

2006-2007 :: M.S. in Communication Disorders

1. Mission Statement: The mission of the Program in Communication Disorders is to guide students in attaining the essential knowledge and skill for entry to the practice of speech-language pathology; to provide the breadth and depth of classroom and practical experiences consonant with each student's developing interests and career goals; and to support student clinical preparation through innovative and collaborative clinical services, on campus and in the community, and an active program of research in understanding, treating, and preventing communication disorders.

2. Objectives:

2.1 Basic Processes: Students will apply knowledge in communication and swallowing processes and disorders, including their biological, neurological, acoustic, psychological, developmental/lifespan, linguistic and cultural bases and apply that knowledge to clinical practice at a level commensurate with entry-level certification and licensure in speech-language pathology

2.1.1 Related General Education Outcome Item(s): 11. Advanced Knowledge in Discipline(s)

2.1.2 Related Strategic Plan Item(s): V-1 Life Science Health Collaborations

2.1.3 Related Institutional Priority Item(s): COM-4 Enhance research, graduate education and technology-driven economic development

2.1.4 Standards and Associations: The American Speech-Language-Hearing Association (ASHA, <http://www.asha.org/default.htm>) ASHA is the professional, scientific, and credentialing association for more than 123,000 members and affiliates who are audiologists, speech-language pathologists, and speech, language, and hearing scientists

2.1.5 Student Related Objective: Yes - This is a student related objective.

2.2 Prevention, Assessment & Intervention: Students will demonstrate knowledge and skills in the principles and methods of prevention, assessment and intervention for people with communication disorders including anatomical/physiological, psychological, developmental, and linguistic and cultural correlates of the disorders at a level commensurate with entry-level certification and licensure in speech-language pathology.

2.2.1 Related General Education Outcome Item(s): 11. Advanced Knowledge in Discipline(s)

2.2.2 Related Strategic Plan Item(s): V-1 Life Science Health Collaborations

2.2.3 Related Institutional Priority Item(s): COM-4 Enhance research, graduate education and technology-driven economic development

2.2.4 Standards and Associations: The American Speech-Language-Hearing Association (ASHA, <http://www.asha.org/default.htm>) ASHA is the professional, scientific, and credentialing association for more than 123,000 members and affiliates who are audiologists, speech-language pathologists, and speech, language, and hearing scientists

2.2.5 Student Related Objective: Yes - This is a student related objective.

2.3 Academic and Clinical Experiences: Students will successfully engage in academic and clinical experiences that prepare them to evaluate and treat individuals who exhibit disorders of articulation, fluency, voice/resonance, receptive/expressive language, hearing, swallowing, cognitive aspects of communication, social aspects of communication, and communication modalities and demonstrate critical thinking skills at a level commensurate with entry-level certification and licensure in speech-language pathology

2.3.1 Related General Education Outcome Item(s): 11. Advanced Knowledge in Discipline(s); 16. Independent Thought; 17. Internship; 18. Practicum

2.3.2 Related Strategic Plan Item(s): V-1 Life Science Health Collaborations

2.3.3 Related Institutional Priority Item(s): COM-4 Enhance research, graduate education and technology-driven economic development

2.3.4 Standards and Associations: The American Speech-Language-Hearing Association (ASHA, <http://www.asha.org/default.htm>) ASHA is the professional, scientific, and credentialing association for more than 123,000 members and affiliates who are audiologists, speech-language pathologists, and speech, language, and hearing scientists

2.3.5 Student Related Objective: Yes - This is a student related objective.

2.4 Research and Ethics : Students will demonstrate knowledge and application principles of ethical practice, research design and analysis at a level sufficient to critique relevant research, evaluate assessment and intervention approaches, and understand and apply principles of evidence-based practice.

2.4.1 Related General Education Outcome Item(s): 11. Advanced Knowledge in Discipline(s); 15. Research & Design

2.4.2 Related Strategic Plan Item(s): V-1 Life Science Health Collaborations

2.4.3 Related Institutional Priority Item(s): COM-4 Enhance research, graduate education and technology-driven economic development

2.4.4 Standards and Associations: The American Speech-Language-Hearing Association (ASHA, <http://www.asha.org/default.htm>) ASHA is the professional, scientific, and credentialing association for more than 123,000 members and affiliates who are audiologists, speech-language pathologists, and speech, language, and hearing scientists

