

Wichita State University
College of Health Professions
Department of Communication Sciences and Disorders

Doctor of Philosophy (PhD) Program Assessment Report

September 2010

Introduction

The Wichita State University (WSU) Department of Communication Sciences and Disorders (herein referred to as the department or CSD) is one of four programs of this type in Kansas. The programs at Kansas State University and Fort Hays State University prepare undergraduates and Master's degree level students but do not include the Doctor of Audiology or the PhD programs. Like the University of Kansas, WSU graduates students with the Bachelor of Arts, Master's, Doctor of Audiology (AuD), and PhD degrees with a major in CSD.

The Master's and AuD programs are accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). Because the profession requires a graduate degree as the entry level to clinical practice, certification and licensure are granted only to those holding the MA or AuD in CSD. Consistent with this professional standard, the accreditation of academic programs is based on standards established for graduate education, in accordance with the CAA and consistent with the Council for Clinical Certification (CFCC) of the ASHA. As the certifying body, the CFCC awards individuals the national Certificate of Clinical Competence, which is the standard for licensure in most states, including Kansas. As such, the CFCC and the CAA establish academic standards that are in concert with the professional competencies expected of licensed clinicians.

Undergraduate education is essential to the program as it provides the foundation for the graduate program and is therefore central to the department. Accreditation by the CAA, however, does not include substantive evaluative information regarding the undergraduate program. Further, the PhD is not part of the ASHA-CAA accreditation process.

The purpose of this report includes the following:

- Define the Program's centrality to the mission of the College and University;
- Describe the continuous evaluation process of the Program; and
- Analyze the current status of the Program in terms of the curriculum, faculty, students, graduates, service, and costs.

Centrality of the program to fulfilling the mission and role of WSU

Mission, Goals and Objectives

Wichita State University: “An urban-serving, research institution”

Wichita State University is committed to providing comprehensive educational opportunities in an urban setting. Through teaching, scholarship, and public service, the University seeks to equip both students and the larger community with the educational and cultural tools they need to thrive in a complex world, and to achieve both individual responsibility in their own lives and effective citizenship in the local, national, and global community.

High quality teaching and learning are fundamental goals in all undergraduate, graduate, and continuing education programs. Building on a strong tradition in the arts and sciences, the University offers programs in business, education, engineering, fine arts, and health professions, as well as in the liberal arts and sciences. Degree programs range from the associate to the doctoral level and encompass 75 fields of study; non-degree programs are designed to meet the specialized educational and training needs of individuals and organizations in south central Kansas.

Scholarship, including research, creative activity, and artistic performance, is designed to advance the University’s goals of providing high quality instruction, making original contributions to knowledge and human understanding, and serving as an agent of community service. This activity is a basic expectation of all faculty members at Wichita State University.

Public and community service activities seek to foster the cultural, economic, and social development of a diverse metropolitan community and of the state of Kansas. The University’s service constituency includes artistic and cultural agencies, business and industry, and community educational, governmental, health, and labor organizations.

Wichita State University pursues its mission utilizing the human diversity of Wichita, the state’s largest metropolitan community, and its many cultural, economic, and social resources. The University faculty and professional staff are committed to the highest ideals of teaching, scholarship, and public service, as the University strives to be a comprehensive, metropolitan university of national stature.

The College of Health Professions:

The College of Health Professions (CHP) is a learning community that embraces diversity and is dedicated to developing health care professionals by:

- Valuing students - our primary focus
- Integrating teaching, scholarship, practice, and service
- Partnering with the community

The Department of Communication Sciences and Disorders:

The mission of the Department of Communication Sciences and Disorders is to prepare qualified speech-language pathologists and audiologists as scholars/practitioners who are professionally competent to practice in educational and medical settings on behalf of children and adults who have disorders of communication.

A degree in CSD supports the College and University missions by:

- Providing students the opportunity to engage in a high quality program of study, designed to prepare them for life-long learning while developing their critical thinking skills, interpersonal communications, and overall abilities to be successful professionals.
- Preparing students for professional practice in educational and medical settings which serve individuals with communication impairments, regardless of age, gender, linguistic, and cultural backgrounds.
- Prepare scholar-practitioners who pursue knowledge and skills through their program of study, undergraduate through graduate, leading toward a degree that prepares them for their future goals.
- Provide students with opportunities to develop their research skills for both applied and basic research, which includes evidence-based practice as central to good clinical practice.

