small number of deaf children needing specialized help, there will probably not be growth in the Education of the Deaf Specialization. However, more multi-handicapped deaf children are being accepted in schools and this new population may require an additional number of graduates to be educated in our program.

Additionally the number of Speech Pathologists and Audiologists specializing in the aging population is going to increase. Government money is going to be available in the future for more health care for all, and Speech Pathologists and Audiologists are hopefully going to be included in the health care team. We also see an emerging interest in the pre-school child. Local headstarts have not yet hired any speech pathologists. I think Dr. Meyerson and Mrs. Green are doing great things in terms of showing what the speech pathologist can do in Headstart programs. And we would hope that in Fresno there would be speech pathologists hired in City Early Childhood Education programs. The future in these areas seems bright.

How do you enter the program and work toward this future? You should first seek admission to the program and fill out an information form. Then make an appointment with the Department Admissions Coordinator as soon as possible to discuss admissions procedures and the sequence of courses which are included in the student brochure. The course curriculum, the choice of program, the School of Education requirements are all described in the brochure. The main prerequisite for admission is the desire to help people. But academic ability is also important. The Department wants to graduate the best possible

person to help people to communicate better during the future.

If this describes you, we welcome you to the program which is dedicated to excellence and service.

THE ACQUISITION OF LANGUAGE AND RELATED SKILLS

All animals can communiate, but only man uses language. Language is species-specific to man. By using language, man can talk about things that are not present. He has the capacity to say and understand things that he has never said before. He has the freedom to arrange the speech sounds into words. All children, regardless of where in the world they live, develop language in the same systematic way. Because language is acquired systematically, it is predictable. In the early years, the reception (understanding) aspect develops first and then comes the expressive or verbal aspect. At the same time the child is relating meaning with the speech sounds he hears in his environment.

Before the child uses meaningful speech there are stages that he goes through. From Age .3-6 months is a period of transition. The baby moves from helplessness to active manipulation and limited exploration of the environment. The baby develops at this time "touch hunger." He grasps, touches, feels and manipulates objects, and invariably everything that comes in contact with his hands eventually winds up in his mouth. He has mastered holding and turning his head, rolling over and sitting up with a support, by six months.

Between 5 and 6 months, babies begin to babble for their own entertainment. Deaf babies babble just as hearing babies do but stop because they can't hear themselves. There are several types of hearing loss, and they can be caused by hereditary, disease (chicken

pox, mumps, measles), birth defects, accidents or noise. Before the first birthday the child begins imitating and reproducing on his own the inflectional and melody patterns that exist in his environment. If you listen, you can almost hear him asking questions, giving instructions and fussing. The child also spends a large portion of this time babbling and crying. The sounds of contentment that baby makes are generally repeated back to the baby by the parents. The child with psychological problems may not repeat these comfort sounds back to his parents and may shut out any stimulation that he himself does not produce or control. Jargon is putting babbled syllables together so that they suggest language. Some children seem to get stuck here or to develop a language system all ~~his~~ their own. This sometimes happens with twins.

Between six months and one year the baby knows familiar people in his environment and is cautious with strangers. The child can now sit without support. He can move around by creeping on his tummy or crawling with his body clear of the floor. He likes repetition and will repeat activities for long periods of time (banging for example). He will imitate hand gestures ~~that~~ of adults ~~do~~ (waving bye-bye). At this time the baby is completing the transition from a horizontal to vertical orientation. The baby learns to walk without assistance somewhere between 9 and 15 months. He can also play such games as pat-a-cake. By the time a baby learns to walk he is no longer considered an infant, ~~but~~ and is then called a toddler.

Between the first birthday and 18 months true words develop. The baby uses these words (mama, milk, up) consistently, knows what

they mean and the response that they will bring when uttered. The first words may be delayed in appearing if the child is permitted to gesture and possibly grunt for what he wants. The first sounds usually produced are /m, b, p, k, and g, h, w/ as well as all the vowel sounds.

By the second year of life the child's receptive language is such that he understands statements and can follow simple directions. He learns names of objects and asks "what's dat?" Expressive language develops too and the child learns the names of a great many objects. Between 18 months and 2 years, the child starts stringing 2 and 3 words together to form a "sentence." He has mostly nouns, some verbs and some adjectives in his expressive vocabulary which numbers approximately 250 words at age 2. The "terrible two's" may be marked with negativism and rebelliousness. The child is beginning to assert himself. He may become domineering and demanding.

At age 3, all of the child's previously learned language skills are improved. The child increases in his ability to understand more complex things. He has more words that he can readily use and more complex ways of joining the words together. At age 3 the other parts of speech are added to the child's existing language system. Most linquistic abilities are firmly established by 36 months of age, and only refinements of grammatical structure and pronunciation, which may be dependent on physical and mental maturation have to be added.

A three year old may have an imaginary playmate which may be with him for a while.

By four, real friends become important and he plays cooperatively with other children. He can assign roles and take turns. Bragging and

name-calling is an important part of language. The child learns that the use of "naughty" words upsets his parents and he may use them constantly.

The five year old is reliable, stable, and well adjusted. He finishes what he starts and works with a purpose. He can obey rules and has good coordination and control. He has developed laterality (handedness). The child can control his impulses and has learned to separate somewhat easily ~~form~~ from his mother. At this point the child is ready for school.

A rough index of what is to be expected of pre-schoolers' language use is that by 3 years, the child should use 3 word sentences, by 4 years he uses 4 word sentences, etc. Average length of the child's sentences is not the total consideration. The complexity of the constructions the child uses is also important. A sentence in which a child only names objects ("that's a doggie, and a glasses and a boy and a hat and a stick") is less complex than one in which abstracts are used, "I think they gonna eat the fish." Naming is the least complex type of verbal communication.

Many pre-school children have difficulty producing some of the consonant sounds particularly /r, s, l, tʃ, ʃ, ʒ, z, θ, ð/. These sounds generally require more complex, refined muscular movements.

By age 7 ~~usually~~ these sounds have become corrected usually without any assistance. If not, ~~then~~ the services of a speech pathologist are necessary.

A child may be referred to a speech pathologist before age 7, however, if he is not developing language as well or as quickly as he

should, or if his speech is unintelligible. In cases where a child has an organic defect such as deafness or cerebral palsy the speech pathologist can begin work as early as age 2.

BILINGUAL/BICULTURAL CHILDREN

There is not a whole lot that any of us can tell you about being bilingual/bicultural. You've been living that sometimes exciting, sometimes confusing state all of your lives. It is important however that you have some information on the theories expressed about bilingualism and the practical implications for the children with whom you work.

Cutlure is really our total environment. Everyone has a culture. No one culture is any better or worse than any other culture. Language reflects culture. Different cultures will have different languages or different varieties of the same language. Because cultures are different, you can conceivably talk about culturally different children. You cannot, should not, use the terms culturally disadvantaged or culturally deprived or culturally deficient. Someone would have to be raised in a vacuum to be without culture.

The differences between languages and dialects are rather fuzzy categories. It appears as if they are determined by political rather than linguistic factors. For example, the Swedish language and the Danish language are so similar that Danes can understand Swedish television with no instruction in Swedish. On the other hand, the dialects of Chinese (for example Mandarin or Cantonese) are so different that a speaker of one could not ever understand the other without prior instruction.

Different dialects or different languages will show divergences

in vocabulary, in grammar or syntax, and in phonology or sound structure. In addition, there will be differences in rhythm and inflection and in the nonverbal communication skills, the body language.

Children arrive in school with skills in their mother tongue. The mother tongue may be Standard English or it may be Black English or it may be Chicano English or any number of other possibilities. If the language that they speak and understand is ridiculed, it will be very difficult for them to grow up with positive feelings about themselves or the educational experience.

Some feel that all children should be allowed to function in whatever language they speak, that the school should accomodate to regional dialects. Others feel that all children should be required to learn the standard of the country. Most of us have mixed feelings about it. Although a truly pluralistic society would allow complete individual determination, the current power structure requires that Standard English be learned to succeed in school and in the professions. Perhaps the more bilingual/bicultural students that are willing to play the power game now and "make it," the more likely it is that they will be able to change structure and values in the direction of pluralism in the future.

One thing is certain. Even if it may be advisable at this time to learn Standard English as a second language or dialect (and most of you have managed that with not much trouble), your first language should never be denied. Children should have help in developing their skills in communicating whatever way they communicate best.

Black English is a term to describe the code that most Blacks

in the United States use all or some of the time. The linguists have traced its roots to the West African languages. The basic sound and grammatical structure of some of these languages were brought by the slaves. In time, English vocabulary items were laid on this structure. Chicano Spanish or English exhibits the same characteristics. . . the basic structure of Spanish with English words fitting into the model. This kind of fusion of elements in different languages is a natural linguistic occurrence when two languages "get together." Much of Standard English has been historically derived from mixtures of languages.

When someone attempts to speak a second language or dialect, the features of his first language show their strength and interfere with performance in the second language. This process is called linguistic interference. . . and it occurs whenever we try to pronounce something in a language that is not familiar to us. Although speech pathologists are not generally in the business of teaching English as a Second Language classes, in areas where there are no specialists, they may be called upon to do this. We should know enough about bilingualism to give in-service instruction and advice to the teachers so that they can add this element to their language arts programs. We also need to know as much as possible about the language and culture of our clients so that we can separate language difference from language delay or deviation.

We mentioned the fact that many standardized tests are meant for Standard English/Mainstream American Culture children and, as such, penalize culturally different children. They may indicate how well

or how poorly a Black or Chicano child does in Standard English, but they can in no way measure the child's intelligence or his ability to operate in his own language. We therefore need to know cultures, tests, disorders. . . in short, be extremely competent professionals, so that we can fairly evaluate children and remediate what may be true problems. It may be criminal to label a child as retarded or delayed just because he does badly on a standardized test. It is just as bad to ignore a child from a monolingual Spanish family because of assumed linguistic difference when the child truly has a serious language delay.

The presence of increased numbers of qualified, capable minority speech pathologists will result in all speech pathologists doing their jobs better.

STUTTERING

As children develop language and speech, they may exhibit what we call dysfluencies. This often happens at around age 3. Children will repeat sounds or words or phrases. Dysfluencies are normal occurrences. We have all had them as children and we have them as adults. We don't think of ourselves as stutterers. Some children however seem to get progressively worse and have more trouble communicating. The reason why some stutter and some don't is not clear. . . in spite of the volumes of research that has been done on the topic.

Stuttering (it is also referred to as stammering) is an abnormal initiation of speech sounds. It can also be described as a disturbance in speech flow. It includes hesitation or blocking of a sound before it is uttered, repeating a sound again and again, or prolonging a sound

beyond a reasonable duration. Sometimes it is accompanied by visable struggle reactions such facial contortions, head and shoulder tics, arms movements, etc.

It has been said that stuttering rarely occurs when singing or when speaking in a choral group, or when speaking in rhythm with a mechanical beat like a metronome, or when swearing. It seems to get worse in situations of fear and stress and exhaustion.

Some experts feel the cause is organic; others feel it is the result of pressures in the environment. More males than females stutter. . . but we don't know if that suggests an organic cause (i.e. something in male genetic makeup that makes them more vulnerable) or in child-raising practices. There seems to be so much variation in the kinds of families that stutterers come from, it would be hard to blame either a repressive upbringing or a permissive one. There are no real differences between stutterers and non-stutterers except for the fact of their stuttering.

For stutterers, the problem is a real one and the methods of therapy vary. Some clinicians use behavior modification (operant conditioning) techniques. Others use psychotherapy. Rhythmic devices to control timing of speech have been utilized. Other machines that introduce either a masking noise or a delay in feedback seem to help others control their dysfluencies. Many stutterers experience a tremendous reduction of symptoms and have virtually no problems as adults. Others maintain stuttering behavior in spite of a variety of therapy procedures over the years.

When we see children who have been labeled as stutterers, we

often note that they also have articulation and language problems. We look at each individual and determine whether to recommend therapy and, if we go ahead, what our target should be. We usually suggest that the parents avoid telling the child to slow down or start over again or think before ~~you~~ speak. In other words, we recommend that the pressures to communicate without dysfluency be removed and that the content (the what) of the child's conversation become more important than how he says it. Older children and adults are treated by speech pathologists in both individual therapy and in groups.

The letter that follows was developed as a handout for the many parents that came to the project satellite centers expressing concern about stuttering.

A LETTER TO PARENTS WHO ARE CONCERNED ABOUT STUTTERING

What stuttering is:

One of the problems that mothers often ask about after their children learn to talk is stuttering. We all have known someone who is an actual stutterer or calls himself a stutterer. What exactly is stuttering? Stuttering is thought of, by most people as delaying or stumbling when talking. This is partly right. Stuttering sometimes involves twisting of the face to help force the words out, a disruption of the breathing process, prolonging sounds so that the person can ease into words, and chopping up speech. Stuttering can also act on feelings, and go along with fearfulness about speaking. If the child thinks he is a stutterer and also thinks this is unnatural and troubles his listener, he will be very anxious and concerned about his talking. A child who repeats sounds in words or parts of words and is not worried

about it is not stuttering.

All of us have trouble talking at times. It is not unusual to forget something and start all over or even to repeat until we can think of what we intended to say. Some repetitions, in fact a large number, are very normal. A child repeats for a number of reasons. He may be trying to stress a word, or he may be searching his mind for a particular word. A child should know it is alright to say he is angry or troubled or afraid by hearing the parents say these things. Repetitions may just be his way of playing along, doing the same thing or making the same sound over and over.

Your reactions to the child's speech hesitations will determine his reaction to them. The child will be bothered if the parents are bothered. We still don't know the real cause of stuttering. Being frightened or being tickled until a child can talk probably does not directly cause stuttering. Changing handedness in a child probably does not cause stuttering, but it does make the child feel that there is something wrong with him that he has to change, and this could add problems.

For parents who stutter, you should be assured that stuttering is not probably heredity. The attitudes, feelings and reactions of the parent and the relationship between the parent and the child is more important than whether or not you stutter. The child learns that not all adults talk perfectly all the time and from you he can also learn you don't have to be upset about it.

How stuttering begins:

There are some signs that stuttering is beginning. These signs are:

(1) the child shows obvious speech hesitancies.

(2) he begins to avoid talking and becomes very shy.

(3) he begins to speak with effort and strain, where he has once said things easily.

(4) he repeats sounds or syllables or draws sounds out more often.

(5) he begins to appear helpless and unable to go on talking.

What can be done:

There are some things that can be done to remove pressure from the child. These are:

(1) make your expectations of the child realistic.

(2) give the child opportunities to express himself.