2.4.5 Student Related Objective: Yes - This is a student related objective.

3. Measures & Findings:

3.1 1a. Embedded essay exam item graded with rubric (C: 1a. Embedded essay exam item graded with rubric (COMD 7378)

3.1.1 Success Criteria: 1a. 75% of students score above 80% on scoring rubrics.

3.1.2 Related Objective(s): Basic Processes

3.1.3 Results Related To Success Criteria: Course offered in Summer and Fall semesters only

3.1.4 Numerical Results: NA

3.1.5 Influencing Factors: NA

3.1.6 Achievement Level: Met

3.1.7 Further Action: No

3.2 2a. Case Study evaluated with rubrics COMD 6320: 2a. Case study assignment evaluated with rubrics related to diagnosis and goal writing (COMD 6320)

3.2.1 Success Criteria: 2a. 75% of students score above 80% on scoring rubrics

3.2.2 Related Objective(s): Prevention, Assessment & Intervention

3.2.3 Results Related To Success Criteria: Case Study requiring students to pass rubrics focused on: identification of diagnosis, goal writing and appropriate activities to support goal. 92% of students passed across the set of designated rubrics exceeding the criterion of 80%.

3.2.4 Numerical Results: 92% of students passed across the set of designated rubrics. Criterion: 80%

3.2.5 Influencing Factors: Objectives are well aligned. Will add additional case studies and more discussion/handouts during lectures to specifically focus on developing and writing appropriate goals and activities that support goals.

3.2.6 Achievement Level: Met

3.2.7 Further Action: No

3.3 3a. Embedded multiple-choice benchmark exam items : 3a. Embedded multiple-choice benchmark exam items (COMD 6320)

3.3.1 Success Criteria: 3a. 75% of students score above 80% on scoring rubrics

3.3.2 Related Objective(s): Academic and Clinical Experiences

3.3.3 Results Related To Success Criteria: Pediatric Midterm: Multiple choice set of 6 questions & Adult Final: Multiple choice set of 8 questions. 86% of the benchmark questions were answered correctly. Criterion for success was 75% of the questions correctly answered.

3.3.4 Numerical Results: 86% of the benchmark questions were answered correctly exceeding the criterion of 75%.

3.3.5 Influencing Factors: Objectives are well aligned. Pediatric section may require additional focus on appropriate strategies and cueing techniques based on specific motor speech disorder (dysarthria vs. apraxia). Adult section will also benefit from additional class examples of characteristics of the different dysarthrias and appropriate therapeutic techniques.

3.3.6 Achievement Level: Met

3.3.7 Further Action: No

3.4 4a. Embedded multiple-choice benchmark exam items : 4a. Embedded multiple-choice benchmark exam items (COMD 7303)

3.4.1 Success Criteria: 4a. 75% of students score 80% or above

3.4.2 Related Objective(s): Research and Ethics

3.4.3 Results Related To Success Criteria: Course to be offered in Summer '07.

3.4.4 Numerical Results: NA

3.4.5 Influencing Factors: NA

3.4.6 Achievement Level: Met

3.4.7 Further Action: No

3.5 1b. Writing exercise evaluated with rubric (COMD 6: 1b. Writing exercise evaluated with rubric (COMD 6377)

3.5.1 Success Criteria: 1b. same as 1a

3.5.2 Related Objective(s): Basic Processes

3.5.3 Results Related To Success Criteria: Course requirements were changed this semester and did not include the writing exercise.

3.5.4 Numerical Results: NA

3.5.5 Influencing Factors: NA

3.5.6 Achievement Level: Met

3.5.7 Further Action: No

3.6 2b. Embedded multiple-choice benchmark exam items : 2b. Embedded multiple-choice benchmark exam items (COMD 7303)

3.6.1 Success Criteria: 2b. 75% of students score 80% or above

3.6.2 Related Objective(s): Prevention, Assessment & Intervention

3.6.3 Results Related To Success Criteria: Course to be offered in Summer '07.

3.6.4 Numerical Results: NA

3.6.5 Influencing Factors: NA

3.6.6 Achievement Level: Met

3.6.7 Further Action: No

3.7 3b. Individual Project evaluated with rubric (COMD: 3b. Individual Project evaluated with rubric (COMD 6221)

