Elizabeth City State University has established a program concentrating in speech pathology and audiology which is nontraditional in approach. It serves as a support in giving valuable substance and current expertise to those programs already offered in the area of language proficiency. Growing out of the established educational concept that skills can best be taught by those teachers with the specific, detailed knowledge from the discipline that have proven effective in developing expertise in particular areas, the program in speech pathology and audiology was instituted to give teachers the expertise in developing language proficiency. The courses in Phonetics, Introduction to Speech Pathology, Anatomy and the Vocal Mechanism, Pathology II, and Clinical Procedure and Practice, are especially useful in teaching reading skills, designing objectives for remediating basic speech and language problems, and establishing behavioral objectives for language arts. The program is especially useful in designing objectives, procedures and materials to serve the exceptional child, both retarded and gifted, in language growth. All courses are structured to provide expertise in servicing the exceptional child. Opportunities are available for interdepartmental use of materials, equipment, and student-faculty exchange of services. (Author/JMF)
ELIZABETH CITY STATE UNIVERSITY
ELIZABETH CITY, NORTH CAROLINA

A Program in Language and Speech Development

TITLE: A CONCENTRATION IN SPEECH PATHOLOGY AND AUDIOLOGY

SERVING THE NEEDS OF

TEACHERS OF VARIOUS DISCIPLINES
Description and Development of the Program

Elizabeth City State University has established a program carrying the traditional title of a concentration in speech pathology and audiology. In actual concept the program is very non-traditional in approach: it serves as a support in giving very valuable substance and current expertise to those programs already in existence at Elizabeth City State University in the much neglected area of language proficiency. The need for competencies by teachers in the ability to establish language proficiency in children is historically evident. However, educators, especially in the State of North Carolina, are currently intensifying their requirements that all teachers, with special emphasis on those teachers of language arts and early education, establish exit criteria in courses which will insure communication proficiency in the general student population of the State.

Growing out of established educational concept that skills can best be taught by those teachers with the specific, detailed knowledge from the discipline that has proven effective in developing expertise in particular areas, the program in speech pathology and audiology was instituted at Elizabeth City State University to give teachers the expertise in developing language proficiency.

Courses are offered as a concentration for the teaching major. While the concentration is open to any interested teaching major, special tracts have been developed for the education major (See Appendix B) and the English major. (See Appendix A) The concentra-
tions culminate in three hours of field experience which in actual involvement requires the prospective teacher, through designated exit criteria and behavioral objectives, to develop a philosophy and competencies in directing language growth in children.

The population which the teachers who leave Elizabeth City State University expect to serve generally have marked deficiencies in developmental language and basic speech skills. The University's efforts are designed to provide the communities in which our graduates are employed with professionals who have the expertise to deal with these problems.
The speech and language development program at Elizabeth City State University has built-in interdisciplinary and multidisciplinary facets as evidenced in the objectives. The courses will be supportive of the objectives of several other departments: the preparation of students as well-trained, professional teachers and workers, and the offering of professional growth opportunities for in-service teachers.

In addition to offering special enrichment courses for majors on all levels, the concentration is especially challenging and productive for the prospective teachers of early childhood education and intermediate education. These professionals will be prepared to structure and execute programs within the classroom for the extensive numbers of students with learning disabilities, especially those which grow out of language disabilities.

The courses in Phonetics, Introduction to Speech Pathology, Anatomy of the Vocal Mechanism, Pathology II, Clinical Procedure and Practice, are especially useful in teaching reading skills, designing objectives for remediating basic speech and language problems while establishing behavioral objectives for language arts.

The English major finds a closely related discipline that serves as a minor, and in-depth supplemental material for the general teaching of English.

The program is especially useful in designing objectives, procedures and materials to serve the exceptional child, both retarded and gifted, in language growth. All courses are structured to provide expertise in servicing the exceptional child.
The course, Clinical Practice and Procedure, teaches methods of developing behavioral objectives and providing one to one service for the language and/or the speech-impaired child. In addition, techniques for developing self-instructing, self-paced modules are taught.