Monitoring the program's effectiveness:

Mechanisms used by faculty to regularly evaluate the congruence of the Program and Institutional goals consist of the following: Conceptual framework, participation in College governance, annual review of Department, College, University strategic plans and goal statements, annual review of Department and College key performance indicators, participation in development of College and Department strategic plans, annual report of individual goals aligned with Department and College goals and strategic initiatives and University Accountability Planning Matrix.

Faculty regularly evaluate the extent to which the program's goals are achieved through ongoing monitoring of committee goal progress toward successful realization of the Department's strategic plan and Departmental reviews conducted in the fall and spring (Departmental) retreats. Additionally, there are weekly meetings of the CSD Executive Committee to monitor progress and activities toward goal achievement.

Program Strategic Plan

The program develops and implements a long-term strategic plan.

The following describes the process for creating and implementing the program's strategic plan.

Three CSD faculty members, one student, and the Chair participated in the CHP strategic planning process that began in January 2008 and continued through May 2008. This participation insured the Department's input to the College and the ability to guide the department process so as to be in congruence with CHP.

All members of the College subsequently were invited to participate in setting the strategic initiatives and target outcomes for the college

Following the model of the College, the Department conducted strategic planning at the CSD spring retreat to draft a two-three year plan that would advance the Department and the initiatives of the College.

The seven strategic initiatives of CHP were the framework for small group discussions of how CSD would address these targets, define department targets, and assess the need for other areas of emphasis

Discussions utilized data from surveys of student and employer evaluations of the CSD program, PRAXIS scores, graduation and employment rates, and input from the community advisory group. The strategic plan was the result of many hours of data gathering, analyses, discussion, writing and editing. The final review and adoption was conducted at the CSD all-day advance held August 13, 2008. This plan is now in the process of review/revision by the department for an updated three-year projection.

The strategic plan was developed and is reviewed in conjunction with the college strategic plan and is updated every three years. The plan and progress is reviewed annually as part of the annual review process. The department plan is approved by the department and the Dean. Individual and department progress toward the strategic initiatives is also reflected in the University Accountability Planning Matrix which is included as part of the annual review process and is therefore reviewed by the Provost, annually.

The strategic plan and department goals are incorporated into the annual report to Academic Affairs and the Graduate School. Meetings with the CSD Advisory Board also provide community input to the plan and the Chair reports to the members regarding progress as well as soliciting further input. Additionally, the program is represented to the CHP Advisory Council, which also consists of community members, who provide insight into current issues and are provided updates on program initiatives. It should also be noted that the University Accountability Planning Matrix, which is one part of the annual review for the Department, individual faculty members and clinical educators, requires reflection on how the goals and activities relate to the community. In this way everyone in the University and each program is expected to demonstrate how the program's strategic initiatives support the University and the community.

Diversity focus

The program's policies and procedures convey respect for and understanding of cultural and individual diversity in numerous ways and it is reflected in the diversity of our program faculty and students. This includes the following practices, to name a few:

- The department diversity plan clearly reflects non-discriminatory policies and procedures in recruitment and retention of students, our curriculum, and our clinical services;
- We currently have a personnel preparation grant and a leadership grant from OSERS that specifically target underrepresented students in our recruitment efforts and financial support and targets underserved areas as employment sites for graduates who are supported by the grants during their educational program;
- Admission to the program is based on 'objective' measures (GRE, GPA) and letters of recommendation;
- Students are not asked to identify by ethnicity, gender, religion, or other potentially discriminating demographics;