3.7.1 Success Criteria: 3b. same as 3a

3.7.2 Related Objective(s): Academic and Clinical Experiences

3.7.3 Results Related To Success Criteria: Course to be offered in Fall '07

3.7.4 Numerical Results: NA

3.7.5 Influencing Factors: NA

3.7.6 Achievement Level: Met

3.7.7 Further Action: No

3.8 4b. Writing exercise evaluated with rubric (COMD 7: 4b. Writing exercise evaluated with rubric (COMD 7378)

3.8.1 Success Criteria: 4b. 75% of students score above 80% on scoring rubrics

3.8.2 Related Objective(s): Research and Ethics

3.8.3 Results Related To Success Criteria: Course to be offered in Summer '07.

3.8.4 Numerical Results: NA

3.8.5 Influencing Factors: NA

3.8.6 Achievement Level: Met

3.8.7 Further Action: No

3.9 1c. Embedded multiple-choice benchmark exam items : 1c. Embedded multiple-choice benchmark exam items (COMD 6222, 6221)

3.9.1 Success Criteria: 1c. 75% of students score 80% or above

3.9.2 Related Objective(s): Basic Processes

3.9.3 Results Related To Success Criteria: 6 embedded multiple choice questions on each of 2 exams in COMD 6222 were scored (COMD 6221 is offered only in the fall semesters.) 90% of the students correctly 75% or more of the questions. The criterion of success was 80%. This indicates that students exceeded the expected success rate on this measure.

3.9.4 Numerical Results: 90% of the students correctly answered at least 75% of the benchmark questions on the 2 exams.

3.9.5 Influencing Factors: Students appear to be mastering the biological, psychological, and cultural factors relevant to the assessment and treatment of stuttering.

3.9.6 Achievement Level: Met

3.10 2c. Individual Project evaluated with rubric (COMD: 2c. Individual Project evaluated with rubric (COMD 6222)

3.10.1 Success Criteria: 2c. 75% of students score above 80% on scoring rubrics

3.10.2 Related Objective(s): Prevention, Assessment & Intervention

3.10.3 Results Related To Success Criteria: Individual treatment plan project scored with rubric providing a percentage score for assessment planning and treatment planning. Criterion of success: 75% of students score above 80% on scoring rubrics. 100% of students scored 80% or above.

3.10.4 Numerical Results: 100% of the students met or exceeded criterion on the scoring rubrics.

3.10.5 Influencing Factors: Objective is well aligned. Although this success looks as if the grading was too lenient, it actually reflects the balance of time spent in class on assessment and intervention versus basic processes and their application. It is, however, appropriate to spend the majority of the time in class on assessment and intervention issues.

3.10.6 Achievement Level: Met

3.10.7 Further Action: No

3.11 3c. Items on graduate exit interview. : 3c. Items on graduate exit interview.

3.11.1 Success Criteria: 3c. 80% of students report meeting goal

3.11.2 Related Objective(s): Academic and Clinical Experiences

3.11.3 Results Related To Success Criteria: Not available

3.11.4 Numerical Results: Not available

3.11.5 Influencing Factors: 10 graduating students have participated in exit interviews and we are seeking additional participants. The interviews were audiotaped and are presently being transcribed. Analysis awaits the completion of the interviews and their transcription.

3.11.6 Achievement Level: Met

3.12 1d. PRAXIS Results: 1d. Sub-area PRAXIS results.

3.12.1 Success Criteria: 1d. At least 75% of the students score in the top 75% in sub-areas relevant to the learning objective.

3.12.2 Related Objective(s): Basic Processes; Prevention, Assessment & Intervention; Academic and Clinical Experiences; Research and Ethics

3.12.3 Results Related To Success Criteria: Criterion was met in all areas: Basic Human Comm. Processes: 81.3% Phonological and Language Disorders: 75.0% Speech Disorders: 90.6% Neurogenic Disorders: 100% Clinical Management: 93.8% Prof. Issues, Psychometrics, Research: 93.8% Results demonstrate the students perform above average compared to national norms on a standardized assessment of knowledge in speech-language pathology.

3.12.4 Numerical Results: The criterion for success was that at least 75% of the students score in the top 75% in sub-areas of the PRAXIS. The following results were obtained: Basic Human Comm. Processes: 81.3% Phonological and Language Disorders: 75.0% Speech Disorders: 90.6% Neurogenic Disorders: 100% Clinical Management: 93.8% Prof. Issues, Psychometrics, Research: 93.8%.

3.12.5 Influencing Factors: The findings indicate that our students perform well above the average on a nationally administered standardized test of knowledge in speech-language pathology. It should be noted that we make to specific effort to prepare students for this examination nor do we consider their scores in determining student progress or suitability for graduation.