(3) strengthen the child's confidence in himself.

(4) try not to show impatience or irritability with the way he talks.

(5) try not to interrupt or plead with him to stop stuttering.

(6) don't ask him to repeat.

(7) don't ask him to talk without stuttering.

(8) listen to what he says; not how he is saying it.

If the stuttering does not stop in a short time, ask your doctor to recommend a speech clinic. If your child is in school, check with his teacher.

The American Speech and Hearing Assocation can also provide the location of clinics and clinicians. The address is:

American Speech and Hearing Society

9030 Old Georgetown Road

Washington, D.C. 20014

CLEFT PALATE

Sometime during the first 2 months after conception, the basic tissues for the face and mouth are formed in two parts and then fuse together at the midline. Most of us are born with in-tact fusion and with symetry of our faces. Still, you can notice the midline meeting in the cupid's bow of the lip, in a cleft chin, in our midline nose. If for some reason there is failure of fusion during the first two months of pregnancy, cleft lip and/or palate will occur. Why would fusion not take place? Well, perhaps there is just not enough growth potential of the tissue. Perhaps the tongue presses up and prevents fusion, perhaps there is wrong timing. . . by the time the two shelves get together, they are too far apart. Anyway, something goes wrong and we have the condition which you can see in the pictures that we have distributed. Why does it happen? Well, we don't really know.

Project Director and cleft palate child at urban medical building satellite.

About 30% seem to have a family history of cleft and we could say that it is hereditary. Most others have no indication in family history that this is hereditary. We have suggestions that the cause might be drugs or viruses but we just don't have the answer as yet. At any rate we know that the incidence in the U.S. is about 1 in 750 and that it's incidence varies in ethnic groups (~~i.e.~~ eg. more in Japanese, less in Blacks).

It is a pretty shocking and scary thing to happen to parents. Most of us have never seen a child looking like this . . . because, happily, most of these are repaired and look alot better while they are still young. For the new parent, though, a great deal of counseling is necessary so that they will understand the possible causes and reduce their own confusion and guilt. They also need to know that with modern surgical techniques this awful looking birth defect is a relatively unimportant minor nuisance in most adult cases. The majority of these children grow up bright, content, adequately attractive looking . . . unlike some other really serious birth defects with long-term problems.

Nevertheless, those early months are pretty tough. The child with cleft lip only doesn't have too many feeding problems, . . perhaps some getting a good seal around the nipple . . . but the child with cleft palate or both cleft lip and palate has more of a hassle. Since the separation between the mouth and nose is missing (that's the cleft), milk would shoot up and out the nose without special feeding techniques and special care. Another problem is that the entrance to the Eustachian tube lies just above ~~of~~ where the palate ought to be. This Eustachian tube leads to the middle ear. Because of a general lack of tissue and

an anatomical deformity, this Eustachian tube will usually not work properly and the middle ear will be subject to many infections. Cleft palate children do indeed have chronic ear problems that certainly cause transitory hearing loss for the period that the middle ear is filled with fluid or pus and sometimes permanent hearing problems. Children born with cleft palate can also expect dental problems. . . missing and excess teeth, poor occlusion, etc. Some children with cleft palate have other problems. . .congenital heart ~~anolomies~~ anomalies, retardation, club feet, etc, but many do not have additional problems.

Surgery is begun at 3 months when the lip is closed. Surgeons wait a bit longer for the palate so that maximum growth can be achieved. The palate is usually closed at 18 months. The purpose of the lip closure is primarily cosmetic, but palatal closure is for improving speech. Why does the cleft palate affect speech? Well, the name of the game is velopharyngeal inadequacy. In English, only 3 sounds /m, n, ng/ are produced with the nasal cavity open into the oral or mouth cavity. You can feel the vibrations in your nose when you say these sounds. . . as opposed to when you say other, non-nasal sounds. For everything else, the soft palate or velum smacks up against the back of the pharyngeal wall or throat, to close off the mouth from the nose. This allows us to speak without excessive nasality and it also allows us to build up enough air pressure to make sounds like /p, t, k, s/. . . which we couldn't do if the air shot out of our nose.

Now, with a cleft, there <u>is</u> no soft palate to work. Therefore, the surgeons attempt to construct one. Usually it is successful and the person sounds quite normal. Sometimes however the surgeons may

close the palate. . . but the muscles of the palate don't work to lift it to smack up against the back of the pharyngeal wall. . . or there may be too much scar tissue for it to work properly. . . or there was so little to work with that the palate is still too short even after repair. The velum doesn't smack up against the pharyngeal wall and you have velopharyngeal inadequacy. Air comes through the nose during speech and cannot be impounded for certain sounds. It is as if the front door is jammed in an open position and all the warm air keeps escaping. Now, let me try to demonstrate what happens in speech. First, there is hypernasality . . . this is a feature of vowels . . . we listen to the vowel sounds and they sound nasal. They shouldn't be nasal in English . . . French has a few but not English. Second, there is nasal emission, air coming out of the nose when it shouldn't. Most serious is a feature we call gross substitutions and it is here that sounds which need impounding of air are substituted with strange, hard-to-correct non-English sounds usually made at the level of the larynx or pharyngeal wall. We call the one at the level of the larynx a glottal stop. . . the vocal folds snap shut tightly and a kind of a non-sound is substituted for the /p/. These are the most serious problems brought about specifically by the cleft palate. If, after surgery, these problems still persist, other surgical procedures are attempted to help correct it. Sometimes, a prosthesis (artificial palate) is placed in the mouth to cover the cleft and facilitate palatal movement. Many cleft palate individuals need speech therapy in addition to these procedures.

Children with cleft palates also demonstrate all the problems that children without cleft palate might have. . . hearing loss,

stuttering, developmental errors (slow in acquiring all the sounds of English), and sometimes language delays which slow down their ability to put words together into sentences. It has been said that cleft palate children have more of a problem with language development than non-cleft-palate children. We don't know why. Perhaps it is their early unsatisfactory feeding experiences that slow them down a bit. Perhaps it is the trauma of frequent hospitalizations, and separations from parents, and pain. Perhaps it is the come-and-go hearing losses that they sustain. At any rate, the parents must be counseled so that they can know what to look for, who to go to if there are problems, how to give maximum stimulation at home. In many cities, cleft palate parents groups are forming. We have one here at Fresno operating out of Valley Children's Hospital.

There are other problems related to facial structure that might occur. A submucous cleft is when a division in the bony part of the palate is hidden from view by the mucous membrane covering. The palate doesn't look cleft but the problems in adequate movement are the same as for a very apparent cleft palate. Sometimes the jaws are not in proper occlusion and this may affect speech. If the mandible (lower jaw) protruded so far out over the maxilla (upper jaw), it would be difficult to put lips together for a bilabial sound like /p/. Surgery can remedy this condition but speech therapy is often needed to counteract habits that no longer need to be sustained.

Some children are born with no tongues (aglossia) or tiny tongues (microglossia) but miraculously can learn to compensate and speak fairly well. Mouths can be too small or noses obstructed. In

later life, parts of the face can be missing because of cancer, surgery, or traumatic accidents. In all the instances, the speech pathologist combines talents with surgeons and dental specialists so that clients can obtain the best possible speech and adequate physical appearance.

CEREBRAL PALSY

Cerebral palsy can be defined as paralysis or motor difficulty due to a lesion of the brain. From the speech pathologist's view, cerebral palsy covers any condition which results from damage to the central nervous system before the age of language learning which results in some problem in motor function.

Cerebral palsy is generally considered a birth defect, but it can occur any time from conception to age 6. It may occur prenatally (before birth) because of genetic imbalances or diseases suffered by the pregnant mother. It may occur during a difficult birth when the oxygen supply is cut off (anoxia). It can also be caused by diseases in early childhood such as meningitis. Cerebral palsy can range in severity from mild, nearly unnoticeable impairments to impairment so severe that the person requires help from others for even the activities required for daily living. Some cerebral palsied children go to regular classes and have few problems -- perhaps one weak arm. Others are in special classes or are institutionalized. As adults, many lead normal or near-normal lives; others spend their days completely dependent upon others.

Cerebral palsy can be classified according to the part of the body that is affected. Motor disability can affect one limb or any

combination of limbs: one limb (monoplegia), two limbs (diplegia), both legs (paraplegia), one side, that is half of the body (hemiplegia), three limbs (triplegia), all limbs (quadraplegia).

The infant is born with many reflexes that are primitive. As the nervous system develops the reflexes become more and more complex. The basic reflexes are still present in the cerebral palsied but because of brain damage higher neural centers cannot adequately control the lower neural centers and these babies retain primitive reflexes long past time. For example, whenever the mouth is stimulated, sucking movements begin. If this maintained, it seriously interfers with speech.

There are several major types of cerebral palsy. Spastic cerebral palsy is characterized by tightness and paralysis. In speech, many of the muscles needed for breathing and speech will be affected.

Athetoid cerebral palsied individuals display involuntary movements that accompany purposeful or postural movements. The athetoid is in constant movement with arms and legs flailing all over the place. In speech, these involuntary movements come at the wrong time in breathing and in phonation and interfere with intelligibility.

Because one part of the brain, the motor part, has been damaged it is not unusual to find other problems. Cerebral palsy can also be associated with impaired hearing, impaired vision, orthopedic defects, convulsions, perceptual difficulties, mental retardation, dental anomalies, and emotional problems.

Treatment of cerebral palsy generally incorporates a physical or occupational therapist and a speech pathologist if one is needed.

Exercises are done by the physical or occupational therapist to strengthen muscles and to improve balance. Some children with cerebral palsy require special school placement due to the wheelchair or braces that they may need to be ambulatory (able to walk).

The prognosis for a child with cerebral palsy is dependent on two things. The first is intelligence and the second is the extent of the paralysis. The lower the level of intelligence and the more generalized the paralysis, the less favorable the future progress.

VOICE PROBLEMS

Voice problems are usually related to the way that the vocal cords function. The vocal cords (also called vocal bands or vocal folds) are made up of muscles and ligaments in the larynx. They can snap shut and valve off the air flow from the lungs. When they are relaxed and air is expelled from the lungs they vibrate and produce sound or voice.

A bad cold can irritate the cords and result in laryngitis. However, when the voice is constantly hoarse or husky, the speech pathologists suspects an organic disorder; that is, there is something wrong with the vocal cords that needs attention. A vocal nodule, for example, is like a corn or callous and seems to be caused by excessive friction or impact of the cords. Nodules, if left untreated, generally increase in size. The voice sounds weak and husky and breathy. Extra effort is needed to produce voice and this extra effort results in hoarseness. Usually the client with vocal nodules is instructed by his doctor to have them removed surgically; the patient is advised to have a period of vocal rest where there is to be no phonation; and speech therapy to learn new habits of phonation. Vocal

relaxation is especially difficult to maintain in children!

Contact ulcers are sores that occur at the ends of the cords. These ulcers occur most frequently in men and very rarely in children. The voice sounds hoarse, weak and husky. The treatment consists of vocal re-education. Changes in the person speaking environment should be made so as to reduce the amount of strain necessary for verbalizing.

Vocal cords can be paralyzed because of injury or disease. The voice is very weak. The speech pathologist needs to evaluate how much is possible without strain in ~~spite~~ view of the problem.

Laryngectomy is the surgical removal of the larynx, including the vocal cords within it. The surgery is performed to prevent the spread of cancer discovered in the larynx. The first symptom of cancer of the larynx may be persistent unexplained hoarseness. Other symptoms are quick fatique of the voice; an inability to clear the throat; a feeling of dryness or rawness in the throat.

After removal of the larynx, a speech pathologist is generally called upon to teach the person a new means of speaking without vocal folds. Esophageal speech is the production of speech using air that has been trapped in the esophagus. Vibration in this case is caused by the sphincter muscle located between the esophagus and the throat. The tone that is produced is low in pitch and is generally weak at first, but can be strengthened.

Generally esophageal speech is the most intelligible and least distracting mode of communication that a laryngectomized person can use. The artificial larynx is an appliance that can be used by persons who for some reason do not learn esophageal speech. The electro-larynx

is a battery-operated vibrator that is held against the throat or the cheek while the person mouths the words he is saying. The tone of the electro-larynx is louder than esophogeal speech. However it does not allow you to use both hands while talking.

Clinical Supervisor and adult laryngectomy male at neighborhood Community Center

Sometimes speech pathologists assist in cases where voices are too high or too low in pitch. They may also be called on to determine whether loss of voice is due to organic pathology, or to emotional trauma. Some people that have suffered real upheavals in their lives "lose their voice." Teamwork with psychiatrists and psychologists is needed in resolving this problem.

APHASIA

Aphasia is severe impairment of established language functions due to trauma to the brain. It most commonly follows a cerebral vascular accident (stroke). Other types of traumatic brain injury following an auto accident, for example, can also result in aphasia.

The language deficit is characterized by reduction of available vocabulary, poor auditory retention span, impaired production and reception of messages. Reading, writing, and speech can all be affected. ~~Perservation~~ Perseveration, or the repetition of something such as uttering a word, can occur.

Spontaneous recovery can take place during the first 6 months after the onset of the trauma. During this period some impaired abilities seem to get better without any professional help. This is due to a decrease in the amount of edema (swelling of the damaged tissues). Direct language training is most effective within the 1st and 2nd months after a cerebral trauma. It is necessary to give the patient and the family psychological support through the relationship with the speech therapist and active involvement in constructive pursuits.

The prognosis is determined by the degree of brain damage, the age of the patient and the pattern of disabilities displayed. Young people with traumatic injuries to the head who start training early have a more favorable prognosis than older patients who have delayed in starting training. Sometimes we see patients who have been aphasic for many years. Although recovery is slower it may still occur. Therefore, we should attempt working with all patients in the hopes of some positive change in their communication skills.

Since aphasic patients may also be paralyzed, there is frequently close cooperation with physical and occupational therapists. Physicians too must be consulted so that risks to the client are minimal. Just as we spoke of the development of receptive and expressive abilities in the development of language in children, so we must consider deficits in these areas following brain trauma. Some aphasics have most problems in receptive skills, others in expressive and some have a mixture of deficit. In planning for therapy we must be very careful about selection of materials that are relevent and that are adult in nature. Special tests for the identification of skills most likely to be affected help us to see where the gaps are. We reestablish a basic vocabulary and go on to the more complex syntactic structures of speech. The client must be able to indicate understanding of vocabulary items, must be able to repeat verbalizations, and then must re-learn correct formulation of verbal expression. . . with the right words in the right grammatical order at the appropriate time.