- Students who are non-native English speakers have been admitted to and successfully completed our program (examples: two students whose native languages were Taiwanese and Farsi, and one student who was Japanese, who completed the MA in SLP or Audiology (previous to the AuD));
- Students who have English as a second language and are applying to graduate school are required to take the TOEFL or IELTS. The CSD requirement is the same for the TOEFL/IELTS. In addition, CSD requires a score of 50 on the TSE;
- Students whose intelligibility had compromised their performance in clinical practica have been provided accent reduction therapy at no cost in order to facilitate successful completion of the clinical practicum;
- Students who have English as a second language have been placed in school and medical practica in sites where their accent will not unnecessarily disadvantage their successful completion of the practicum;
- Students who have English as a second language have been provided additional support for completing written work (e.g., thesis) when needed;

One student who completed the MA and PhD programs ‘simultaneously’ was nominated for and selected to participate in the ASHA minority leadership development program, which recognizes and celebrates his diversity. That same student completed dissertation research on the phonologic patterns of Spanish speaking children, which capitalized on his linguistic background.

Two other students have been selected for the ASHA minority leadership program in each of the past two years. Currently, the PhD cohort of students includes one African American, one Asian, and one East Indian student, representing 33% of the current PhD class of full-time students. In the past year we have graduated one Japanese and one Taiwanese student from the PhD program. We continue to attract a diverse population of students seeking to complete the PhD in CSD.

The quality of the program as assessed by the strengths, productivity, and qualifications of the faculty.

Faculty Qualifications

All CSD faculty have PhD degrees and teach courses at the undergraduate, graduate, and doctoral levels. Their expertise spans the breadth and depth of the fields of speech-language pathology and audiology, including: typical and atypical literacy development, phonetics, swallowing and disorders of swallowing (dysphagia), applied phonology, aural rehabilitation and clinical audiology, speech perception and auditory disorders, neuropathology and augmentative/alternative communication, fluency disorders, child language disorders and language remediation strategies, and language acquisition and autism spectrum disorders. All faculty have graduate faculty status and all but one, Dr Parham, who is new to the University, hold dissertation chairing status.

Faculty positions typically include all of the following responsibilities: teaching, research, and service. Some faculty also may assume academic advising or clinical supervision responsibilities. A three-credit hour course is considered to be 25% of one-semester teaching

load (12.5% of one academic year) for a full-time academic appointment, with each semester consisting of the equivalent of 12 credit hours. Faculty work loads are typically 50% teaching, 40% research, and 10% service for pre-tenure and 40% teaching, 40% research, and 20% service for tenured faculty. Teaching includes thesis, non-thesis research, or dissertation direction for students as well as two courses. Faculty teaching, research, and service roles may be adjusted, depending on the rank of the faculty member, other service or administrative assignments, research activities such as grants, or other responsibilities, at the discretion of the chair.

Although the report requests documentation of the faculty quality, at times throughout this report, reference will be made to the Clinical Educators and the Director who are vital members of the department. Clinical educators in audiology typically teach one didactic course per semester and clinical practicum courses. Clinical educators in speech-language pathology typically teach clinical practicum courses only.

The decision to grant tenure to a faculty member is considered a forecast of the individual's future contributions to the university, based largely on their past accomplishments as indicators of continued productivity. The essential components of the faculty member's portfolio include teaching, research, and service to the department, college, university, community, and the profession. To be granted tenure, the individual faculty member must demonstrate a strong, productive record of active research, excellence in teaching, and a consistent record of service. Every member of the faculty who has been reviewed for tenure and promotion over the past 5 years has been awarded both tenure and rank. Further, two members of the faculty have been awarded Professor Incentive Review. Currently the faculty consists of 11 tenure-eligible PhD faculty (9 are tenured) and 1 PhD Senior Clinical Educator. There are 6 full-time clinical supervisors (2 12-month, 4 10-month), 4 of whom hold the MA, 1 with the AuD, and 1 with the PhD. Additionally, there are three clinical supervisors who hold the MA and work less than full-time.

The productivity of the faculty is evident when examining their record of scholarship, including peer-reviewed publications, books and book chapters, scholarly presentations, and grants. Their publications have appeared in leading professional peer-reviewed journals such as the *American Journal of Speech-Language Pathology (AJSLP)*, *Language, Speech, and Hearing Services in the Schools (LSHSS)*, *Journal of Speech-Language-Hearing Research (JSLHR)*, *Communication Disorders Quarterly*, and *Topics in Language Disorders*. Research and scholarly presentations have been given routinely at international (e.g., International Association of Logopedics and Phoniatrics), national (e.g., American Speech-Language-Hearing Association convention), and state (e.g., Kansas Speech-Language-Hearing Association) levels.