3.12.6 Achievement Level: Met

3.12.7 Further Action: No

3.13 External Practicum Supervisor Evaluation: Practicum supervisors at external sites complete form to evaluate students` ability to apply knowledge to clinical cases.

3.13.1 Success Criteria: On each learning objective, 80% of students achieve a rating of "consistent" or better.

3.13.2 Related Objective(s): Basic Processes; Prevention, Assessment & Intervention; Academic and Clinical Experiences; Research and Ethics

3.13.3 Results Related To Success Criteria: The expectation for students' clinical performance as rated by external practicum supervisors (non-UTD clinicians) was that 75% of the students would rank at least "consistent" on the rating scale provided to the supervisors. External supervisors rated the students on specific performance skills related to each of the 4 program learning objectives. In Objective 1 (Basic Processes) 100% met criterion, in Objective 2 (Prevention, Assessment, and Intervention) 98% met

criterion, in Objective 3 (Academic and Clinical Experiences) 97.5% met criterion, and in Objective 4 (Research and Ethics) 98% met criterion.

3.13.4 Numerical Results: In Objective 1 (Basic Processes) 100% met criterion, in Objective 2 (Prevention, Assessment, and Intervention) 98% met criterion, in Objective 3 (Academic and Clinical Experiences) 97.5% met criterion, and in Objective 4 (Research and Ethics) 98% met criterion.

3.13.5 Influencing Factors: This particular evaluation is considered critical in evaluating student application of knowledge because the assessment is made by independent clinicians not associated with the university. However, we have some concern, given the overall high ratings, that evaluating professionals may not be specifically differentiating an individual's skills in their ratings. There appears to be a halo effect that results in students who are excellent overall being given the highest rating on all skills even when there are individual skills on which the student needs to show improvement. The descriptors for the rating scale will be reviewed to address this issue.

3.13.6 Achievement Level: Met

3.13.7 Further Action: No

3.14 Comprehensive Examination: Questions on the Comprehensive Examination evaluated with rubrics related to student learning goals.

3.14.1 Success Criteria: 80% of student responses will be rated "mastered" on each learning objective.

3.14.2 Related Objective(s): Basic Processes; Prevention, Assessment & Intervention; Academic and Clinical Experiences; Research and Ethics

3.14.3 Results Related To Success Criteria: Responses to questions in the 4 key areas (child language disorders, adult language disorders, child speech disorders, adult speech disorders) of the written comprehensive examination were evaluated with rubrics related to each of the 4 program goals. The criterion for success was that 80% of the students would demonstrate mastery of each learning goal on each question. The results show mastery between 97% and 100% on each learning goal. Those students who did not demonstrate mastery were required to complete a rewrite of questions in those areas. Following the rewrite, all students demonstrated mastery across the 4 learning goals in each of the question areas.

3.14.4 Numerical Results: 97-100% of the students achieved mastery across a matrix of the the 4 areas of the examination by the 4 program student learning goals. Criterion for success was set a 80% for each cell in the matrix.

3.14.5 Influencing Factors: The Comprehensive Examination is designed both as a capstone in which students are expected to demonstrate the ability to synthesize the knowledge and skills gained through coursework and clinical practicum and diagnostic in evaluating gaps in learning. Because the examination is designed to assure acceptable competence for entry to the profession, the 80% criterion for success may be low. However, the results do indicate the effectiveness of the program in achieving its learning goals.

3.14.6 Achievement Level: Met

3.14.7 Further Action: No

5. Closing the Loop:

5.1 5.1 Continue to evaluate the assessment measures and success criteria: The assessment process implemented in the last 2 review cycles is in need of update and evaluation as additional data are collected. We need to look for annual consistencies and inconsistencies to determine how and when the data we are collecting should be used to initiate significant program change. Currently, our measures, both internal and external indicate program effectiveness, but we may be missing probes in areas where problems exist or our criterion scores may be too low to capture correctable problems which negatively affect student learning and student outcomes.