Opportunities are available for interdepartmental use of materials, equipment and student-faculty exchange of services.
Need for the Concentration

A. In northeastern North Carolina, public school systems generally reflect a lack of developmental and corrective services in the area of language, speech and hearing. Curricula are conspicuously weak in this area. At least one logical reason for this obvious deficiency in the education of the children and youth of our region is the dearth of trained personnel. No doubt some trained personnel are available in the state at large and importations are always a possibility. However, history -- past and immediate -- has proven that northeastern North Carolina lacks the financial and cultural appeal of other regions of the state. Therefore, the classroom teachers who work in this region must be prepared to offer the much needed services in language and speech.

B. North Carolina (as in the case of many other states) is becoming increasingly concerned with the learning disabilities of children and youth, many of which disabilities are an outgrowth of language disabilities. A speech/language program which presents competencies that permit the classroom teacher to work with (1) language development skills, (2) language disorders, and (3) the traditional speech defects and disorders serve many fundamental needs of the educational system.

C. Many of the children who enter the classroom with language/speech skills so deficient that learning is hampered are from low socio-economic environments. For northeastern North Carolina this low socio-economic student population is largely composed of minorities.
Ineffective language skills on the part of the minority population has caused many problems for both teachers and students as the school systems attempted to integrate. It is anticipated that the teachers with competencies in language development will be skilled in solving many of the learning problems and other social problems that invariably accompany poor communicative skills. Consequently, the very delicate process of smoothly integrating the schools will be given impetus.

E. There are many avenues for employment open to individuals skilled in speech and language development, which are the specific areas in which competencies are provided. Special fringe benefits are a great degree of expertise in the teaching of reading and the training of the mentally retarded and the child with learning disabilities. The State of North Carolina, which this program will basically serve, is really just beginning to establish full programs in many of these categories. Teachers with the concentration will be able to meet employment criteria.
Requirements for the Concentration

Objectives of the Program

The general objectives will reflect those given in the guideline from the State Department in its Standards and Guidelines for Approval of Institutions and Programs for Teacher Education. (See Appendix C) The students enrolled will learn:

1. The normal development of speech, hearing and language in infants and children
2. The anomalies or disorders in the development of speech, hearing and language
3. Techniques for the prevention and remediation of speech, hearing and language disorders
4. The etiology and treatment of specific speech, hearing and language impairments
5. The phonological, physiological, psychological, sociological, neurological, semantic foundations of speech and hearing
6. The anatomy, physiological and function of the auditory and speech mechanism
7. The testing procedures and varied methods in the diagnosis, evaluation and treatment of speech and hearing disorders
8. The techniques for auditory training and speech reading
9. Techniques for rehabilitating the speech impaired, resulting from an acoustical handicap
10. Techniques for rehabilitating the language impaired
There are six in-depth core courses designed to give basic expertise in the areas of speech/language development and general knowledge of the relationship of hearing to speech/language problems. They are:

- **Introduction to Speech Pathology 26-227**
  - Designed to acquaint the student with the nature and development of normal and defective language patterns. Survey of the disorders of speech and hearing, including symptomatology, causation, testing; emphasis on problems encountered by the classroom teacher.

- **Phonetics 26-229**
  - Study of the phonetic alphabet. Practice in transcription of the International Phonetic Alphabet. Application of the phonetic alphabet's own speech improvement and to the teaching or reading. Consideration of standard and substandard speech characteristics of the three major American regional dialects.

- **Anatomy of the Vocal Mechanism 26-301**
  - A study of the basic structures and functions of the speech and hearing mechanism. Application of such study to the field of speech pathology and audiology.

- **Speech Pathology II 26-339**
  - An advanced course in speech correction covering causes of organic, functional and psychological speech dis-
orders. Special emphasis on pathologies and therapeutic procedures in stuttering and speech disorders of the central and peripheral nervous system. Prerequisite: Introduction to Speech Pathology 26-327.

**Clinical Procedure and Practicum in Speech Pathology** 26-459  
Methods, theory and practice in preparation of therapeutic objectives and materials. Supervised clinical case work with children and adults having various speech and language disorders. Practicum and observation on the University campus, the local community speech center, and the public schools. May be repeated for a total of 6 semester hours. Prerequisite: Introduction to Speech Pathology 26-327.