The faculty have ample time and resources to conduct research. The general faculty role allows 40% assigned time for research. The three new faculty have been assigned a different role, with 50% research, 40% teaching, and 10% service. The purpose of this is to afford greater emphasis and commitment of time to research endeavors, with clear expectations for publication and pursuit of external funding having been delineated in their appointment letters. This reduces the teaching load to 3 classes annually, during the pre-tenure years. For Dr. Goldberg, who is hired with tenure and Associate rank, the role may be adjusted after the first year, following evaluation and discussion at the time of the annual review.

Existing faculty have been reassigned from clinical supervision to afford greater time for research over the past two years. This has proven to be productive in terms of publications and increased efforts toward securing external funding. The increased productivity is evident in the number of publications that have increased over the past five years, as seen in Tables 1 and 2.

Table 1. Publications and presentations

CSD		2005	2006	2007	2008	2009
# of publications		9	1	15	10	25
# of presentations		46	5	0	41	108

Table 2. External funding

CSD		2005	2006	2007	2008	2009
Rate		50%	50%	60%	100%	68%
# of grants applied for		6	8	5	2	22
# of grants awarded		3	4	3	2	15
Value of grants awarded		\$14,500	\$403,931	\$399,472	\$395,006	\$537,140

For the 2010-2011 academic year, financial support to PhD students for tuition, fees, and stipends totaled \$89,665 from grant supported resources. This is a substantial contribution to the efficiency and impact of the PhD program in WSU.

All doctoral faculty participate in supervising non-thesis research in the MA and AuD programs. Evidence of research productivity is reflected in the faculty members' graduate faculty standing. Further evidence of research productivity is the renewed graduate faculty appointments for continued status at the highest levels, when reviewed by the Graduate Subcouncil. Such renewal requires continued publications in scholarly journals or books. Additionally, one member, Dr. Hodson, received the University award for Outstanding Research in the spring of 2008. In 2009 Dr. DiLollo received the University Outstanding Young Faculty Scholar and in 2010 Dr. Self was awarded the University Outstanding Teaching Award.

The quality of the faculty and their work also has been validated in a number of ways by the American-Speech-Language-Hearing Association (ASHA), the national professional organization for audiologists and speech-language pathologists. (See report, August 28, 2009). The following is an excerpt from that report:

STRENGTHS/COMMENDATIONS

The CAA identified the following strengths and commends the program in these areas:

- **The mission of the CAA is to “promote excellence in graduate education in the discipline of communication sciences and disorders for the professions of audiology and speech-language pathology through a peer review process of establishing and promulgating accreditation standards that encourage continuous quality improvement”. Results of the 2009 CAA re-accreditation review of the Department of Communication Sciences and Disorders at Wichita State University *is an example of continuous quality.***
- **Dr. Kathy Coufal’s effective leadership skills have been reported as a strength of the program. This program appears to have taken opportunities for growth and future development by the horns and broken into a full sprint. It is apparent that this program is poised to meet its future needs head on. Students, faculty, consumers and other members of this constituency appear to be pleased with the outcome of the department’s efforts. Congratulations on this achievement.**

A number of faculty and clinical supervisors are Board Recognized Specialists by the Council for Clinical Specialty Recognition of the ASHA. Dr Coufal, Dr Hodson, and Dr Self are Board Recognized Specialists in Child Language. Mr. Ray is a Board Recognized Specialist in Fluency. Six CSD faculty members (Drs. Coufal, Hodson, Hull, Scherz, Goldberg, and Scudder) are ASHA Fellows. The Fellow is one of the highest honors ASHA can bestow on a member. It recognizes professional or scientific achievement and is given to members who have shown outstanding contribution to the professions--contributions that are significant and would be so regarded within and beyond their community or state. Dr. Hodson was awarded the Honors of the Association, which is the highest honor that ASHA bestows and is in recognition of a lifetime of contributions to the discipline.