People with aphasia suffer great embarrassment and loss of self-esteem. They functioned in a variety of roles before their stroke or accident. Now, they have trouble finding the word for a common object. It is critical that we recognize that they are still intelligent and aware of their surroundings. We must empathize with their feelings of frustration and be careful never to behave in a patronizing manner.

Although we generally think of aphasia as impairment occuring after language has already been acquired, some professionals diagnose young children as having developmental or congenital aphasia. These children are neither retarded nor autistic nor deaf but it is suspected

that they present evidence of brain damage that interferes with the ability to acquire language. Aphasic youngsters have problems with perception. . the ability to organize, compare and assign meaning to things in the environment that are heard or felt or seen. The children also demonstrate distractability, perseveration, and hyperactivity. Intensive language therapy is usually recommended.

DYSARTHRIA

Dysarthria can be described as weakness, paralysis or incoordination in speech because of damage to the brain, the nerves leading from it, or the muscles which are responsible for the movement of the speech mechanism. It sometimes occurs in people who have had strokes or traumatic brain injuries. It is not like aphasia in that it does not affect language, but rather the act of speaking. In other words, the patient does not have trouble finding the word, just pronouncing it. Often, dysarthria and aphasia go together because of the proximity of the areas of the brain responsible for language and for movement.

Other kinds of problems result in dysarthria as well. Cerebral palsy is referred to as childhood dysarthria. Polio acquired in either childhood or adulthood can result in paralysis of the speech mechanism and dysarthria. Many adults develop a progressive condition known as Parkinsonism. They appear very rigid, move slowly and have a persistent tremor. They also become increasingly more dysarthric as the disease progresses. People with multiple sclerosis or muscular dystrophy or facial nerve paralysis may also be dysarthric.

When a client is dysarthric his articulation may be slurred and imprecise because of the paralysis. He might have trouble closing his

lips for the bilabial sounds or maintaining a smooth flow of air for /s/. He might sound hypernasal because of paralysis of the velum and the resulting air escape thrugh the nose. Some post-polio clients that have velar paralysis, for example, sound like cleft palate patients. Voice quality in dysarthria may be harsh and strained, or breathy and weak. The patient may not be able to vary the pitch level or the loudness level and the stream of conversation may go along without any inflectional variations. This makes speech very difficult to understand.

In evaluating these speakers we must be aware of the limitations based on the physical involvement. There is just so much we can do if the paralysis is extensive. We need to test for the extent of motor control of the speech musculature . . . how well the patient can move his tongue, how fast, how smoothly and how far. Therapy focuses on doing the most with the abilities that remain and giving the client speech that is as clear and intelligible as possible.

In diagnosing dysarthria, we need to differentiate it from a problem called apraxia. Apraxics do not have paralysis or weakness or incoordination of the muscles of speech. But they often sound as if they do. Sometimes their speech production will be normal. The kind of damage that they sustained has resulted in difficulty in motor formulation for speech. The articulation errors are inconsistent, movements are sometimes uncontrollable, and the problems get more serious as the words get longer. The patients speak slowly and in an exaggerated fashion in an attempt to avoid slurring. As with dysarthria, apraxia can occur along with aphasia.

AUTISM

Autism is a serious form of mental illness in children. The

cause remains a puzzle although some experts have blamed disinterested mothers and others have said there may be some brain disturbance inherited at birth. As infants, autistic children are often described by the parents as "self-sufficient", "in a shell", "happiest when left alone", "acting as if people weren't there." They show the following kinds of behavior: abnormal interpersonal relationships; lack of eye contact; limited emotional attachment to the parents; little or no variation in facial expressions; the child does not join any group activities; shows little emotion; and ritualistic and compulsive behaviors. Autistic children are also generally thought to display delays in speech and language development.

Autistic children have a good relation to objects in that they are interested in them and can play happily with them for hours. Some develop speech and language; others never speak. Many autistic children have been found to have excellent memories for block designs and rote memory tasks. For example, after several days they are able to rearrange blocks in precisely the same unorganized manner. They seem intelligent in some ways and severely retarded in others. They are very difficult children to care for.

In the treatment of speech and language disorders in autistic children, behavior modification techniques are often used. The clinician rewards any attempt at speech with a pleasant stimulus. The rewards are then given only for closer and closer approximations of correct words.

ASSESSMENT OF SPEECH AND LANGUAGE DISORDERS

In assessing the adequacy of speech, we are looking at its effectiveness in communication. The speech pathologist's purpose in

assessing a client's speech or language behavior is to describe and to observe behavior. There are a number of ways of gathering information. These are standard tests, case histories, and informal or non-standard tests. The purpose of administering any test to a client is to accurately report a behavior ~~quantatively~~ quantitatively (how much or how often it is observed). In a case history, a second method of gathering information, the client or an informant who knows the client supplies information about the client. This can be a parent or guardian or nurse or other professional. The one serious drawback with this method is that recalling information from memory is extremely unreliable, generally.

In assessing any client, the clinician has in mind three objectives. The first objective is to determine the nature and severity of the speech defect. The second is to determine a prognosis, how much improvement can be realistically expected. We can aim for improved speech for a severely cerebral palsied client but we would not expect perfect speech. The third objective is to determine and plan appropriate therapy. There are various aspects of communication that can be assessed. In examining the client's language behavior there are a number of parameters to be observed. Vocabulary is the number of words a person can not only recognize visually or auditorily, but also the number of words he can use correctly in spoken or written communication. Syntax or grammar is the usable knowledge of how language works. There are various kinds of tests designed to give quantatative data on these parameters. Vocabulary tests are usually administered by having the child make a selection or choice from a group of possibilities after the examiner has said the word that is to be tested. A certain number of

words must be in the vocabulary if the child is to express an idea verbally, but there is no certain list of words that the child must have. Language comprehension and language usage tests measure the child's ability to assign meaning to linguistic symbols and to rearrange symbols in order to sequence them. Informal measures such as the average length of response judges social maturity and gives a starting place for work in therapy. Language tests are needed for those with brain injuries or retardation or for children that appear to be delayed in language development.

Clinician evaluating child with multiple articulation errors at county hospital out-patient clinic

Just as language shows the "what" is spoken, articulation indicates the "how". It is what is often called pronunciation. Articulation is sometimes defined as the manipulation of the breath by the tongue, teeth, lips and the resonators. Articulation tests measure correct production of sounds or words in isolation or in context. Children and adults that appear to have trouble pronouncing or whose speech is not clear are recommended for articulation tests.

Speech related abilities such as respiration, phonation, orofacial structure, motor skills and sensory perception, learning abilities, personality and environmental must also be observed and assessed since they are all involved in the communication process.

In assessing new clients (we also call it diagnosing or evaluating) we get a case history and also try to obtain medical, educational and psychological reports compiled by other professionals. Each client has many facets -- strengths or weaknesses that may affect the therapy process. Often we engage the client in spontaneous conversation or ask him to tell us what's happening in a picture. Listening carefully to his running speech gives us an indication of his language, articulation, fluency, voice, etc. If one or more of these features is in question, we can give him any number of standardized or non-standardized tests to quantify his performance. In addition to the language and articulation tests, we mentioned there are special tests to measure comprehension, verbal, reading and writing skills of the aphasic. There are ways of recording the number and kinds of stuttering blocks, the quality of voice, the ability to move the speech musculature, the skill of distinguishing some sounds from other sounds.

It is important to make certain that the methods are appropriate for the client. Kiddy pictures will not do for an adult. Asking a severely involved cerebral palsied child to point to a picture which represents a word doesn't make sense. He might know the word and recognize the picture but he is unable to point. A child may have excellent language abilities in Spanish but would score as low on an English receptive language test as most of us would on a Russian receptive language test. This would not mean that we or they are language delayed or retarded, but rather that our development has been in another system or culture or code. If we use a test, we must fully understand what it is testing. We should not even report test scores that are not really relevant.

Assessment is never complete; it is an ongoing process There is always more to be learned about an individual once he is in therapy. The initial evaluation however serves to give a basic framework for understanding where the client is, how far he can go, and what are some of the ways of getting there.

THERAPY

Once the voice, speech or language disorder has been identified and the client's performance has been assessed, we have a better idea of what he can do and what he is doing. Therapy begins with reinforcement of tasks that can be successfully mastered and progresses in small steps toward the target goal. In a delayed language youngster, the objective may involve moving from one word utterances to two-word phrases. In an adult aphasic it may be the relearning of words for familiar household objects. The cerebral palsied older child may need

to improve control of his articulators. An adult with a voice problem might need guidance in changing the habitual pitch level.

With the objectives of therapy spelled out, there are a number of ways to progress. There is not any one method or procedure of therapy. Forcing a procedure which is disliked by the client or the clinician will not get you anywhere. For some clients and clinicians a more open and unconstraining framework for therapy with much supportive counseling may work best. For others, a more structured behavior model with predetermined steps and a learning-theory based program might be best.

Lesson plans must be formulated with the particular clinician in mind. Materials must be relevant. . . ~~i.e.~~ e.g. no childrens books for an adult with normal intelligence. Plans should be flexible enough to allow for change. Procedures should have some success built in so that the clients will not be discouraged. Carry-over activities based on those things mastered in therapy should be given as homework. The clinicians write out specific instructions to clients and parents and hospital staff and ask them to check off daily practice sessions.

The therapy that you've been watching and helping with this semester has been varied. Yet, you have only seen a few of the many possible approaches. When you are professionals you will add your own. Hopefully, they will be relevent and goal directed, ~~and~~ you ~~will~~ should make careful note of performance at each session so that you can document the success or failure of your procedures.

HEARING IMPAIRMENT AND AUDIOLOGICAL ASSESSMENT

Hearing is the most critical means of learning language and speech. When a child is born deaf or hard of hearing, there is need

for a great deal of special help and training so that he can cope with the hearing world.

The ear consists of three parts. . . inner ear, middle ear and outer ear. Outer ear problems include things like congenital atresia where the outer flap is deformed and the opening to the ear is closed. Middle ear problems include perforated ear drums, middle ear infections, or lack of adequate movement of the tiny ear ossicles (bones). If any problems occur in the outer or middle ear, the patient will have a conductive loss. He will be hard of hearing but not totally deaf. A child that is hard of hearing will develop language but might have difficulty pronouncing some of the sounds that he cannot hear.

When there is damage to the inner ear either before, during, or after birth, the child has a sensorineural loss and can be deaf. Drug use or the contraction of German measles during pregnancy can result in this type of impairment in the child. Meningitis in childhood can also lead to a sensorineural loss.

In adults, damage to the inner ear or to the nerve carrying the sensation of hearing to the brain can occur because of disease, or excessive noise, or the aging process. These losses can result in real problems in communication for adults; problems that may be unrecognized or misinterpreted and need the intervention of speech and hearing specialists.

The hearing specialist in our profession is called an Audiologist. He/she is concerned with the identification of hearing problems, the diagnosis of the condition, and the remediation of the problem. You are about to be given a tour of the audiological suite. The Audiology

professor will demonstrate the kinds of equipment used in testing hearing. He will show you the pure tone audiometer and demonstrate its use. He will also show you impedence audiometry which indicates how well the eardrum is functioning in reflecting sound. He will demonstrate use of hearing aids, one of the principal methods of rehabilitation in hearing impairment.

Audiologists work with infants, with children, and with adults. Some are in hospital settings or work with private otologists (ear doctors) or hearing aid dealers. Some are in research laboratories or at universities. There are Educational Audiologists that test and treat children in the schools. There are Audiologists in industry that are concerned with maintaining healthy sound levels so as to protect the hearing of the employees. Many Audiologists spend the bulk of their time in aural rehabilitation, teaching patients to improve their abilities in speech reading (lip reading) and getting the most out of the hearing that they have.

When a child is deaf or hard of hearing, the combined efforts of the Audiologist, Speech Pathologist, and Educator of the Deaf are geared to helping him get the most out of his environment. Deaf children are taught either by sign language, or a completely oral approach or a combined system called total communication. Total communication is the method preferred by the Education of the Deaf faculty members on our campus.

III. GUEST LECTURES

CONGENITAL BIRTH DEFECTS

Dr. Devinder Chopra, a local neonatologist, spoke to a joint meeting of faculty members, graduate and undergraduate students and trainees involved with the satellite programs. He is a pediatrician who specializes in caring for the infant for the first 30 days of life. Dr. Copra presented slides and gave descriptions of various congenital birth defects.

A congenital birth defect is an abnormality that is present when a child is born and is due to hereditary or prenatal environment. There are certain identifying characteristics involved with many birth defects. Some common birth defects and their stigmata (signs and symptoms) that Dr. Chopra discussed were:

Downs's Syndrome:

The child's facial features are marked by an excessively large tongue and a small mouth. There is an extra fold of skin tissue around the eyes, giving a slanted appearance. The child may also have incurved pinkies. Children with Down's syndrome are usually obese, docile, and very easy to care for. They generally have low intelligence, and may have other defects such as heart problems or cleft palate. Down's syndrome is sometimes called Mongolism and occurs most frequently when the mother is past 40.

Apert's Syndrome:

This syndrome is generally associated with cleft palate. Because there is premature closure of the sutures of the head, the head has a very odd appearance. There is generally webbing of the fingers. These children may or may not be mentally retarded.

Trainee and clinician working with Spanish-speaking Downs Syndrome child at rural satellite

Klippel-Feil Syndrome:

This syndrome is associated with congenital deafness and the child has an unusually short neck and low hair line.

Pierre Robin:

The defect is characterized by an underdeveloped mandible (lower jaw), lack of growth of the external and middle ears, cleft palate and a small tongue.

Blueberry Muffin Syndrome:

This defect causes an enlarged liver and spleen, and spots on the body. This defect is related to the rubella syndrome and deafness

is common.

Pendred's Syndrome:

This condition is marked by goiter, a swelling of the thyroid gland in the front of the neck, and may be associated with deafness.

Waardenburg's Syndrome:

The identifying characteristics of this syndrome are a white lock of hair near the forehead and different colored irises. Deafness is the most serious feature of this congenital anomaly.

Treacher Collins Syndrome:

There is lack of development of the external auditory meatus (ear) and an extra layer of skin tissue on the eyelids, but there is generally no mental retardation.

The trainees gained familiarity with a number of congenital birth defects and an understanding of the many problems and implications. In spite of the existence of a very unusual appearance, many birth defective children have normal intelligence and good potential. Others can be helped with a variety of remedial procedures.

LANGUAGE DEVELOPMENT IN MINORITY CHILDREN

Gloria T. Weddington, Ph.D., a speech pathology professor at San Jose State University, gave a lecture to the trainees, the graduate student clinicians involved in the satellite program, other students in speech pathology and faculty members on the subject of language development in Black and Chicano children.