5.1.1 Related Objective(s): Basic Processes; Prevention, Assessment & Intervention; Academic and Clinical Experiences; Research and Ethics

5.1.2 Related Measure(s): 1a. Embedded essay exam item graded with rubric (C; 2a. Case Study evaluated with rubrics COMD 6320; 3a. Embedded multiple-choice benchmark exam items ; 4a. Embedded multiple-choice benchmark exam items ; 1b. Writing exercise evaluated with rubric (COMD 6; 2b. Embedded multiple-choice benchmark exam items ; 3b. Individual Project evaluated with rubric (COMD; 4b. Writing exercise evaluated with rubric (COMD 7; 1c. Embedded multiple-choice benchmark exam items ; 2c. Individual Project evaluated with rubric (COMD; 3c. Items on graduate exit interview. ; 1d. PRAXIS Results; External Practicum Supervisor Evaluation; Comprehensive Examination

5.1.3 Responsible Person: Program Head and Faculty

5.1.4 Target Date: April 2008

5.1.5 Priority: Medium Priority

5.2 5.2 Course Improvement: Inclusion of Supplementary Information Our assessment indicated that the program achieved criterion on all measures. However, faculty noticed some weakness in student performance in review of the data they collected from the courses they taught. Faculty instructors will be responsible for reviewing the content and method of presentation of materials and evaluation of student performance in an effort to enhance student learning in area in which current student performance is weaker than expected.

5.2.1 Related Objective(s): Basic Processes; Prevention, Assessment & Intervention

5.2.2 Related Measure(s): 1a. Embedded essay exam item graded with rubric (C; 2a. Case Study evaluated with rubrics COMD 6320; 3a. Embedded multiple-choice benchmark exam items ; 4a. Embedded multiple-choice benchmark exam items ; 1b. Writing exercise evaluated with rubric (COMD 6; 2b. Embedded multiple-choice benchmark exam items ; 3b. Individual Project evaluated with rubric (COMD; 4b. Writing exercise evaluated with rubric (COMD 7; 1c. Embedded multiple-choice benchmark exam items ; 2c. Individual Project evaluated with rubric (COMD

5.2.3 Responsible Person: Course Instructors

5.2.4 Target Date: Fall 2007 or when the course is offered

5.2.5 Priority: Medium Priority

5.3 5.3 Catalog Revision: The biennial catalog preparation provides the opportunity to use program assessment data and faculty input to to strengthen and update course content, sequence, and requirements. The faculty will meet periodically, to review the program and implement changes which will take effect with the publication of the revised university catalog.

5.3.1 Related Objective(s): Basic Processes; Prevention, Assessment & Intervention; Academic and Clinical Experiences; Research and Ethics

5.3.2 Responsible Person: COMD Program Faculty

5.3.3 Target Date: Fall 2007

5.3.4 Priority: High Priority

6. Analysis:

6.1 Program/Unit Strengths:

6.1.1 Objectives/Outcomes Exceeded or Met: The assessment findings showed that the students in the program achieved or exceeded criterion in each learning goal. This suggests that our ongoing system of program improvement has been effective. The measures we employed included direct performance on essay and multiple choice examinations, application of learning through externally rated performance in clinical practicum, and performance on a national standardized test of knowledge in the field of speech-language pathology (PRAXIS.) These results give us confidence that students are attaining the knowledge and skills commensurate with entry into professional practice in speech-language pathology as stated in our mission. Exit interviews with graduating students indicated a need for coursework and additional practicum opportunities in bilingual speech-language pathology. In response, we employed a lecturer to teach Bilingual Speech-Language Pathology in Spring 2007 and have actively worked with bilingual therapists in the Richardson and Plano ISD s to accept more students for practicum sites serving children who are bilingual. We have also expanded our practicum website to provide more easily accessible information concerning practicum opportunities and requirements.

6.1.2 Other Strengths: The program successfully completed its 7-year re-accreditation site visit by the American Speech-Language-Hearing Association. The program received very high ratings by the external review panel.

6.2 Program / Unit Weaknesses:

6.2.1 Objectives / Outcomes Partially or Not Met: All objectives were met.

6.2.2 Other Weaknesses: We are still in the process of modifying and validating our measures and criteria for success. Although our external measures indicate we are meeting our student learning goals and program mission, it's possible our success criteria are set too low.

6.3 Other Areas Needing Improvement: The growth of the program continues to present problems regarding infrastructure including parking, areas for students to congregate, and an appropriate mix of classroom sizes. The program also lacks the financial resources to compete effectively in the financial arena with area universities which offer substantial incentives to masters students in speech-language pathology.