All of the CSD faculty are involved in professional leadership activities. All faculty have served as editorial consultants for professional journals (*LSHSS, AJSLP, Journal of Phonetics, JSLHR, Communication Disorders Quarterly, and Word of Mouth*) and/or book reviewers for major publishing companies. In addition, Dr. Coufal has been the editor of *Communication Disorders Quarterly* for seven years and is now an Associate Editor of that journal. Many faculty (Drs. Coufal, DiLollo, Goldberg, Hodson, Hull, Mefferd, Scherz, Scudder, Self, and Strattman) have served on national committees, such as convention program committees and professional education boards. Drs Scherz and Scudder have served as site visitors for the ASHA-CAA and Dr. Scudder is currently a member of the CAA Board. Dr. Coufal has been elected to serve as the convention Co-chair for the annual ASHA convention to be held in 2011. Most CSD faculty members (Drs. Coufal, Goldberg, Hodson, Hull, Self, Scherz, Scudder, and Strattman) have held offices or chair positions within national or state organizations. Dr. Hull routinely serves on grant review and evaluation boards for such agencies as the Veterans Administration, Department of Health and Human Services, and the Department of Education. Also notable is the fact that the unclassified professionals also have a history of peer-reviewed publications, professional presentations, and leadership within state and national organizations.

The quality of the program is excellent as determined by the qualifications, strengths, and productivity of the faculty and its unclassified professionals. It is ready to continue in its development in the future. The department and its clinic are leading the field in such areas as formative assessments within academic courses and the serving as a model for evidence-based practice.

The quality of the program as assessed by the curriculum and impact on students. This section must present the student learner outcomes and how assessments of student learner outcomes data are used to improve the quality of the program.

The PhD program in CSD prepares doctoral students to be scholar-scientists in research and teaching. Individualized doctoral programs of study, mentoring by nationally and internationally recognized faculty, and specialized practica are provided to help doctoral students develop optimal research and teaching skills. The goal of the CSD doctorate is for the student to acquire the knowledge and skills that lead to scholarly research, expertise in teaching, and professional leadership. To earn the PhD, students need to acquire a substantial mastery of scientific knowledge and also demonstrate the ability to use that knowledge independently and creatively.

Qualifying Examination

The Qualifying Examination is viewed as an opportunity to (a) demonstrate mastery of knowledge and integration of information in the student's area of expertise in communication sciences and disorders and related or supplemental areas and (b) provide evidence of readiness to conduct doctoral research. Typically this examination is taken during the term that the student completes the academic and tool requirements. Prior to the examination, the student meets with each member of the Advisory Committee to establish the parameters for each topic area and to discuss the number and scope of questions to be written. The student then sends a summary of each meeting to the respective committee member and also to the student's doctoral advisor.

The written examination consists of two components: (a) two field-based papers and (b) an "in house" closed session (in which the student responds to a minimum of three questions in writing within a consecutive 3-day period; time constraints to be determined by the Advisory Committee in consultation with the student). The student is allowed 4 weeks for each field-based paper. The student writes a minimum of three closed-session answers in a departmentally approved location (supervised by the advisor) within 4 weeks after completion of the field-based papers. The Qualifying Examination is evaluated by the Advisory Committee, with the student's advisor serving as chair. If the consensus is that the written components are satisfactory, the oral portion of the Qualifying Examination is scheduled to take place within 2 weeks. At this time, the student has the opportunity to clarify aspects related to the written answers and to answer questions from committee members. In the event components (written and/or oral) are deemed unsatisfactory, the Advisory Committee establishes guidelines for further examination. Consistent with Graduate School policy, the student passes the Qualifying Examination if the majority (e.g., at least three members of a five-person committee) vote positively.

Advancement to Candidacy

Following successful completion of the Qualifying Examination, the Graduate School is notified, and the doctoral student becomes a Candidate for the PhD. The student must be enrolled

continuously (every semester, including the term that the dissertation is completed) for a minimum of 2 credit hours of Dissertation (CSD 999).