Dr. Weddington began her talk by giving the average ages at which most children develop verbal language. Dr. Weddington said in her observation of Black and Chicano clients who are developing language

skills, these linguistic structures emerge at the same time and in the same order. Despite theories to the contrary, Black and Chicano children are not inherently slower in developing language skills than other children.

Black mothers do talk to their children. However, they do not often read to their children, generally. Middle class white mothers, on the other hand, do read to their children, in addition to talking to them. It is through the interaction of a parent talking with a child and hearing other siblings and parents talk that a child learns how to use and understand ~~and learn~~ language.

All children learn the culture to which they are exposed, so it is incorrect to say that some segment of the population is without culture. Cultures vary from one group of people to another. One is not better or worse than another; only different. Many children from minority cultures are seen by speech pathologists not because they demonstrate true speech disorders but because they have learned the language of their culture which may be different from the language that the majority of people use. Variations of language (dialect) are not considered speech disorders. Because children are members of the same minority group does not necessarily mean that they should be placed together for speech therapy. Their level of development, organic involvement and nature and extent of disorder should be the prime concerns.

INTERPERSONAL CLINICAL DYNAMICS

Dr. Don Dorsey, professor and counselor at California State University Northridge, presented a lecture/demonstration on interpersonal dynamics. Clinicians, trainees, faculty members, and community professionals attended. He discussed the differences between the superficial contact

and the human encounter. The helping relationship which speech and hearing clinicians attempt to establish is a human encounter with a goal of communication behavior change. Helping is risky; the effect may be hurtful rather than positive or neutral. Our expectation of the client's progress is a critical issue. If we do not truly expect any positive change, we might consider removing ourselves from the relationship.

Dr. Dorsey supervised the students in a number of exercises designed to learn more about interpersonal dynamics. Those who attended were encouraged to break into small groups and do things such as milling, eye-balling, following non-verbal cues, listening intently without interruption, etc. The students were then invited to share their feelings and impressions related to the exercises. Most left with an increased awareness of the need to understand our own motives and the image we project.

SPANISH/ENGLISH SPEECH VARIATIONS

Maria Sanchez, a bilingual Speech Pathologist at San Diego State University, addressed trainees, clinicians, and faculty members on some of the differences between Spanish and English. In addition to the obvious vocabulary differences, Professor Sanchez described structural divergences in the grammars of the two languages. Use of pronouns, tenses, question formation, etc. is quite different. As a result, a number of linguistic "goofs" of different types result when a native Spanish speaker attempts English. These "goofs" are largely predictable because of the interference of one known language system on another. The teacher must understand the structures of both languages so as to use effective means of analyzing and modifying the "goofs."

Phonological (sound) differences are many. There are sounds of English that do not exist at all in Spanish, and many that are similar but are produced differently. Because of this phonological interference, many Mexican-American children will demonstrate articulation differences. If a teacher or speech pathologist is aware of the sound variations, he/she will be able to distinguish between linguistic differences and real developmental delays or distortions.

HEALTH PROBLEMS IN WEST FRESNO

Noel Smith, M.D., spoke on the health problems that are peculiar to the population of West Fresno, which is largely Black and Chicano. Dr. Smith specializes in gynecology, obstetrics and family practice.

Among the problems that are found in West Fresno is the near non-availability of medical help. Although there are Black physicians in Fresno, there are not enough to properly provide services for the entire population of West Fresno. There is one small medical center located in the southwest portion of Fresno. At this facility there are a number of doctors and dentists in private practice, but there are no emergency facilities and no beds. A second health related problem is the co of health care. Due to the cost of medical care, a large number of the residents of West Fresno cannot afford health care. Some physicians limit the number of welfare patients they see because of a reduced schedule.

Some health-related skills seem to be acquired with further schooling. Preparing nutritious meals, reading a thermometer, giving a sponge bath are just some of these skills that are lacking in the under-educated. By providing education in these areas it is possible to

raise the level of hygiene and care.

The overcrowded patient list of pediatricians in town is also a problem Referring a patient to another doctor may require a long wait which may waste valuable time. The problems of health care in West Fresno could be partially solved by an increase in the numbers of Black and Chicano physicians, other health professionals and community facilities.

CLEFT PALATE AND HEARING

During summer session approximately 30 students, faculty, trainees and area professionals in speech and hearing attended a lecture presented by Darryl E. Norton, Ph.D. Dr. Norton, a speech pathology professor at Federal City College in Washington, D.C., spoke on "Cleft Palate and Hearing Loss." His presentation was based on his dissertation research at the University of Pittsburg. The study was prompted by the accepted finding that otitis media (middle ear infection) is universal in the cleft palate child. The tensor palatini muscle does not function properly in Eustachian tube activity and does not provide for adequate middle ear aeration. The otitis is transitory and is often treated routinely with myringotomies (draining) or tympanostomies (placement of tubes in ear). Almost all the children develop otorrhea (inflammation of the ear) as a side effect of these treatments.

Dr. Norton selected a group of cleft palate children between the ages of 4-7 years old who had no additional congenital anomalies. A number of these children had had ongoing ear treatment at the University of Pittsburg. Another group from West Pennsylvania Hospital had had virtually no routine ear care. The subjects were given

a number of examinations including otological, audiometric, (both pure tone and impedance), language, articulation, intelligibility ratings, hypernasality evaluations and measures of velopharyngeal activity.

Those subjects that were patients at the University of Pittsburg Medical Center appeared to fall into three categories: those that had had good ear care, those with fair ear care and those with poor ear care. The last group were primarily those who lived in rural areas and could not readily commute to the city for follow-up treatment. Those with good ear care were seen every four months for 4 years. The otological evaluations were made with a negative point system which figures all episodes of otitis media during the time period indicated. Impedence audiometry was of great value in formulating the diagnosis and was slightly more accurate than the otologist in indicating the presence of fluid in the middle ear.

Many criteria were examined: age at time of palatal surgery, economic status, type of cleft, pre-school training, speech and language therapy, etc.

It was found that the group with ear care averaged a 13 db bilateral hearing loss (0 db bone conduction) and the no ear care group averaged a 21 db bilateral loss. These losses are minimal and should not be critical in language development. Neither group demonstrated significant language or speech problems and there were no significant differences between the groups. The relatively minimal hearing threshold reduction might explain the lack of serious problems in the experimental groups. One factor that was notable was that those

who had had palatal repair between the ages of 17 and 22 months appeared to have the best speech. Those with repairs before 11 months (when inadequate maxillary (upper jaw) growth or the trauma of hospitalization at a critical developmental period might have intervened) and those repaired after 26 months, which appears to follow a critical 'expressive' speech developmental period, did not do as well.

Dr. Norton stressed the limitations placed on children who have tympanostomies: . . . no swimming, ears must be covered, constant follow-up visits, possible otorrhea, etc. In view of these psychologically upsetting factors, and in view of the lack of real difference between those children with good ear care and those with no ear care, he would advise surveillance without routine medical intervention for otitis media in cleft palate children.

INFORMAL MEETINGS: TRAINEES AND MINORITY PROFESSIONALS

All minority professionals invited to campus as guest lecturers and/or consultants for the AHEC/Communicative Disorders project met informally with trainees. The purpose of these sessions was a frank interchange of experiences, problems and suggestions and, as such, will not be reported in full. Several points were repeated however in all of the meetings and these warrant sharing with the readers.

All the professionals offered encouragement to the trainees, and underscored the need for their services and the employment opportunities that exist for them across the country. The trainees were encouraged to improve their writing skills, to pursue doctoral programs, to become experts in a variety of sub-specialties, to be trained to work with many kinds of disorders. They were also advised to maintain sensitivity

to cultural differences and to continue communicating with those with less schooling.

The visiting professionals displayed real enthusiasm for their work and appeared to share a love and concern for people. The warmth and the sense of commitment were apparent to the trainees and reportedly served as very positive motivation in their continued academic pursuits.

IV. A LOOK TO THE FUTURE

Among the objectives of the AHEC/Communicative disorders project was the production of a manual of instruction and organization which would serve as an educational model for similar programs. This publication represents that objective. It attempts to detail the implementation of the project goals and present the basic content of the instructional sessions which were held for the trainees.

Moreover, this section summarizes the highlights of a more formalized objective assessment of the project impact which was conducted by an independent evaluator.

The dynamics of the team interaction are difficult to put into words. Six of the eight trainees were excited enough by the experience to request admission into the Communicative Disorders major. Their sensitivity to problems in communication and their familiarity with a variety of clinical syndromes should provide them with a real advantage as they begin the basic coursework. Their presence in the department should present Communicative Disorders as a major in which minority students can study and succeed.

In anticipation of the inevitability of project termination, an effort has been made to create some didactic materials that can be used by minority students and others to gain an awareness of the speech and hearing professions. Both this manual and audiovisual materials developed through the grant can be used to serve this purpose.

The sixteen participating graduate student clinicians (eight during the spring semester and eight others during summer session) agreed that the off-campus satellite experience was excellent and invaluable.

They had the opportunity to work with a variety of disorders in totally different settings. For many, the experience has resulted in a change of professional goals. . . more interest in pursuing the M.A. and working in hospital settings. The clinicians found working with the trainees a fine learning experience. Several stated that they wished they had had this opportunity, and that the trainees would make good CD majors and excellent clinicians. The students felt that the screenings were hectic but provided an excellent opportunity to become aware of normal language in children representing a wide ethnic mix. Graduate students and trainees alike felt that continuation of the satellites is necessary for adequate professional training and is critical in terms of providing services to under-served areas.

Trainees working with severely handicapped cerebral palsied child at extended care facility

A large number of letters from clients, families of clients, and program administrators express appreciation for the quality of services provided by the AHEC/Communicative Disorders project to the community. To insure continuity of quality services, an objective of the project was the stimulation of development of permanent speech and hearing programs in pre-school, rehabilitative, and community facilities throughout the valley. By demonstration of need of these kinds of services and by setting an example of professional expertise, it was hoped that local agencies would be prompted to fund speech and hearing services at a variety of locations. The period of time of active implementation of the project was short. Although there has been no immediate community-supported takeover of the satellites, many encouraging developments have occurred. The administrator of the extended care facility has been conferring with other administrators on the possibility of hiring a qualified speech pathologist to serve a number of nursing homes. (At present, no nursing home in the valley has a staff speech pathologist.) The county hospital is considering inclusion of a speech pathology program for the 1975-76 fiscal year. The county Headstart is hoping to develop its own speech and language program; especially in the light of the recent commitment to include handicapped children in the program. The cities' Early Childhood Education Department has seen the need for these kinds of services and is hoping to budget for them in the future. The campus ACTION program is considering funding of a part-time supervisor position to afford its students the opportunity to work on community speech and hearing teams. Some of the rural communities have become familiar with the services and,

although local services are not likely, transportation systems are being considered so that clients can be brought to the campus and/or other clinics in the city.

The 1,054 children screened, the 97 clients diagnosed, the 55 adults and children receiving therapy, the 8 trainees and 16 graduate student clinicians attest to the positive impact of the program. It is hoped that the AHEC/Communicative Disorders project has provided a model for similar programs throughout the country.

APPENDIX

APPENDIX A

BASIC IN-SERVICE LECTURE TO NURSES, TEACHERS, AIDES

I believe that language is an inborn phenomenon that is species-specific to man. It is what makes man unique and is part of man's genetic code. All humans have the potential for language. Other species do not. You may note that bees give signals, that chimps can give signs, that dolphins have been known to do clever things. Nevertheless, only man can spontaneously initiative an infinite number of sentences. All over the world, children develop language in a systematic and predictable way. . . very much the same in spite of vast cultural differences. Some parents don't talk very much to their babies; others talk them to death. The products of both these environments usually begin to use language in the same way and at the same time. Language emerges. . . first the receptive aspect or understanding; then the expressive or verbal. . . and all this time almost immediate skill in associating meaning with the speech sounds.

You may discuss exceptions to the rule. Children that have been totally isolated, raised with wolves, etc. have bad luck. Although the original potential is there, the complete lack of human interaction seems to take its toll and these children die young and are never normal in function. However, retarded children, deaf children, spastic children. . . although their progress may be slower than normal, can and do learn language in a similar pattern. The biological time table is there although it is slowed down just a little. Primates, no matter how much love, attention, learning strategy, etc. do not ever develop oral language as we know it. But, in man, derrivation must be absolutely extreme in order for a child not to develop language.

Hearing, the auditory modality, is the primary means of acquiring language. The potential is there. . . but the particular language that the child hears in his environment is the one that will become his mother tongue. . . be it Russian, Japanese, Xhosa or English. The particular words, sound system, grammatical forms are all incidental. . . the basis for learning by listening and then expressing concepts by means of words is universal. What happens with children born deaf? They have a very difficult time with language and require significant special education during their early years. Children born blind have no language problems generally. Although language and intellect are related, deaf children can indeed have high abilities and begin to blossom when language training is intensive.

There are many ways of explaining language development. . . and each author will give some small variation of the time table but let me give you one representative account of the stages of emergent language development. During the first year of life babies began recognizing inflectional patterns. . . questions, bawling out, general meaning of some of the simple things you said to them. Expressively, they babble and cry. The kind of babbling that they do may differ with the languages that are heard. Chinese babies are said to babble with an inflection that suggests that they are differentiating tone as is done in the Chinese language. They begin to speak in jargon, putting together babbled syllables in such a way that you used to think they were really saying a lot . . . even though you can't quite understand what.

Around the time of the child's first birthday . . . true words emerge . . . bye, bye, up; milk. The sounds produced most easily are

some of the vowels . . . /I.a e/ and consonants lik , g, b/.

During the second year of life the child begins getting really sharp in understanding the specific meaning of most commands and statements. Expressive speech develops slowly with more and more single words for things. After 18 months, the child begins putting words together in 2 or 3 word sentences. By the end of the 2nd year of life the child may have as many as 250 words in his vocabulary . . . lots of nouns, some action verbs and a few adjectives.

The third year is an exciting one and there is accelerated improvement in all of the previously learned linguistic skills . . . larger vocabulary, better understanding, longer sentences. Many children seem to talk every waking hour when they are approaching 3. Sounds and intelligibility improve, personal pronouns and other parts of speech emerge. Language may not be completely correct . . . in grammar or even in pronunciation . . . but it is generally good enough to make wants known and is understood by those in the environment. If most of us were able to understand and speak a foreign language as well as a 3 year old uses his mother tongue, we'd be pretty proud of our abilities. At this point in time the child is on his way . . . refinements come later, vocabulary keeps increasing all through life . . . but the basic linguistic abilities have emerged.