**Introduction to Audiology** 26-327  
Overview of the field of Audiology. Introduction to normal and defective hearing. Methods and procedures of pure tone audiometry, with emphasis on their application to the study of hearing disorders. Demonstration and practicum with the pure tone audiometer. (Generally suggested as an elective)
The electives for the concentration are designed in two channels. One channel is geared to the English majors who would more frequently benefit from electives in the general field of English (which includes reading, grammar, literature, developmental history of the English language, drama, speech education). (See Appendix A) The second channel is geared to other majors (with special concern for the education major). The emphasis here is geared to reading, all psychologies dealing with child development and learning disabilities. (See Appendix B)

While specific courses are suggested for each channel of the concentration, students have freedom of other electives with advisement from the core director.
Main Objectives

The student will:

1. Know and apply the definition of speech in terms of a pathology.

2. Know the emotional problems that reinforce a speech deviancy.

3. Know each stage through which normal speech and language develops and grows.

4. Know the causes of delayed speech and language.

5. Be able to use not less than twenty techniques designed to correct delayed speech.

6. Know the disorders of articulation.

7. Know the names of the varieties of articulation test along with their publishing companies.

8. Know how to use and interpret the various standardized screening test for articulation disorders.

9. Use at least three diagnostic-screening test.

10. Write two articulation test reports which include both the phonetic analysis and the kinetic analysis.

11. Write at least two summaries of a diagnostic examination.

12. Be able to use not less than twenty techniques designed to correct disorders of articulation.

13. Know the causes of voice disorders.

14. Know the categories of voice disorders.

15. Know the methods for producing vicarious voice.

16. Know the components of the artificial larynx.
17. Know the definition for esophageal speech.
18. Know the seven progressive steps in treating voice disorders.
19. Know at least ten theories of stuttering.
20. Know the steps in the development of stuttering.
22. Know the names of definitions of the organic disorders of speech.
23. Know the causes of speech disorders which are precipitated by hearing problems.
24. Know the classification of hearing loss.
25. Know the sources of hearing rehabilitation.
26. Know career opportunities and resource personnel in the field of speech pathology.
The Instructional Staff and Support

The concentration in Speech Pathology and Audiology is administered by a Certified Speech Pathologist (CCC-SP—American Speech and Hearing Association). All core courses are taught by this faculty person. The budget is provided by the Department of English which provided the expertise in developing the innovative program and to which the core faculty member belongs. The concentration is a part of the extended services to the University by this department.

Evaluation

Students in the concentration are evaluated on their ability to develop objectives and modules successfully in offering language development services to a selected population on the University campus and in the University kindergarten and nursery school.

The general success of the program is determined by surveys which reveal employment opportunities and the effectiveness of the in-service teacher who has completed the program in providing special services in the school/community employment situation.
Contribution to Teacher Education

Any discussion of such a program carries inherent statements on contributions to teacher education. To detail the major specifics:

1. It utilizes new techniques for training prospective teachers.

2. Prospective teachers of various disciplines are given expertise in offering language and speech services.

3. Prospective teachers are given expertise in providing services to the child with learning disabilities.

4. Prospective teachers are given expertise in providing services to the exceptional child, especially the retarded child.

5. Experience is provided for the prospective teacher to develop and execute modules on a one-to-one basis and in groups.

6. The program offers specific enrichment to the usual teaching curriculum.

7. The program is highly motivating to students.

8. The program provides assistance to the State of North Carolina in offering services to a large group of special students; namely, the language/learning impaired children.
APPENDIX A

Concentration in Speech Pathology and Audiology for the English Major

Core Course Requirements:

| Course     | Title                                      | Credits
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>26-319</td>
<td>Phonetics</td>
<td>3 hours</td>
</tr>
<tr>
<td>26-327</td>
<td>Introduction to Speech Pathology</td>
<td>3 hours</td>
</tr>
<tr>
<td>26-329</td>
<td>Anatomy of the Vocal Mechanism</td>
<td>3 hours</td>
</tr>
<tr>
<td>26-339</td>
<td>Pathology II</td>
<td>3 hours</td>
</tr>
<tr>
<td>26-459</td>
<td>Clinical Procedure and Practice</td>
<td>3 hours</td>
</tr>
</tbody>
</table>

