

SPEECH&PHONETICS INSTRUCTION and OUTREACH COURSE
a Community-based project

Natalie M. Baker
Associate Professor, Voice and Speech
School of Drama

The Speech&Phonetics Instruction and Outreach Course is designed for Carnegie Mellon University students who wish to develop their proven skills in speech and phonetics so they can teach established standards of precision and clarity in any dialect. They will examine language as a living thing, as a social phenomenon. This is a serious investigation to open the way for CMU students to put the science of phonetics to practical use in an elementary school to teach children, regardless of regionalisms, accents or dialects, to speak Standard American English. The CMU students will create an opportunity for elementary students through Comparative Phonetics, the science of speech sounds and the art of producing them, to know their deviations from the norm and how to correct them. They will classify the sounds of this group and compare the sounds to the Standard American Speech Dialect. Through a whole new world of sound study the elementary students will be made aware of how to use Standard American English in particular situations as a viable option. The course broadens the horizons for Carnegie Mellon students, who have already acquired the knowledge and technical skills to speak in a distinct, efficient and pleasing manner, to apply those capabilities to teaching and coaching the Standard American English Dialect as well as to classify any and all regionalisms, dialects and accents of the Standard Dialect.

Abstract:

Carnegie Mellon University Drama Department and the Robotics Institute are teamed with Holy Rosary Catholic Elementary School, one of Pittsburgh's inner city schools that enrolls economically disadvantaged African American students and is supported by the Extra Mile Education Foundation, to develop a curriculum for interactive, speech recognition software. Natalie Baker, associate professor of drama, and the FLUENCY project will create educational software that will adapt the recognizer to distinguish a student's inaccurate sounds and present the correct sound according to Standard American Speech Dialect. As part of the project, CMU drama students, in a new course funded by the Center for University Outreach and developed by Ms Baker, "Speech and Phonetics: Instruction and Outreach", will be paired with fifth graders to test the software in the Spring Semester 2000. This outreach program will encourage CMU drama students to apply their expertise while developing their understanding from their prerequisite course in Speech and Phonetics and to have experience with other applications for their training. The CMU/Holy Rosary "The Vocal Coach" project will teach elementary students, through Comparative Phonetics, the science of speech sounds and the art of producing them, to know their deviations from the norm and how to correct them. The software will classify sounds of this group and compare them to sounds of Standard American Speech Dialect.

Course Learning Goal: synthesis of theory and practice while providing learning informed service in the community

Course Pre-requisite: Speech&Phonetics 54-103 and 54-104

Required : Membership, International Phonetic Association
Course Packet of Specified Readings

Educational Purposes of the Course:

the course is relevant for actors and singers as well as students of linguistics, speech and language therapy, speech technology, modern languages and EFL to explore:

- descriptive and acoustic phonetics
- practical phonetics training techniques as well as issues in the assessment of practical phonetic ability
- categorization of dialect and regional varieties of Standard American Speech
- phonetics curriculum issues
- teaching and learning materials and techniques
- web based learning with speech pattern displays for the teaching of phonetics
- development of the capacity to be of service in the community

The Community Partner:

The Extra Mile Education Foundation's Holy Rosary School, is a Catholic inner city elementary school that enrolls mostly economically disadvantaged, non-Catholic, African-American children. The Foundation, and the Holy Rosary community: administration, faculty, students, and parents, are highly enthusiastic about the project. (See enclosure)

The Problem:

There is convincing evidence that inner-city youth are both stigmatized and inhibited by their speech. Although their heritage is irreplaceable and deserves honor, the dialects used in informal speech often limit their ability to communicate outside their neighborhood, in seeking jobs or across generational lines. In speech, as in every area of life, young people have to learn to adapt to informal, formal, business and social situations. In this community-based course: Speech & Phonetics, Instruction and Outreach, young students receive the instruction of the CMU students under the direction of Associate Professor, Natalie Baker, to learn to speak the standard of American English dialect needed for clear communication. In addition, a new familiarity with words and expression will encourage them to read across the curriculum, including the classics, technical directions and publications, etc.. The course aims to radically improve students' communications skills by combining proven techniques of teaching speech with significant opportunities to observe college campus fine arts activities. This introductory program will prepare elementary students for further schooling and jobs in a competitive economy.