What kinds of things can you expect from children in pre-school? Very roughly, we expect 3 year olds to frequently use sentences of 3 words, 4 year olds to use sentences of 4 words, 5 year olds to use sentences of 5 words or more. The number of words is only one factor; the complexity of the sentence structure is also important. The sentence . . . "I see shoes, socks, pants, shirt, coat, hat, mittens"

is long but the sentence "I thought I saw them there" is more complex. Although most children have no trouble with the vowel sounds in their languages, some of the consonants sounds are not mastered until after 5 generally . . . ~~like~~/r, l, s, z, ʃ, ʧ, θ/. It is not unusual to find many errors in these sounds in the average kindergarten class. Without any intervention at all, the errors usually self-correct in first grade. These sounds require a more complex, more refined combination of physical adjustments and need to wait until the child is ready in terms of his motor control. After the age of 7 we expect that there are no further errors. When there are, speech pathologists try out their skills.

This is not to say that we don't get involved earlier. Indeed we do. The majority of our caseload is preschool. Why? Well, when children are not developing language, are not putting 2 and 3 words together to form sentences, are misarticulating so very many sounds that their speech is virtually unintelligible, then we have to get busy. If the child has an obvious organic defect like deafness, cleft palate, retardation, cerebral palsy, we can begin working with him or her at 2 or earlier. If there is no apparent organic problem we usually begin working with the children at 3 . . . because that is when parents begin getting concerned about the child's development.

At about 3, the child may begin hesitating, repeating, blocking. We think of this as normal dysfluency and we expect some of it in all children. How does this normal dysfluency grow into stuttering? We are not really sure. We don't know or understand the causes of stuttering. We know that it is aggravated by environmental pressures but we don't think that is the whole story. Some kids have horrendous

pressure and tension in their lives and never stutter; others grow up under what would be considered ideal, accepting, non-pressured atmospheres and do stutter. We continue to recommend however, that parents and teachers cool it, that they do not label the child as a stutterer, that they do not correct constantly with comments like "slow down" or "stop and start over" and "don't talk so fast" or "think what you are going to say first." We still recommend that the adults work on making the child feel good about himself, show love for the child unconditionally, and make communicating a satisfying experience for him.

By the time the child is ready to enter first grade he should be able to handle spoken language well enough to follow instructions. He should be able to understand information and to follow directions.

Children who speak Spanish or Black English have all of these skills. They have learned to produce the words and sounds and inflectional patterns they hear in their environment, and most have learned them beautifully. If the child has internalized the rules of his mother tongue, he has no language problem as far as we are concerned. If he is to learn Standard English, he should be able to learn it easily enough as a second language. We however have the responsibility of learning more about his language and culture and developing better means of evaluating his performance.

The problems with which we must deal early are things like cleft palate, cerebral palsy, all types of brain damage from the hyperkinetic minimally involved child to the severe mental retardate, hearing losses secondary to otitis media and profound deafness, stuttering, voice problems because of nodules, multiple articulation

errors which render speech unintelligible and language dealy for no apparent reason. In helping to remediate these problems, speech pathologists must evaluate and diagnose, provide appropriate therapy and work with physicians, nurses, teachers, parents and many professionals who are concerned about the child. There are many of us that are certified, credentialled, licensed and ready to help you.

APPENDIX B

INFORMATION PACKET

Language, Hearing and Speech Clinic
California State University, Fresno
Fresno, California 93710

Date:

We are in the process of scheduling _____
for a diagnostic evaluation. In order for us to establish the appointment, we will need recent medical information from a physician. If the individual who is to be evaluated has been seen by a physician within the last three months, please let us know the date of the examination and the name of the physician so that we can send a medical form for him to fill out. Also, please sign the enclosed authorization slips and return them to us as soon as possible. These authorization slips permit us to receive the medical reports which will allow us to go ahead with the scheduling of the appointment.

If there has not been a recent medical examination, please arrange to have one and send us the date of examination and name of physician after you have seen one.

The earlier we receive the medical report, the sooner we will be able to schedule the diagnostic evaluation.

Sincerely,

Clinic Director

INFORMATION PACKET

California State University, Fresno
Language, Hearing, and Speech Clinic
Room 125, Lab School
Fresno, California 93740
Phone: 287-2422

CHILD INFORMATION FORM

I. General Information

Time: _____

Name: _____ Date: _____

Birthdate: _____ File: _____

Father's name: _____ Age: _____ Occupation: _____

Mother's name: _____ Age: _____ Occupation: _____

Address: _____ Phone: _____

City: _____ County: _____ School District: _____

Referred by: _____

Address: _____ Phone: _____

Family Physician: _____

Address: _____ Phone: _____

School: _____ Grade: _____ Teacher: _____

Brothers and Sisters (including names and ages): _____

_____

_____

Statement of the Problem: _____

_____

_____

_____

Describe any other speech, hearing, or language problems in the family: _____

_____

Father's Education: _____

Mother's Education: _____

II. Prenatal and Birth History

Conditions during pregnancy: General Health _____

Accidents _____

Length of pregnancy: _____ Illnesses _____

Birth Weight: __lb. __oz. Medical Care _____

Length of Labor _____ Medication _____

Number of miscarriages or stillbirths _____

Age of mother at birth ___ Father _____

Birth difficulties and/or injuries _____

_____

Circle delivery: head first feet first breech Caesarian section

Feeding problems: _____

III. Medical History (fill in approximate age when child suffered the below illnesses):

Measles _____ Convulsions _____ Allergies _____

Whooping Cough __ Mumps _____ Paralysis _____

Pneumonia _____ Hearing Problem _____ Earache _____

Ear discharge _____ Others _____

Accidents: _____

Operations: _____

IV. Developmental History (fill in age when child began the following):

Crawling _____ Sitting _____ Standing _____

Walking _____ Feeding self _____ Dressing self _____

Completely toilet trained _____ Prefers which hand _____

Using single words _____ Combining words _____

Difficulty in walking, running or throwing _____

V. Speech, Hearing, and Language Behavior

Does child babble _____ Coo _____ Hum _____ Sing _____ Laugh _____

Does child understand gestures _____ Speech _____

Does child respond to quiet sounds _____ Loud sounds _____

Does child use words to make wants and needs known _____

Gestures _____

How does the child's speech differ from others his age? _____

_____

What was your first indication that a problem existed? _____

_____

Give place and date of any previous speech or hearing examinations:

_____

_____

VI. General Behaivor

Does child eat well _____ Sleep well _____

Respond well to family _____ Other people _____

Is child attentive _____ Extremely active _____

Does he bang his head, rock, or spin _____ Play by himself _____

Is he restless _____ Does he lose his temper _____

VII. School History

I's child at school or nursery _____ Where _____

What time of day _____ Name of teacher _____

How does he/she get along at school _____

_____

VIII. Additional Information (add here anything that you feel might be helpful in the evalaution of this child):

_____

_____

CALIFORNIA STATE UNIVERSITY, FRESNO
Language, Hearing and Speech Clinic
Fresno, CA 93710

TO: _____ Date: _____

_____

_____

RE: _____ Birthdate: _____

_____

_____

You have my permission to provide the California State University, Fresno Language, Hearing and Speech Clinic with diagnostic information regarding the above named client.

Signed: _____ Date: _____
(Signature of parent, guardian or client if 18 years of age or older.)

Witnessed by: _____ Date: _____

CALIFORNIA STATE UNIVERSITY, FRESNO
Language, Hearing and Speech Clinic
Fresno, CA 93710

Release of Diagnostic Information

The undersigned gives the California State University, Fresno, Language, Hearing and Speech Clinic permission to release clinical information concerning _____ to medical and educational agencies involved in his care and education.

Signed: _____ Date: _____
(Parent, Guardian, or Client if 18 years of age or older.)

Witnessed: _____ Date: _____

CALIFORNIA STATE UNIVERSITY, FRESNO
Department of Communicative Disorders
Language, Hearing, and Speech Clinic

Consent and Release Form for
Photographs, Motion Pictures, or Video Tapes

Consent is hereby given to the Department of Communicative Disorders, California State University, Fresno, with the approval of _____ (school, institution, agency), to take photographs, motion pictures, or video tapes of _____ (my child or myself). These photographs will be used to train university students and demonstrate departmental activities to the general public.

I understand that I will be able to view the photographs, motion pictures, or video tapes if I so request.

_____ Date

_____ Parent or Guardian

Approved By:

_____ Date

_____ Chairman
Department of Communicative Disorders
California State University, Fresno

_____ Date

_____ School, Institution, or Agency Representative

_____ Date

_____ Supervisor

APPENDIX C

INFORMATION FOR CLINICIANS

I. Clinic:

Each clinic session will last 45 minutes. The remaining 15 minutes of each session can be devoted to counseling parents, writing brief evaluations of the session, etc. Keep a record of each of your client's phone numbers, in case of tardiness or absence. Keep a record of each client's visits.

II. Conferences:

Cases will be staffed on Fridays. Be prepared with comments, suggestions and pertinent questions about each of your cases.

III. Lesson Plans:

Lesson plans are to be written in the following form and are due on Thursday p.m. Lesson plans are to be written in duplicate. (May be hand written, but neat). A sample follows:

Name of client: Dates of therapy:
Diagnosis: Name of clinician:

Long range goals: (These should be written in terms of behavioral objectives.)

1. To establish a level of verbal expressive language that is commensurate with age.

2. To develop correct production of plosives in spontaneous speech.

Short-term goals: (These should be rewritten weekly, as judged by the progress made).

1. To establish /p/ in initial position in words.

2. To develop 2 word strings in spontaneous speech.

Procedures:

Monday: Activities

1. This should correspond to short-term goal #1.

   a. A second activity, with the same goal as short-term goal #1.

2. Activity with goal of #2 of short-term goals.

Wednesday: Activity

3. goal #3

4. goal #4

5. goal #5

A short statement of rationale should be provided for each activity.

Comments: (Use this part of the plan as a log of your therapy)

IV. Reports:

A. The initial summary is a typed, double-spaced statement of the client's problem and the behaviors he exhibits during the first part of the semester. The initial summary with some minor changes make up part of the clients final summary. The following is the form to be used for final summaries.

CALIFORNIA STATE UNIVERSITY, FRESNO
Language, Hearing and Speech Clinic
Fresno, California 93740

FINAL SUMMARY

NAME:
SCHOOL STATUS:
ADDRESS:
CITY:
TELEPHONE NUMBER:
SEMESTERS IN THERAPY:

BIRTHDATE:
CLINIC FILE NO:
DIAGNOSIS:
PERIOD COVERED: _____ to _____
DATE OF REPORT:

CLINIC SCHEDULE:

Sessions per week _____
Length of sessions _____
Number of clinic visists ___

Clock hours of individual therapy ___
Clock hours of group therapy _____
Total clock hours of therapy _____

I. STATUS AT BEGINNING OF THE PERIOD

In paragraph form include a detailed discription of the initial complaint, present description of speech, voice, language or development and general behavior.

This seven year old female was first seen for a diagnostic evaluation at California State University, Fresno, in 1969. At this time, she was found to be delayed in language development. Verbal expressive language at that time was characterized by two and three word responses. Speech was characterized by multiple articulation errors, primarily omissions.

At the beginning of the semester, her 9th in therapy, Jane's language, etc.

II. SUMMARY OF THERAPY

Here enumerate your goals for the semester. Write out some of your procedures for accomplishing the goals.

A. FINAL SUMMARY

Along with initial summary, add more information about client's progress and behaviors in therapy.

III. RECOMMENDATIONS

Here write the prognosis for the person, if he should continue therapy.

Student Clinician _____
(type your name)

Supervisor _____
(type supervisor's name)

* * * * * * * * * * * * * * * * * * * *

V. Diagnostic reports:

Diagnostic reports are to be written in the following format (see following sheet), using the attached form, and are due not more than three days after the client has been seen. Be sure the client has a complete information packet. (This can be obtained from clinic secretary) and that releases have been signed.

LANGUAGE AND SPEECH EVALUATION

STATEMENT OF THE PROBLEM

This seven year old girl was referred to California State University, Fresno, for a diagnostic evaluation by Mr. _____ a social worker. The mother described the problem as ". . . . . ". Include source of referral.

HISTORY

1) Include prenatal and birth history obtained from the forms filled out by the parents, 2) development milestones, 3) any pertinent medical history, and 4) social, family and school background.

OBSERVATIONS AND TEST RESULTS

Include all of your observations and the results of testing in each area.

A. Speech:

B. Language development:

CALIFORNIA STATE UNIVERSITY, FRESNO
Language, Hearing, and Speech Clinic
Fresno, California 93740

DIAGNOSTIC REPORT

Name _____ Date of Examination _____

Birthdate _____ Clinic Classification _____

Age _____ Examiner(s) _____

Parents (leave out when not applicable) _____ Clinical File Number _____

Address _____ Informant _____

City _____ Referred By _____

Phone _____ Address _____

Occupation, Father (leave out when N/A) _____ Phone _____

Education, Father (leave out when N/A) _____ Occupation, Mother (leave out when N/A). _____

STATEMENT OF THE PROBLEM (as presented when client came for help)

HISTORY

- Prenatal and Birth
- Developmental
- Medical
- Social-Family-School

OBSERVATIONS AND TEST RESULTS (including speech, language, hearing, peroral, and other diagnostic findings)

DIAGNOSIS

RECOMMENDATIONS

C. Hearing:

D. Peroral Examination:

DIAGNOSIS

Write a statement of the problem.

RECOMMENDATIONS

Write what you feel would be appropriate treatment (therapy, no therapy, re-evaluation) and include the name of any person or agency to receive a copy of the client's diagnostic report (doctor's, welfare dept., school speech pathologist, etc.).

VI. You will be graded in the following areas:

_____ Application of classroom knowledge to client's problem.

_____ Basing procedures on relevant rationales.

_____ Ability to describe the therapeutic program with appropriate procedures.

_____ Ability to appropriately select and use diagnostic tools.

_____ Ability to use academic resources.

_____ Ability to observe and modify client's behavior.

_____ Ability to gain confidence of client.

_____ Ability to assess client's progress.

_____ Ability to write concise reports.

_____ Punctuality.

_____ Creativity.

_____ Flexibility.

VII. The date for final conferences will be announced. Be sure to bring to the conference your type reports, the cover sheet for final summary, the client's folder and both copies of your practicium hours.