Electives -- Select one from the following:

| Course     | Title                                      | Credits
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>26-457</td>
<td>Introduction to Audiology</td>
<td>3 hours</td>
</tr>
<tr>
<td>26-314</td>
<td>Public Speaking</td>
<td>3 hours</td>
</tr>
<tr>
<td>25-324</td>
<td>Introduction to Dramatic Arts</td>
<td>3 hours</td>
</tr>
<tr>
<td>20-479</td>
<td>Research in Language and Literature</td>
<td>3 hours</td>
</tr>
<tr>
<td>20-480</td>
<td>Junior-Senior Honors Project</td>
<td>3 hours</td>
</tr>
<tr>
<td>25-325</td>
<td>Play Production: Acting and Directing</td>
<td>3 hours</td>
</tr>
<tr>
<td>20-319</td>
<td>Children's Literature</td>
<td>3 hours</td>
</tr>
<tr>
<td>20-121</td>
<td>Developmental Reading</td>
<td>2 hours</td>
</tr>
<tr>
<td>63-482</td>
<td>Learning Disabilities of Children</td>
<td>3 hours</td>
</tr>
<tr>
<td>63-425</td>
<td>Classroom Diagnosis of Reading Difficulties</td>
<td>3 hours</td>
</tr>
<tr>
<td>63-407</td>
<td>Storytelling</td>
<td>3 hours</td>
</tr>
<tr>
<td>63-464</td>
<td>Techniques and Materials for Improving Reading in the Public Schools</td>
<td>3 hours</td>
</tr>
</tbody>
</table>
APPENDIX A

hearing or language clinicians should take the major portion of their course work in speech pathology, audiology, and/or language disorders. Those students preparing to become teachers of the hearing impaired, including the deaf, should take the major portion of their course work in education of the hearing impaired and/or deaf.
APPENDIX B

Concentration in Speech Pathology and Audiology
for Non-English Major

Core Course Requirements:

- 26-319 Phonetics (3 semester hours)
- 26-327 Introduction to Speech Pathology (3 semester hours)
- 26-329 Anatomy of the Vocal Mechanism (3 semester hours)
- 26-339 Pathology II (3 semester hours)
- 26-459 Clinical Procedure and Practice (3 semester hours)

Electives — Select one from the following:

- 26-457 Introduction to Audiology (3 semester hours)
- 20-327 History of the English Language (3 semester hours)
- 61-307 Psychology of Child Development (3 semester hours)
- 10-202 General Physiology (3 semester hours)
- 10-207 Human Anatomy (3 semester hours)
- 63-482 Learning Disabilities of Children (3 semester hours)
GUIDEINE 2: The program should provide preparation in an area of concentration in sufficient depth to develop the required competencies.

b. Speech and Hearing—Emphasis differs depending on whether the training is for the preparation of a clinician or a teacher to specialize in speech, hearing, deafness, or language. Study should include the normal development of speech, hearing, and language in infants and children, and possible anomalies or disorders in their development; basic techniques for the prevention and remediation of speech, hearing, and language disorders; study of the etiology and treatment of specific speech, hearing, and language impairments, such as articulation, rhythm (stuttering), voice, organic involvements and language, and hearing disorders; study of phonology and language development; physiological, psychological and social foundations of speech and hearing disorders; anatomy, physiology and function of auditory and speech mechanisms; observation of procedures and methods in the diagnosis, evaluation and treatment of hearing; auditory training and speech reading; speech rehabilitation; testing of hearing; speech for the acoustically handicapped; and problems of the child with a hearing loss. Those students preparing to become speech,
The Department of Modern Languages in which the current concentration was developed has proposed to the University system a full major in Speech Pathology and Audiology.

The program, which will also be creative in its approach, features two channels --

1. the teaching, which provides undergraduate training for those planning to teach in developmental speech programs and participate in school-related corrective speech or language arts programs;

2. the non-teaching, which provides undergraduate pre-professional training as broad preparation for graduate study.