7. Report:

7.1 Executive Summary: The masters program in Communication Disorders is one of the largest, if not the largest speech-language pathology program in the country in full-time students. It is ranked by U.S. News and World Report 17th out of approximate 325 graduate speech-language pathology programs. Admission to the program is increasingly competitive with the admission running about 35% of applicants and a yield of 75-80% acceptances. The program has earned a strongly positive reputation statewide and nationally which has benefited recruiting and employment of graduates. The program routinely graduates 100% of its entering students within 2 years and 100% are employed within 2 months of graduation. Nearly all graduating students (95-100%) pass the PRAXIS examination on their first try and after completing their clinical fellowship are eligible for national certification in speech-language pathology awarded by the American Speech-Language-Hearing Association (ASHA.)

Compliance with ASHA accreditation standards has required continuous evaluation of student performance to assure the readiness of graduates to enter the profession. ASHA has published and list of knowledge and skills competencies students are expected to attain before entering the field and these have served as the foundation for the program learning goals. The program has had a process of ongoing monitoring of student performance to assure the adequacy of each student's preparation and compliance with ASHA guidelines. The results of the program assessment were strongly positive and indicated that students exceeded criterion performance on each measure of program learning goals. The measures included direct assessment of student performance within core courses using embedded multiple-choice questions and essay questions graded with a rubric, student responses to comprehensive examination assessed using rubrics, external practicum supervisor evaluation of student performance using an evaluation form keyed to program learning goals, and student performance in sub-areas of the nationally administered PRAXIS examination.

While the findings regarding student learning were strongly positive, the course-based assessments helped individual instructors detect specific problems in the students' acquisition of knowledge of course material. This provided useful feedback to instructors regarding ways they might strengthen their courses, through supplemental background information or a shift in the balance of time devoted to particular topics. It was agreed that instructors would use the information as "pretest" data for course improvement in the next cycle of course offerings. The program also intends to undergo a more thorough analysis of course content and sequence in conjunction with the biennial preparation of the graduate catalog which will be ongoing over the next year.

The overall assessment results appear to support our impression and those of the professional field that the Communication Disorders program is meeting its mission in preparation of students for entry to the practice of speech-language pathology. However, the program will continue to refine its assessment techniques and seek additional valid measures to better triangulate the findings regarding student achievement of program learning goals.

7.2 Top 3 Program/Unit Accomplishments: New Faculty hires-The past two years has seen significant additions to our family:

Dr. John Hart Cognitive Neuroscience
Dr. Tom Campbell Speech Pathology, Director Callier Center
Dr. Christine Dollaghan Speech Pathology
Dr. Christa McIntyre Neuroscience
Dr. Mandy Maguire Language Development
Dr. Shayla Holub Social Development
Dr. Candice Mills Social Development
Dr. Daniel Krawczyk Cognitive Neuroscience
Dr. Bart Rypma Cognitive Neuroscience
Dr. Deborah Wiebe Medical Psychology

Significance of hires - These hires, in various ways, advanced several important School and Institutional objectives:

- 1) develop the joint brain-imaging Center with UT Southwestern and UT Arlington (Hart, Krawczyk, Maguire, Rypma)
- 2) develop the Center for BrainHealth (Hart, Krawczyk, Maguire, McIntyre, Mills, Rypma)
- 3) develop strong new leadership and programs at the Callier Center (Campbell, Dollaghan, Maguire)
- 4) strengthen faculty range for proposed Center for Children and Families (Campbell, Dollaghan, Holub, Maguire, Mills)

7.3 Research Activities or Publications: The School conducts research both within and across its three subsuming divisions: Psychological Sciences, Communication Sciences and Cognition and Neuroscience. Additionally School faculty conduct collaborative projects with institutions around the country, most notably UT Southwestern Medical Center, but also such institutions as Johns Hopkins, University of California at San Francisco, University of Wisconsin, Baylor Medical Center, University of Dijon, and University of Hamburg among numerous others. Collaborative projects with industry provide a small but growing part of the School's research programs, particularly in the area of bioengineering. During 2006 research on cochlear implants, hearing aids, neural stimulation and neural interfaces for prostheses were conducted. School faculty generated approximately 100 scholarly articles, over 100 presentations at national conferences, 20 chapters in edited volumes and 10 books. Faculty were featured speakers at several national or university meetings. The School also hosts its own speaker series to enhance the scholarly life of its programs. The central vehicle for this is the School's colloquium series which hosted 6 nationally prominent speakers during 2006. The Callier Center's Bruton Conference also brings prominent speakers to campus, as well as providing outreach to the community. Similarly the Center for Brain Health's The Brain: An owner's Guide disseminates current research information to the lay public.