CLIENT NAME _____

FILE NUMBER _____

FINAL SUMMARY

(Should have typed final report and folder)

COPIES SENT TO: (1) _____

_____

_____

(2) _____

_____

_____

(3) _____

_____

_____

RECOMMENDATIONS:

_____ Return Spring

_____ Return Fall

_____ Return First Session - Summer

_____ Return Post Session - Summer

_____ Dismiss

APPENDIX D

SAMPLES OF DIAGNOSTIC REPORT, LESSON-PLANS, FINAL SUMMARY REPORT

The following is a diagnostic report, some lesson plans and a final summary for a 23 year old non-verbal client with cerebral palsy. The client was seen in a nursing home on a bi-weekly basis. A description of her behavior before therapy can be found in the diagnostic report. The overall progress and recommendations can be found in the final summary.

LANGUAGE, HEARING, AND SPEECH CLINIC
California State University, Fresno
Fresno, California 93710
PHONE: 487-2422

DIAGNOSTIC REPORT — CONFIDENTIAL

Name: Diane — Date of Examination: February 20, 1974

Birthdate: 8-5-51 — Clinic Classification: Cerebral Palsy

Age: 23 years — Examiner(s):

Parents: — Clinical File Number:

Address: — Informant:

City: Fresno, Ca. — Referred by:

Phone: — Address:

Occupation, Father: — Phone:

Education, Father: — Occupation, Mother:

Education, Mother:

LANGUAGE AND SPEECH EVALUATION

STATEMENT OF THE PROBLEM

Diane is a 22 year old female currently residing at a Fresno convalescent hospital. She is diagnosed as having cerebral palsy; spastic athetoid quadraplegia. Diane has athetoid movements of the upper extremities and spastic contractions of the lower extremities. She wears glasses to correct myopia.

Diane requires total nursing care. She must be secured and positioned in a wheelchair. She does not feed herself without assistance. It was reported that Diane has no speech or language but attempts to communicate with facial gestures. Diane has difficulty chewing and swallowing. She is currently on a soft diet and is medicated on a daily basis.

HISTORY

Diane suffered congenital cerebral palsy and spent 18 years in a day care school for cerebral palsy children. During this time she lived with her mother. She enjoys social activities, music, crafts, etc. It has been noted that Diane responds positively to the stimulation of events outside the hospital environment. It is reported that Diane has exhibited receptive language abilites which allow her to respond in some fashion to the routine of daily living. Diane has received physical therapy in the past, but not currently receiving such care.

OBSERVATIONS AND TEST RESULTS

A. MOTOR ACTIVITY: Diane exhibits athetoid movements of the upper extremities. She did not exhibit the ability to grasp objects and hold them for any length of time. The left hand seemed more severely involved than the right hand. Her posture in the wheelchair was not erect. With assistance, she was placed in proper sitting position with her hands directly in front of mid-torso and asked to maintain this position for a short period of time. She maintained this posture for approximately 2 seconds. When asked to point to pictures and objects she did not exhibit the ability to voluntarily produce the necessary motor act.

B. ORAL EXAMINATION: A formal examination was not administered. Diane consistantly protruded the tongue during attempts to verablize. She periodically was noted to grind her teeth as she attempted to verbalize. Reports note that she has difficulty eating and chokes easily.

C. SPEECH AND LANGUAGE: Verbalizations, either spontaneous or as receptive identifications, consisted of the low intensity utterance /haI/. It was noted that nasal snorting accompanied breathing and an occasional verbalization. Receptive identifications of objects and pictures were not clearly noted. Due to the extreme involvement of the arms and hands it was difficult to measure identifications. Imitative oral movements necessary for production of the bilabial phonemes /p/ and /b/ were not exhibited by the subject. Diane remained attentive during the examination and attempted to carry out all commands made by the examiner.

SUMMARY AND DIAGNOSIS

Diane exhibits oral function which is extremely reduced due to her present physical condition. She presents herself as a cerebral palsied adult with undifferentiated speech or langauge. Her fine and gross motor functions are limited. Diane does exhibit a very positive willingness to attempt speech and motoric tasks.

RECOMMENDATIONS

1. It is recommended that Diane receive weekly speech therapy; twice a week if possible.

2. Therapy should be geared toward increasing Diane's voluntary control of her posture and motor functions of her hands, and arms. Oral mobility related to specific productions of phonemes should be stressed.

3. Diane should be encouraged to build a phonemic inventory which would facilitate her communications in the immediate environment.

STUDENT CLINICIAN _____

SUPERVISOR _____

cc: Hospital Administrator

LESSON PLAN

Client: Diane
Date: 4/1, 4/3
Clinician:

Supervisor:
Diagnosis: Cerebral Palsy, Non-Verbal

Long Range Goals

1. To improve the client's voluntary muscle control of the upper extremities.
2. To build a phonetic inventory within the limits of her physical capabilities which satisfies her needs for communication.
3. To establish an expressive mode of communication.

Immediate Goals

1. To improve the posture of the upper torso.
2. To improve eye contact during communication.
3. To secure the client's ability to approximate her lips voluntarily to the count of 10.
4. To secure the client's ability to produce a graduate mouth-open, and graduated mouth-closed.
5. To desensitize the oral cavity.
6. To secure the client's ability to move the tongue out voluntarily for a count of 5.

Procedures: Monday

1. The clinician will assist with proper positioning of the upper torso. The client will be verbally rewarded for periods of proper positioning. The client will be encouraged to return to the proper posturing without assistance. The trainee will help monitor posture during the session.
2. The clinician will lightly tap the client on top of the head when the client fails to maintain eye contact. The trainee will assist in reinforcing this behavior.
3. The clinician will assist with lip approximation and will count to 8 simultaneously. This procedure will be repeated 2 times.

3a. The client will be encouraged to approximate her lips without assistance to the count of 8. This procedure will be repeated 2 times.

4. The client will be encouraged to gradually open her mouth; the clinician will assist with the action. The client will then be asked gradually to close her mouth; the clinician will assist.
5. The clinician will use his fingers to lightly brush the client's teeth, gums, buccal cavities, tongue, hard palate, lips, etc.
6. The client will be encouraged to move the tongue outward from the oral cavity in a voluntary fashion and hold for the count of 5. The clinician will assist with the activity if necessary.

Procedures: Wednesday

Repeat procedures 1-6.

Comments:

LESSON PLAN

Client: Diane
Diagnosis: Cerebral Palsy, Non-Verbal
Dates of Therapy: July 1 and 3
Clinician:

Long Term Goals

1. To improve voluntary control of upper extremities
2. To establish voluntary muscle control of prespeech activities.
3. To build a phonetic inventory within limits of her physical capabilities.

Short Term Goals

1. To strengthen eye blink method of responding to yes-no questions.
2. To strengthen opening and closing mouth, and tongue direction in response to "do this" and a model.
3. To strengthen imitative vocalization of /a/ and /m/, and to establish /b b b / imitatively

Procedures: Monday and Wednesday

1. To strengthen the eye-blink method of responding to yes-no questions, the clinician will begin and end each session with a few questions which Diane will respond to by signaling one blink for "yes" and two blinks for "no". The trainee will also attempt to elicit this blink response.
2. To strengthen opening and closing the mouth, and tongue direction, Diane will be asked to open and close her mouth imitatively, and then on command without a model if possible, for a count of 8-10. For tongue movement and direction, Diane will be asked to move her tongue in and out, imitatively and then on command, and hold it in, out, left, and right for a count of 3-5 seconds.
3. To strenthen vocalization, Diane will imitate /a/ and /m/ with assistance if necessary. She will be timed to see how long she can hold phonation. The trainee will assist with the timing. Then she will be asked to imitate /b b b /, with assistance.

CALIFORNIA STATE UNIVERSITY, FRESNO
Language, Hearing and Speech Clinic
Fresno, California 93740

FINAL SUMMARY

NAME: Diane
SCHOOL STATUS:
ADDRESS:

BIRTHDATE: 8/5/51
CLINIC FILE NO.:
DIAGNOSIS: Cerebral Palsy: Non-Verbal

CITY: Fresno
TELEPHONE NUMBER:
SEMESTERS IN THERAPY: 1

PERIOD COVERED: 2/25/74 to 5/22/74
DATE OF REPORT: May 24, 1974

CLINIC SCHEDULE

Sessions per week	2	Clock hours of inidividual therapy	10
Length of sessions	30 min.	Clock hours of group therapy	0
Number of clinical visits	20	Total clock hours of therapy	10

STATUS AT BEGINNING OF PERIOD

Diane is a 23 year old female currently residing at a Fresno convalescent hospital. She is diagnosed as having cerebral palsy with resultant spastic athetoid quadraplegia. Diane has athetoid movements of the upper extremities and spastic contraction of the lower extremities. Diane is currently attending the Cerebral Palsy Day Care Center, Fresno, California on a daily basis.

She is confined to a wheelchair and requires total nursing care. Diane has difficulty swallowing and chewing. Her diet is soft and she is medicated on a daily basis.

Diane was seen for a diagnostic evaluation on 2/11/74. At that time Diane communicated using facial grimaces, an occasional indistinguishable vocalization, and by using eye blinks to signify yes and no. Her oral masculature is characterized by spastic contractions, with little palatal movement, and reduced voluntary control of oral structures.

SUMMARY OF THERAPY

The goals in therapy were:

1) To improve the voluntary muscle control of the upper extremities.
2) To establish voluntary muscle control of the pre-speech activities.

3) To build a phonetic inventory within the limits of her physical capabilities.

Diane exhibits the ability to approximate her lips and hold for a count of ten. She is able to employ a graduated open closing of the mouth without assistance. Diane can smile hold for a count of 3 with assistance. She can move the tongue out of the oral cavity and hold for a count of 10 without assistance. She exhibits the ability to move the tongue out of the oral cavity then lateralize to the right and left, and hold for a count of 2 with assistance.

Diane vocalizes an occasional /no/ with articulatory proficiency. She does not exhibit voluntary contraction of the orbicularis oris muscle. She does not exhibit the ability to impound air in the oral cavity necessary for the plosive phonemes.

Confirmation of communications continues to be made suing the eye blink method, (one blink yes, two blinks no).

RECOMMENDATIONS

It is recommended that therapy be continued on the twice weekly schedule currently used. Therapy should move toward voluntary control of pre-speech activities. A program of sucking, swallowing, and eating should be initiated in conjunction with daily activities at the Cerebral Palsy Day Care Center and convalescent hospital staff. Possible refinement of gross motor involvement in the upper extremities could lead to establishing a language board for the purpose of communication.

Student Clinician _____

Supervisor _____

cc: Hospital Administrator

APPENDIX E

EVALUATION OF CLINICAL COMPETENCIES

The following form was used to evaluate the student clinician. It lists areas that the faculty at CSUF have found to be important for clinical competence. The student is judged by his performance in each of the areas, and by his performance when with the client. Mid-semester input is indicated in the "Comments" Section. An evaluation is completed by the supervison for each clinician at the end of each clinical semester.

CALIFORNIA STATE UNIVERSITY, FRESNO
Department of Communicative Disorders

EVALUATION OF CLINICAL COMPETENCIES

Student Clinician _____ Midterm date _____
Supervisor _____ Final Date _____

COMMENTS

1. The clinician demonstrates knowledge, background, and training in the field of communicative disorders that is appropriate to the problem of the client with whom he is working.

_____ Knows, understands, applies, adapts
_____ Knows, understands, applies
_____ Knows, fair-good understanding, needs constant consistent assistance to apply and adapt
_____ Knows, some understanding . . difficulty applying even with assistance
_____ Limited knowledge, limited understanding

2. The clinician will consider specific language, speech, and hearing problems according to the objectives of the total rehabilitation program and uses some theory in analyzing tasks into component steps, establishing objectives and appropriate reinforcement schedules.

_____ Uses procedures based most of time on relevant rationales
_____ Plans procedures consistent with reinforcement
_____ Is not sure how to reinforce desired learning and behavior
_____ Has little understanding, reinforces undesired learnings and behaviors
_____ Has limited understanding

3. The clinician will demonstrate competency in selecting appropriate diagnostic and evaluative tools (by including

COMMENTS

information from case histories) to assess the client's problems and can administer and interpret these in the therapeutic planning process.

____ Can put speech, language, and hearing problems in terms of tc[illegible]ilitation based o[illegible]ic/evaluative t.
____ Understands information gained from diagnostic/evaluative process and attempts to implement in the total rehabilitation process
____ Attempts to understand information but needs supervision in implementing the information in the rehabilitation process
____ Has limited understanding and requires maximum supervision
____ Cannot see the problem in appropriate prospective and cannot follow direct supervision

4. The clinician will demonstrate his ability to utilize academic resources in planning and implementing therapy.

____ Searches out multiple references independently
____ Uses texts, class notes, assigned resources
____ Reads assigned resources and can use for planning with some assistance
____ Reads some assigned resources, has difficulty relating and using even with assistance
____ Might use a resource

5. The clinician will demonstrate his knowledge of referral procedures by following appropriate steps when need for assistance or consultation is evident in the child's behavior.

COMMENT

_____ Is alert to extraneous problems manifested by the client and suggestions for specific procedures to follow to confirm or deny the suspicions

_____ Questions if all the problems are being observed and if the needs are being met and questions how to proceed with referrals

_____ Would follow procedures for referral if needs were pointed out

_____ Has limited ability to see needs and follow referral procedures even after they have been pointed out

_____ Cannot follow up referral procedures or see the needs after they have been pointed out

6. The clinician will describe the therapeutic program with appropriate procedures for each objective.

_____ Outlines long-range semester goals as well as short-term objectives with appropriate, sequential consistent tasks

_____ Outlines objectives a few weeks in advance with appropriate, sequential steps most of the time

_____ Outlines objectives from session to session usually appropriate but not always sequential

_____ Outlines objectives for individual activities at times, sometimes appropriate, not usually sequential

_____ Outlines unclear objectives - not usually appropriate or sequential

7. The student will demonstrate his ability to gain the confidence of

COMMENT

client and family by creating an atmosphere of open communication regarding the purpose of clinic and clinical procedure.

_____ Listens, reflects, and explains therapy in appropriate terms
_____ Listens and attempts to explain therapy
_____ Attempts to listen but is often judgmental and inconsistent in explaining therapy
_____ Keeps the client at a distance and is defensive about explaining therapy
_____ Cannot relate at any level or explain his therapy

8. The clinician will demonstrate his ability to continuously evalute the client's response to therapy through an on-going assessment of methods, procedures, and tasks.

_____ Alters plans relative to weekly evaluation - results, observations, impressions relative to specific objectives and procedures
_____ Shows concern about effectiveness but has difficulty altering
_____ Considers efficacy of program only after problems are pointed out
_____ Has limited ability to alter plans even after they are pointed out
_____ Cannot alter plans or procedures or accept the errors in therapy

9. The clinician will demonstrate use and manipulation of materials and equipment within the clinical setting and make appropriate "out of clinic" assignments for "follow-up" therapy.