Academic Standards for CMU Students:

This is a practical application in an educational setting, with small groups and individuals. It presents the following challenges:

- Comprehensive Teaching of the Standard American Dialect to the elementary students
- Proper Diagnosis and transcription of the sounds by use of audio tapes, of the particular regional dialect of the elementary student population
- Detailed Implementation of a workbook to teach the sounds, using the IPA (International Phonetic Alphabet) by weekly written assignments
- Creative Utilization of in-class drills for the vowel, diphthong and consonant sounds to help elementary students to master the Standard American Dialect
- Co-authoring of a journal of the experience of the semester with assigned elementary students
- Weekly Seminars to discuss progress in the work
- Production of the final project "My Favorite Poet" performance: coaching the elementary students' poetry and directing the presentation for the Studio Theatre, Purnell Center

- Taping and critique of final performance
- Writing of final paper

Course Commitment:

Along with high academic learning expectations, the CMU students are required to apply the community service learning to the course learning. The course weight is based on the quality of learning (six units). Adding the community service component to this course adds three units. As a nine unit course, the Carnegie Mellon students will complete each week:

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| • Tutoring at Holy Rosary School and at CMU | 3 | hours |
| • Conferences with Fifth Grade Teacher at Holy Rosary | | |
| • Correcting Workbook and Audio Tapes Review | 1 | hour |
| • Seminar with Natalie Baker | 1 | hour |
| • Travel time to Holy Rosary School | 1 | hour |

What the Carnegie Mellon Students Should Learn

- that good speech and principles of intonation can be taught to children with satisfactory results using simple terminology
- how to help children hear and repeat the thirty-nine sounds of American English with ease through a thorough drill in their proper use
- that all spoken languages are made up of sounds--the task is to re-examine how the sounds are produced, used and ultimately taught, perfecting the general technique of phonetics
- methods of notating initial deviations from the Standard Dialect, using phonetics
- the number of speech problems in all populations using the Roman alphabet
- how to help elementary students apply what they have learned to poetic text and to present selections of poetry to an audience in the final project

Instructional Strategy for Carnegie Mellon University Students:

Location: There are two sites for the training of the Carnegie Mellon Students: Holy Rosary School, 7120 Kelly Street, Homewood, Pittsburgh, PA on Tuesdays and Carnegie Mellon University, Purnell Center on Thursdays (Holy Rosary students will be bussed)

Length of Classes: Ninety minutes -both days. The children will learn:

- to draw IPA (International Phonetic Alphabet) symbols
- to use proper vocal technique
- to employ logical Intonational Patterns
- to apply proper speech sounds to poetic text
- to analyze text
- to exercise appropriate performance techniques

The Carnegie Mellon Students' Work with Natalie Baker involves:

- initial class at Carnegie Mellon to set goals, understand procedure, receive guidelines for methodology, explore the Workbook, learn the schedule of training at Holy Rosary and at CMU
- supervised 90 minute sessions twice a week with the Holy Rosary students
- meetings with Principal, Gwendolyn Young and Fifth Grade Teacher, Beverly Deanes
- weekly one hour seminars to discuss the work, assigned readings
- rehearsals of Final Favorite Poet Project in Studio Theatre, Purnell Center

Although there will be group work with Holy Rosary students every week, the class of thirty will be divided into five teams of children each led by one of the six CMU tutors for phonetic drills, admission of tests and correction, review of workbooks, co-authoring of journals and coaching of final project.

Procedure

I Diagnosis

Record and notate phonetically the sounds made by the elementary students in the initial class, having given the children specific material to read as well as questions to answer. Prepare reports on initial findings for Natalie Baker and fellow students.

II Seminars

Discuss audio tapes of elementary students and deviations from the Standard Dialect. Discuss readings. Share the students' ongoing challenges with teaching the sounds, the Workbook, text analysis, choosing the favorite poets, coaching the final project.

III Classroom Instruction

- instruct children on use of the "Distinct, Efficient and Pleasing for Elementary School" tape
- teach the IPA (International Phonetic Alphabet)
- present the Workbook, assign homework, correct homework (Workbook and tapes)
- conduct drills in the 39 sounds
- work with "Distinct, Efficient and Pleasing for Elementary Children" tape
- read poetry to students
- assign poetry to students and critique memorized presentations
- analyze poetry chosen by students for final project "My Favorite Poet"
- co-author journals with each of assigned five students on the individual team

IV Final "Favorite Poet Project"

- help each student on team to finalize favorite poet choice and examples of poet's work
- coach the speaking of the poetry for performance at Purnell Center
- coordinate with fellow CMU students to stage the final presentation in Studio Theatre
- create the program to showcase the Holy Rosary students and to involve the Homewood community (parents, friends, teachers) as well as the Carnegie Mellon Community

Assessment: How the Carnegie Mellon Students will be Evaluated

- comparison of the initial diagnostic tape of each student on the Carnegie Mellon Student's team with final tape of each student's work on the final Favorite Poet Project
- level of critique and correction of workbook of each student on the team
- review of the co-authored journals of each student on the team
- comments from Gwendolyn Young, Principal and Beverly Deanes, Fifth Grade Teacher
- evaluation of the Favorite Poet Project with written comments of children and teacher
- participation in weekly seminars
- final paper