Grants

PI Funding Agency Title Total Award

Assmann NSF Perception of Frequency-Shafted Speech 223,418

Atzori NIH/NIDCD Acetylcholine and Dopamine Modulation in Auditory 1,223,284

Cortex

Bharadwaj NIH Speech Production in Children with Cochlear Implants 200,310

Buckley NIH Cross-modal Plasticity in Pre-Lingually Deaf Children 83,490

Chapman Baylor Neurobehavioral Outcome of Head Injury in Children 396,968

Chapman Baylor Neurobehavioral Outcome of Head Injury in Children 45,587

Chapman NIH Genetic Factors in Outcome from Traumatic Brain 87,627

Dodd DEPT OF ED Projects FAMILY 2001+: Facilitating and Mentoring 1,206,914

Interdisciplinary Learning for the Years 2001+

Geers/Tobey NIH/NIDCD Long-term Outcomes of Cochlear Implantation in Early Childhood (Shannon Award) 100,000

Golden/Perwaiz NSF Doctoral Dissertation Research: Statistical Models of Hypertext Comprehension 10,560

Holub Timberlawn Foundation The Role of Parents' Restrictive Feeding Practices and General Parenting Style in Children's Eating 27,357.00

Jerger, S. NIH Auditory Processing in Hearing Impaired Children 1,783,366

Katz, W. Veteran's Affairs Treatment of Apraxia of Speech Following Stroke 77,000

Kilgard JAMES S MCDONNELL Brain Plasticity and Neuro-Rehabilitation 446,000

Kilgard NIH Cortical Plasticity and Processing of Speech Sounds 224,250

Kilgard NIH Supplement Cortical Plasticity and Processing of Speech Sounds 41,711

King/Hart UNCF Merck Foundation Quantification of Cortical Atrophy by Fractal Dimension 85,000

Lomber NIH Cerebral Organization Following Cochlear Implant 224,250

Lomber NIH Dev of fMRI Compatible Reversible Deactivation 380,290

Lomber NSF Cerebral Control of Aurally-Mediated Behavior 451,179

Lomber NSF supplement Cerebral Control of Aurally-Mediated Behavior 10,000

Malhotra NIH Cerebral Control of Sound Localization 31,069

Moore UTSW MCD Personality Theories and Dynamics 23,500

O Toole ONR Evaluating Face and Person Recognition Algorithms 325,545
with Human Benchmarks

O Toole ONR Face recognition performance: Humans vs Machines 175,000

Olness NIH/NIDCD Narratives in African Americans & Caucasians with 202,500

Aphasia

Owen Child Care Group Relationship-Centered Child Care & Children's Dev 82,012

Owen Timberlawn Relationship-Centered Child Care 37,165

Owen NIH/NICHD Study of Early Child Care and Youth 42,500

Roeser CALLIER FN Service, Training and Research for Cochlear Implant 795,898
Children

Stillman OHSU Validation of Evidence-Based Assessment Strategies 190,000
to Promote Achievement in Children who are Deaf-
Blind

Thompson RBC Life Sciences Nootropic Effects of Microhydrin and Microhydrin-Plus in Aging 101,132

Tobey UT AUSTIN Motor Control of Serial Organization of Speech 138,041

Tobey JOHN HOPKINS U Lang Outcomes in Pediatric Cochlear Implantation 1,531,219

Tobey MED EI CORP SPECT rCBF in Adult Cochlear Implant Users 12,000

Underwood NIH Social Aggression: Precursors and Outcomes 1,470,400

Underwood NIH Social Aggression: Origins, Development and Outcomes 597,320

7.4 Instructional/Training Activities (presented or received): Number of students who graduated
(by level and total)

39 M.S. students in Spring 2007

Number of students in each degree program

Enrollment spring 2007: 171

Number of new majors

18 new M.S. students entered in January; 73 have accepted admission for summer and fall 2007

Grants related to teaching

None

Major curricular changes

None

New programs or certificates

None

Updates or additions to classroom technology

All classrooms at Callier-Dallas and Callier-Richardson have videolink technology. All classrooms now have installed LCD projectors and laptop-based systems for video presentations

Teaching collaborations (internal and external)

None

Retention efforts and documented success(es)

Retention rate remains about 100%. Not an issue with this program

Service learning or community-based learning courses

All students engage in clinical practicum and most have community-based placements. However, these are not typically considered service-learning projects.