COMMENT

_____ Is always imaginative, effective, and captivates the interest of the client
_____ Is usually effective and sometimes imaginative
_____ Is often not appropriate to the procedures and/or client
_____ Consistently, uses too many or too few materials
_____ Cannot create - no imaginative materials - totally inappropriate

10. The clinician demonstrates flexible clinical behavior through his ability to revise procedures to adapt to spontaneous situations that arise.

_____ Is skillful in "on-the-spot" adaptation
_____ Can change procedure and still pursue stated objective
_____ Has difficulty when he departs from written plan
_____ Ignores situation and "sticks" to the plan
_____ Cannot see spontaneous situations and can never change procedure

11. The clinician will provide maximum opportunities for the client to assess his own progress during therapy sessions by keeping appropriate charted records of performance. This assessment should be at appropriate intervals and objective in nature.

_____ Strives always for maximum client participation and sets the ground rules for "on-going" regular client assessment
_____ Maintains client participation, but assessment is conducted only session by session
_____ Tends to be underprepared in client involvement and is not always consistent

COMMENT

_____ Is not prepared to involve the client in assessment of progress
_____ Client is incidental - never involved in assessment

12. The clinician will demonstrate his ability to write clear summary reports which are specific and useful to teachers and other professionals.

_____ Uses precise, professional terminology; includes specific recommendation for total rehabilitation program
_____ Reports with some lack in clarity; no specific observations included
_____ Writes general reports with marginal number of recommendations, no observations
_____ Writes jumbled, disorganized
_____ Not relevant - unable to follow recommendations

13. The clinician will demonstrate competency in making judgment for therapy and referral by differentiating between clinical observation vs. personal impression; clinical insight into nature of client's problem vs. personal feelings about what "might" be the problem; and valid recommendations vs. invalid recommendations.

_____ Can use information from test results, observations, supervisor's comments, teacher's notes and impressions, and personal information from children, and make judgments and appropriate recommendations about the client
_____ Is methodical in procedure to gain information about client but is sometimes reticent to make judgments and appropriate

COMMENT

recommendations about client

_____ Experiences difficulty in relating all information in the total rehabilitation plan for the client

_____ Consistently misinterprets information and cannot get "on target" with the client

_____ Makes no attempts to get information together about client and is unable to make judgments and recommendations

14. The clinician will demonstrate professional behavior by discretion in discussion of clinical matters and by punctuality in meeting clients and assigned deadlines.

_____ Meets assigned deadlines promptly and with all materials/reports prepared; is articulate in discussing client with professionals

_____ Has valid questions and reasons for not meeting deadlines; can discuss client with professionals if leading questions are given.

_____ Sometimes asks for extensions on deadlines and delays starting therapy on time; reticent to discuss client's problems with professionals

_____ Often asks for extensions and seldom starts therapy on time - even absent sometimes; avoids discussion of client's problems with professionals

_____ Does not meet deadline dates and does so with no communication with supervisor or client; will not be "pinned down" for a discussion of client's problems

15. The clinician recognizes his own professional competence as well as his limitations and seeks appropriate

COMMENT

consultation and assistance when necessary.

_____ Appears to always want to improve; is consistently redefining objectives, goals, and strategy; always follows through with suggestions, and demonstrates an inquiring attitude about his special field

_____ Usually follows through with suggestions that have been given after he seeks consultation but is not always redefining goals unless he has been so directed by the supervisor; inquiring attitude evident only regarding a particular client with whom he may be experiencing difficulty in therapy

_____ Must be directed by supervisor in all areas of redefining goals, following through on suggestions, and searching out new information

_____ Unable to follow through even after supervisor has made suggestions and has limited ability to search out new approaches

_____ Refuses any suggestions and never follows through in search for new approaches

16. The clinician will determine the extent to which his own personality characteristics contribute to the relationships within the clinical matrix, i.e. clinician/client, clinician/parent, clinician/teacher, etc.

_____ Has a sincere attitude and honest approach in helping people and can relate to all persons involved in the therapy setting in a supportive way while at the

COMMENT

same time providing opportunities for maximum independence

_____ Displays sincere and honest attitude in dealing with persons in the therapy setting but has difficulty sometimes being appropriately supportive

_____ Expresses interest but not always substantiated by an honest approach with persons involved in the therapy setting but will change if directed by supervisor

_____ Appears to be "putting in time" and persons involved in therapy setting feel it

_____ Demonstrates a "could care less" attitude

17. The clinician will demonstrate his ability to modify the behavior of client by structuring and designing tasks for success.

_____ Uses appropriate techniques to control the behavior of client and is able to be as authoritarian or permissive as the situation requires

_____ Seems to have good control but has some difficulty switching from one approach to the other

_____ Needs supervision in deciding how to approach the discipline and needs modeling from the supervisor regarding correct approach

_____ Has difficulty understanding importance of discipline and can't implement after modeling has been presented.

_____ Refuses to become involved in client's behavior and will not follow any modeling

18. The clinician will present himself as a model in terms of behavior, self discipline, personal characteristics, and expressive/receptive language.

COMMENT

____	Has pleasant voice, excellent articulation and language; grooms self appropriately and not offensively, behavior above reproach
____	Adequate voice, articulation, and language skills; personal grooming; and behavior
____	Needs maximum supervision in learning to be a good model
____	Has a correctable communicative disorder and/or lack of self-discipline
____	Will not conform to the established suitable clinical model

Course Grade _____

Kinds of Clients:

Total Clinical Clock Hours _____

Semester in Clinic (circle one) 1 2 3

Supervisor _____
(Signature)

Student _____
(Signature)

APPENDIX F

SUPERVISOR EVALUATION

The student clinicians are also given an opportunity to judge the supervisors performance. Each of the students is asked to rate a supervisor and the total for each area is averaged. It is administered at the end of the semester by a staff secretary who types the hand written comments before submitting it to the Supervisor. It is hoped that this becomes a learning experience and affords the opportunity for continued improvement of supervision.

CALIFORNIA STATE UNIVERSITY, FRESNO
Department of Communicative Disorders

SUPERVISOR EVALUATION

Name of Supervisor _____

Course _____ Date _____

Rating Scale:	1 - 2	3 - 4	5	6 - 7	8 - 9
	Very Poor	Inferior	Average	Superior	Outstanding

1. Is the supervisor always willing to give advice and direction? ___
2. Is the supervisor understanding of the clinicians limitations and inexperience? ___
3. Does the supervisor give needed reassurance even when clinician makes mistakes? ___
4. Is the supervisor willing to give references and source material which may be beneficial in planning? ___
5. Is the supervisor helpful in giving ideas for better motivation or strategy of the client? ___
6. Do you or your supervisor agree on the criteria for assessing your clinical abilities? ___
7. Is the supervisor sufficiently available to clinicians? ___
8. Is the supervisor flexible in accepting clinicians' innovations in therapy? ___
9. Does the supervisor relate well with clinicians and with clients? ___
10. Does the supervisor give enough constructive criticism? ___
11. Is the supervisor punctual in turning back plans, reports, etc.? ___
12. Does the supervisor provide information gained from communication with outside agencies when appropriate? ___
13. Does the supervisor demonstrate clinical techniques when you are "at a loss?" ___

APPENDIX G

Audiology

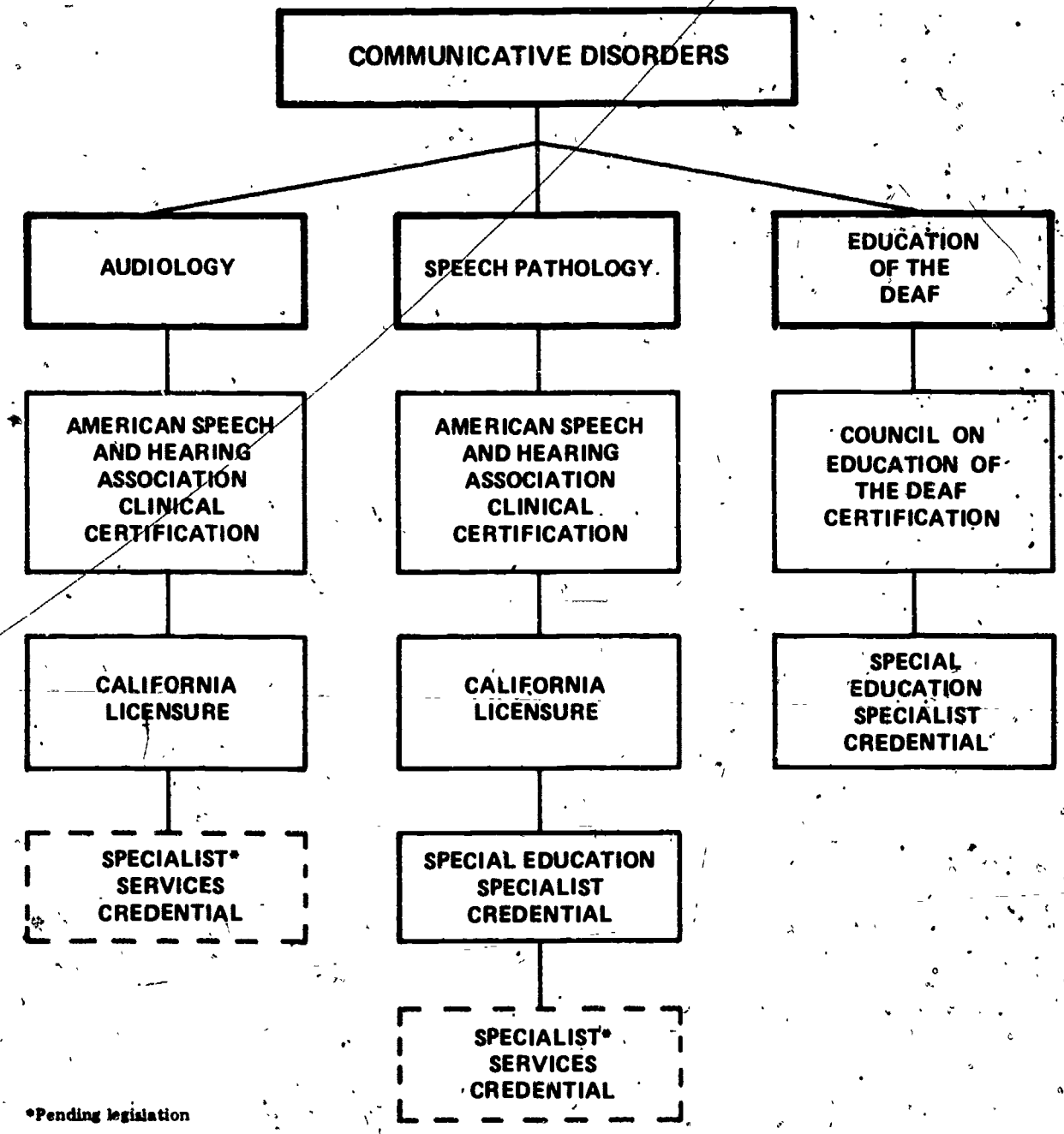
Department of Communicative Disorders

Speech Pathology

Education of the Deaf

CALIFORNIA STATE UNIVERSITY, FRESNO
Fresno, California 93740

Certification & Credential Programs
DEPARTMENT OF COMMUNICATIVE DISORDERS
California State University, Fresno



*Pending legislation

DEPARTMENT OF COMMUNICATIVE DISORDERS
California State University, Fresno
Fresno, California 93740

Professional training in the field of Communicative Disorders at California State University, Fresno, is a five-year program including at least three years of specialized course work. The four-year undergraduate curriculum qualifies the student to obtain a Bachelor of Arts degree in Communicative Disorders and usually to acquire the Multiple Subjects Credential to teach elementary children without communicative disorders. However, a student needs an additional year beyond the B.A. to satisfy the requirements for the California Special Education Specialist Credential and/or for certification by the national organizations in speech pathology, audiology, or education of the deaf.

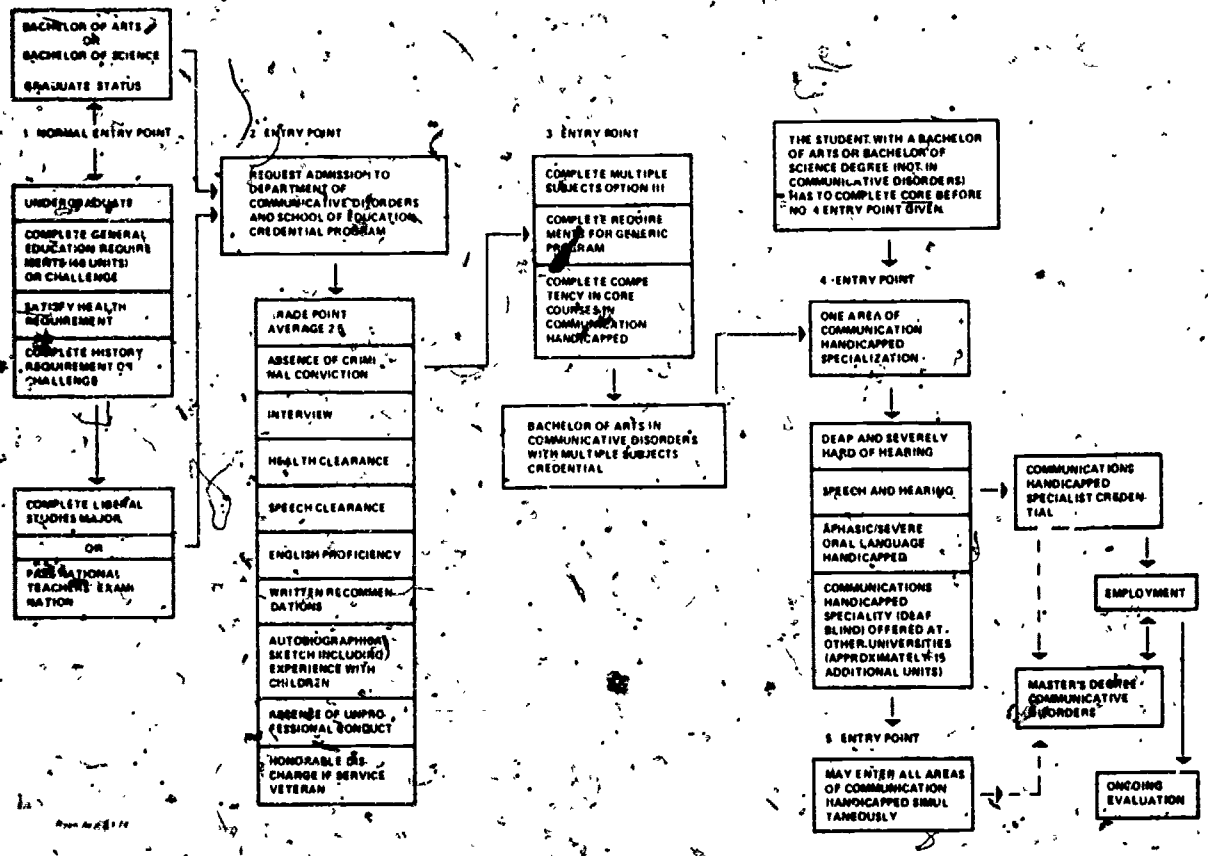
Because Ryan (Ryan Legislation, 1970) credential programs currently require completion of the Multiple Subjects Credential, Communicative Disorders' students are advised to take the National Teachers Examination (common section) at the end of the first semester of the sophomore year or immediately upon entering the program. The successful completion of the NTE and 40 units of general education courses can be substituted for the 84-unit Liberal Studies Major required for the Multiple Subjects Credential.

Students who choose to do graduate work in Communicative Disorders without previous background in the field will be required to complete all prerequisite courses prior to enrollment in courses leading to the graduate degree. The School of Graduate Studies and the Graduate Coordinator of the Communicative Disorders Department will send specific requirements to interested students.

The following pages indicate the sequence of courses designed to prepare the student for credentialing and/or certification in Communicative Disorders. The student is directed to the *General Catalog*, which can be obtained by sending $1.65 to the Admissions Office, for full descriptions of courses indicated by number in the outline. An application for admittance into the Communicative Disorders Department will be sent upon request to the Admissions Office. Further information about the program is available by writing to the Coordinator of Undergraduate Advising and Admissions in care of the Communicative Disorders Department.

"SPECIAL EDUCATION SPECIALIST CREDENTIAL PROGRAM"* for Communication Handicapped

Department of Communicative Disorders
California State University, Fresno
Fresno, California 93740



RYAN CURRICULUM: SPECIAL EDUCATION SPECIALIST IN COMMUNICATION HANDICAPPED

Deaf and Severely Hard of Hearing

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR	GRADUATE
18 units General Education or Liberal Studies Major (Credential)	Gen Ed 4 Health 3 Hist 3 Poly Sci 3 Ling 134 3 16 Take NTE (Commons Section: Prerequisite for E. Ed 132B)	E. Ed 100 2 E. Ed 105 3 AS/CD 114 3 CD 131 3 CD 128 1 CD 163 3 15	CD 162 3 CD 164 3 E. Ed 120T 4 E. Ed 132B 6 16 Apply for Generic Student Teaching	CD 232 3 CD 262 3 CD 263 3 CD 264 3 CD 211 3 15 Apply for Student Teaching, AS 164B
18 units General Education or Liberal Studies Major (Credential)	CD 121 3 CD 100 3 CD 104 3 CD 108 1 CD 107 1 Electives 5 16 If necessary, retake N.T.E., obtain clearance from School of Education	E. Ed 156 3 AS/CD 116 3 CD 132 4 CD 136 3 CD 135 3 16 Apply for Student Teaching, E. Ed 132B	CD 266 3 CD 260 2 CD 137 3 E. Ed 132B 6 14 Summer Elective 3	CD 267 3 CD 268 6 AS 164B 6 15 This semester is subject to departmental revision Summer Thesis Project 3 or Comprehensive Exam 0

The program outlined above includes all requirements for national certification by the Council on Education of the Deaf

Speech and Hearing

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR	GRADUATE YEAR	M.A.
18 units General Education or Liberal Studies Major (Credential)	G.E. or L.S.M. 4 Amer Hist 3 Health 3 Poly Sci (U.S Const.) 3 Ling 134 3 16 NTE (Commons Section: Pre-requisite for E. Ed 132B) Obtain clearance from School of Education	CD 101 3 CD 104 3 E. Ed 120T (Curriculum) 4 E. Ed 132B 6 16	CD 132 4 CD 111 3 CD 130 (50 hours) 2 CD 116 3 Elective or CD 136 3 15 Sign up for Generic Student Teaching	CD 230 (50 hours) 2 CD 110 or CD 205 3 Select Courses From: 9 CD 210 CD 207 CD 213 CD 220 CD 214 CD 211 CD 215 CD 133 CD 206 Psych 177 CD 232 (If M.A.: CD 299, Thesis; or CD 298) 1 15	Complete Course Work: CD 230 CD 298 CD 299 NTE: Sp. Path
18 units General Education or Liberal Studies Major (Credential)	E. Ed 100 2 E. Ed 156 3 E. Ed 105 3 CD 100 3 CD 102 3 CD 107 1 CD 108 1 16 If, necessary, retake NTE sign up for student teaching, option III.	Speech & Hearing Therapy Courses Required CD 105 3 CD 106 3 CD 112 3 Pre-Clinic Screening CD 131 3 CD 128 1 CD 114 3 16	CD 130 (50 hours) 2 CD 205 or CD 110 3 E. Ed 132B (Generic St. Teaching) 6 Elective or CD 136 3 CD 230 (Hearing) 1 15 Pre-student teaching screening. Sign up for CD student teaching	Select Graduate Courses From: (List as above) 6 CD 209 1 AS 164A 4/6 (if M.A.: CD 299, Thesis; CD 298) 5 16	Suggested Electives: Sp 162 Sp 160 Ling 243 (Syntax) Psych 149 Psych 205A RC 212

RYAN CURRICULUM: SPECIAL EDUCATION SPECIALIST IN COMMUNICATION HANDICAPPED

Aphasic/Severe Oral Language Handicapped

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR	GRADUATE YEAR	M.A.
18 units General Education or Liberal Studies Major (Credential)	G.E. or L.S.M. 4 Amer Hist 3 Health 3 Poly Sci (U.S. Const.) 3 Ling 134 3 16 NTE (Commons Section: Pre-requisite for E. Ed 132B) Obtain clearance from School of Education	CD 101 3 CD 104 3 E. Ed 120T (Curriculum) 4 E. Ed 132B 6 16	CD 132 4 CD 111 3 CD 130 (50 hours) 2 CD 116 3 CD 188T* or CD 136 3 15 Sign up for Generic Student Teaching *Language for the Aphasic Child	CD 230 2 CD 110 or CD 205 3 Select Courses From: 9 CD 207 AS 245 CD 214 CD 133 CD 232 CD 213 CD 211 Ling 243 CD 220 Psych 177 AS 242 Psych 169 (If M.A.: CD 299, Thesis; or 298) 1 15	Complete Course Work: CD 230 CD 298 CD 299 NTE: Sp. Path
18 units General Education or Liberal Studies Major (Credential)	E. Ed 100 2 E. Ed 156 3 E. Ed 105 3 CD 100 3 CD 102 CD 107 1 CD 108 1 16 If necessary, retake NTE - sign up for student teaching, option III.	Speech & Hearing Therapy Courses Required CD 105 3 CD 106 3 CD 112 3 Pre-Clinic Screening CD 131 3 CD 128 1 CD 114 3 16	CD 130 (50 hours) 2 CD 205 or CD 110 3 E. Ed 132B (Generic St. Teaching) 6 CD 188T* or CD 136 3 CD 230 (Hearing) 1 15 Pre-student teaching screening. Sign up for CD student teaching. *Language for the Aphasic Child	Select Graduate Courses From: (List as above) 6 CD 209 1 AS 164A in aphasic class or with severe oral language handicapped children 4/6 (If M.A.: CD 299, Thesis; CD 298) 5 16	Suggested Electives: Psych 149 Soc Sc 205A RC 212

TENTATIVE CURRICULUM: ASHA CERTIFICATE OF CLINICAL COMPETENCY

Audiology

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR	GRADUATE
18 units General Education	Gen Ed 4 Am Hist 3 Poly Sci 3 Ling 134 3 Elective 3 16 *Request admission to the Department of Communicative Disorders	CD 101 3 CD 102 3 CD 104 3 CD 131 3 CD 128 1 Psy 101 3 16	CD 132 4 AS 153 3 CD 111 3 CD 130 2 Elective 3 15	(See Graduate Catalog) 30 units graduate program (1) CD 218 or Statistics required (2) 300 clinical hours: 150 at graduate level in appropriate categories
18 units General Education	CD 100 3 CD 107 1 CD 108 1 Sp 160 3 CD 114 3 Elective 6 17	Speech & Hearing Block CD 105 3 CD 106 3 CD 112 3 CD 133 3 Elective 3 15	CD 136 3 CD 205 3 CD 250 2 Psych 103 3 Elective 4 15	

Speech Pathology

FRESHMAN	SOPHOMORE	JUNIOR	SENIOR	GRADUATE
18 units General Education	Gen Ed 4 Am Hist 3 Poly Sci 3 Ling 134 3 Elective 3 16 *Request admission to the Department of Communicative Disorders	CD 101 3 CD 102 3 CD 104 3 CD 116 3 Psych 101 3 Elective 3 18	CD 132 4 CD 111 3 CD 130 2 CD 110 3 Elective 6 18	(See Graduate Catalog) 30 units graduate program (1) CD 218 or Statistics required (2) 300 clinical hours: 150 at graduate level in appropriate categories
18 units General Education	CD 114 3 CD 100 3 CD 107 1 CD 108 1 Psych 121 4 Sp 160 3 Elective 3 18	Speech & Hearing CD 105 3 CD 106 3 CD 112 3 CD 131 3 CD 128 1 Elective 3 16	CD 130 2 CD 205 or CD 110 3 CD 230 (Hearing) 1 CD 136 3 Elective 7 16	

DEPARTMENT OF COMMUNICATIVE DISORDERS

CD 76	Problems in Oral Expression	2
CD 100	Principles of Communicative Disorders	3
CD 101	Phonetics of American English	3
CD 102	Psychology of Speech and Language Development	3
CD 103	Management of Communicative Disorders	3
CD 104	Physiology and Anatomy of Speech and Hearing Mechanisms	3
CD 104L	Physiology and Anatomy Laboratory	1
CD 105	Voice and Articulation Disorders	3
CD 106	Seminar in Stuttering	3
CD 107	Field Experience in Communicative Disorders: Speech Pathology	1-3; max 3
CD 108	Field Experience in Communicative Disorders: Education of the Deaf	1-3; max 3
CD 110	Diagnostic Procedures	3
CD 111	Neurological and Physiological Basis of Speech	3
CD 112	Management of Language Disorders of Children	3
CD 114	Education of Exceptional Children	3
CD 116	Prescriptive and Individualized Instruction	3
CD 121	Language Acquisition	3
CD 128	Observation in Communicative Disorders: Audiology	1-3; max 3
CD 130	Clinical Practice in Speech and Hearing Therapy	1-3; max 6
CD 131	Principles of Audiology	3
CD 132	Aural Rehabilitation	4
CD 133	Audiometry	3
CD 135	History, Education, and Guidance of the Deaf	3
CD 136	Manual Communication for the Deaf	3
CD 137	Psychology of Deafness	3
CD 160	Clinical Practice in Education of the Deaf	2; max 6
CD 162	Speech for the Deaf	3
CD 163	Language for the Deaf	3
CD 164	Elementary School Subjects for the Deaf	3
CD 188T	Topics in Communicative Disorders	1-3; max 6
CD 190	Independent Study	1-3; max 6

GRADUATE COURSES

CD 205	Functional Speech Disorders in Children	3
CD 206	Communication Disorders-Articulation, (Phonemic)	3
CD 207	Dysphasia in Adults	3
CD 209	Speech-Hearing in Public School Environment	1
CD 210	Seminar in Structural Speech Disorders	3
CD 211	Programmed Instruction	3
CD 213	Seminar in Neurological Speech Disorders	3
CD 214	Seminar in Language Disorders of Children	3
CD 215	Seminar in Voice Disorders	3
CD 218	Research Methodology in Communicative Disorders	3
CD 220	Communicative Disorders of Second Language Usage	3
CD 228A	Observation in Communicative Disorders: Speech Pathology	1; max 3
CD 228B	Observation in Communicative Disorders: Audiology	1; max 3
CD 228C	Observation in Communicative Disorders: Education of the Deaf	1; max 3
CD 230	Advanced Clinical Practice in Speech and Hearing Therapy	1-3; max 6
CD 231	Seminar in Audiology	3; max 6
CD 232	Seminar in Differential Diagnosis of Auditory Disorders in Children	3
CD 233	Seminar in Analysis of Hearing Aids	2
CD 234	Seminar in Industrial Audiology	2
CD 250	Advanced Clinical Practice, Audiology	2; max 6
CD 260	Advanced Clinical Practice, Education of the Deaf	2; max 6
CD 262	Seminar in Speech for the Deaf	3
CD 263	Seminar in Language for the Deaf	3
CD 264	Seminar in Elementary School Subjects for the Deaf	3
CD 266	Instructional Strategy and Technology for the Deaf	3
CD 267	Supervised Instruction With the Deaf	3
CD 268	Internship With the Deaf	6
CD 270	Seminar in Organization and Management of Audiology Clinics	3
CD 290	Independent Study	1-3; max see reference
CD 298	Individual or Group Research Project	2; max 4
CD 299	Thesis	1-6; max 6

*This course utilizes all facilities of the Anna Michelson Memorial Instructional Media Center for the Deaf which functions within the Department of Communicative Disorders. This center is the only one of its kind in the U.S. and is designed to educate future teachers of the deaf in the selection and production of media materials and equipment.

SUGGESTED ELECTIVES
Department of Communicative Disorders

Phy 155	Neuroanatomy	4
Phy 160	Neurophysiology	2
Ling 131	English Dialects	4
Ling 142	Phonology	4
Ling 143	Syntax	4
Ling 147	Bilingualism	3
Psych 103	Maturity and Old Age	3
Psych 124	Perception and Cognition	4
Psych 125	Physiological Psychology	4
Psych 126	Language, Thought, and Culture	4
Psych 155	Developmental Psychology	4
Psych 156	Social Psychology	4
Psych 164	Humanistic Psychology	4
Psych 166	Abnormal Psychology	3
Psych 167	Mental Retardation	3
Psych 175	Family Counseling	3
Psych 177	Behavior Modification	3
P.E. 152	Elementary School P.E.	3
P.E. 156C	Adaptive P.E.	3
HS 220	Seminar in Physical Handicaps	2
Ph Th 133	Physical Medicine and Rehabilitation	3
RC 201	Rehabilitation Counseling	3
AS 170	Learning Disabilities	3
E. Ed 156	Reading	3
Nursing 188T	Gerontology	3