Student engagement initiatives and activities

The local chapter of the National Student Speech-Language-Hearing Association holds regular events including speakers, workshops on resume writing and job application procedures, charity fund-raisers, and parties for graduating students.

Faculty development activities

All faculty are awarded funds for travel to professional meetings and workshops of their choice. The School sponsors a Colloquium series which brings in 6-8 distinguished speakers for 2-day visits including formal and informal talks. There are multiple, weekly brown-bag seminars sponsored by the individual degree programs. Faculty have access to speaker series at UT-Southwestern Medical School.

Teaching recognition awards

None

Student achievement awards

None

7.5 Public Service: The School of Behavioral and Brain Sciences provides very extensive community service through numerous service programs of its Callier Center and Center for Brain Health, as well as collaborative efforts of various faculty. The Callier Center offered over 25 different clinical service programs generating over 40,000 patient contacts during 2006. Examples are its programs with such clinical populations as hearing impaired individuals across the age spectrum, language disorders, speech problems and autistic spectrum disorders. Similarly the Center for Brain Health offers service programs in Alzheimer's disease and Brain-injury in children. The School has extensive programs with numerous school districts providing educational programs for all hearing-impaired preschoolers in the Dallas Independent School District and audiological consultation with the Plano School District. Individual faculty in our neuroscience programs have also provided seminars for Plano and Richardson Schools in the area of brain research. The Center for Brain Health hosts an annual public lecture series on aspects of

brain research and the Callier Center offered two Bruton Conferences in 2006 primarily for professionals in the field of communication disorders. Callier audiologists also participated in outreach programs for hearing assessments in Panama and Mozambique

7.6 Other External Activities: The School has a number of international collaborations both via its academic programs and through clinical initiatives. During 2006 visiting scholars came from the Czech Republic, Mexico, Germany, France and Britain to engage in collaborative research programs. We have agreements in place for exchange with the University of Dijon, University of Hamburg, University of Chile, University of Montpellier and the University of Guanajuato. Faculty from the School were invited speakers at numerous international conferences and were Scholars-in-Residence at Dijon, Prague, Oxford and Tokyo. Clinical initiatives through the Callier Center took place in Mozambique and Panama. Ross Roeser is Editor of the International Journal of Audiology.

7.7 Contributions to UTD: The faculty in the School of Behavioral and Brain Sciences are unusually broad in the scope of their interests, subject populations studied, level of analysis employed in their work and the methodologies utilized. The diversity of these endeavors, coupled with the geographic proximity of two of the School's facilities to Southwestern Medical Center, has made the School a natural collaborator with other units of the University, the Medical School, as well as other institutions around the country. Examples of these efforts include investigations on developing new hearing technologies, combining efforts of surgeons, hearing, language and speech researchers and electrical engineers; developing new prostheses, engaging neuroscientists, computer science and electrical engineering faculty and neurosurgeons, and investigations on long-term consequences of pediatric brain injury, joining cognitive neuroscientists, pediatricians and virtual world engineers. In addition to these research partnerships, the School provides extensive direct service to the community through its various clinical programs. This community involvement has resulted in significant levels of philanthropic support for the School's programs.

7.8 Top 3 Program / Unit Challenges: The major challenges to the Communication Disorders program is that the Callier-Dallas infrastructure is inadequate to handle 170-180 masters students and 50 Au.D. and Ph.D. students. Parking is limited and the classrooms are insufficient in both number and size for optimal scheduling of classes. Parking, especially, is more than just an inconvenience when students arrive for class and are unable to legally park. Similarly, space for establishing new research and clinical initiatives at Callier-Dallas is virtually nonexistent. New construction is the solution, but Callier-Dallas is landlocked and any new construction related to the Center or the School is not in the University's immediate plans. Another challenge relates to the distance between the Callier-Dallas and Richardson campuses. Considerable commuting time is spent by both faculty and students. While discussions regarding van transportation have been ongoing, there are a number of hurdles before shared-ride transportation becomes a reality.

7.9 Detailed Resources Needed to Improve and Fulfill Mission: The program is in need of new and expanded facilities. The Callier-Dallas facility is nearly 40 years old and the portion of the building which houses the Communication Disorders program has never undergone significant renovation. Funding of renovation is problematic in a tight fiscal environment. Nonetheless, improvements in teaching, research, and office space is essential for the program to progress.