The program faculty continue to review students, the program requirements, and the relative success of students from both a formative and summative perspective. The nature of a PhD program is that it is highly individualized. Therefore, the success of the program, in terms of learner outcomes, is largely reflected in students' completion of the program in a timely manner, their accomplishments during their program of study, and their employment upon completion of the PhD. Of those graduating over the past ten years, 100% of them are employed in positions of their choosing.

Representative Student Accomplishments in Past 5 years:

Refereed publications (students in bold print)

- Ellis, C. M., & Hodson, B. W.** (2011). Therapy design and implementation. In B. Peter & A. MacLeod (Eds.), *Comprehensive perspectives on child speech development and disorders: Pathways from linguistic theory to clinical practice*. Hauppauge, NY: Nova Publishers.
- Goldberg, L. & **Rajagopalan, J.** (2010). Carbonated liquids: Helping clinicians understand their value and use in dysphagia management. *Proceedings of the 28th World Congress of the International Association of Logopedics and Phoniatrics (IALP), Athens, Greece*, 504-509.
- Goldberg, L., Parham, D.F., Coufal, K.L., **Maeda, M.**, Scudder, R.R., & **Sechtem, P.R.** (2010). Peer review: The importance of education for best practice. *Journal of College Teaching and Learning*, 17(2), 71-83.
- Goldberg, L., Uhlig, P., Downs, D., Scott-Koontz, J., Kumar, N.G., Shah, S., Clark, P., **Coiner, C.**, & **Crumrine, D.** (2010). Infusing an inter-professional and inter-university perspective in healthcare education. *Higher Education Research and Development*, 29(4), 421-431.
- Niessen, N.**, Strattman, K., & Scudder, R. (2010). The influence of three emergent literacy skills on the invented spellings of 4-year-olds. *Communication Disorders Quarterly*. Advance online publication. doi: 10.1177/1525740110363624
- Prezas, R.**, & Hodson, B. (2010). Phonological cycles remediation approach. In L. Williams, S. McLeod, & R. McCauley (Eds.) *Interventions for speech sound disorders in children* (pp. 137-157). Baltimore: Brookes.
- Self, T., Hale, L., & **Crumrine, D.** (2010). Pharmacotherapy and children with autism spectrum disorders: A tutorial for speech-language pathologist. *Language, Speech, and Hearing Services in Schools*, 41(3), 367-375.
- Franklin-Guy, S.** & Scudder, R. (2009). The effect of tacit beliefs on students with learning disabilities: An exploratory study. *The International Journal of Learning*, 16(10), 65-79.

- Prezas, R., Shaver, M., Carlson, T., Taylor, J.S., & Scudder, R.** (2009, October). Peer review of teaching: Multiple raters. *Perspectives on Issues in Higher Education*, 12(2), 59-63.
- Tsai, M., Scherz, J., and DiLollo, A.** (2009, June). Mentoring Asian graduate students who attend Communication Sciences and Disorders programs in the United States. *Perspectives on Issues in Higher Education*, 12, 24-31.
- Watts, C. R., **Prezas, R. F., & Awan, S. N.** (2009). The effectiveness of behavioral voice therapy for functional and organic voice disorders: A clinical rather than a systematic review. *Evidence-Based Communication Assessment and Intervention*, 4(1), 1-4.
- Champley, J., Scherz, J., Apel, K., & Burda, A.** (2008). A preliminary analysis of reading materials and strategies used by older adults. *Communication Disorders Quarterly*, 29(3), 131-140.
- Graham, T.K. & Scudder, R.R.** (2007). The language and social interactions of parents and their twins who are developmentally different. *Communication Disorders Quarterly*, 28(2), 107-113.
- Hart, P., Scherz, J., Apel, K., & Hodson, B.** (2007). Analysis of spelling error patterns of individuals with complex communication needs and physical impairments. *Augmentative and Alternative Communication*, 23, 16-29.
- Prezas, R. F., & Hodson, B.W.** (2007). Diagnostic evaluation of children with speech sound disorders. *Encyclopedia of Language and Literacy Development* (pp. 1-8). London, ON: Canadian Language and Literacy Research Network.
- Self, T., Scudder, R., Weheba, G., & **Crumrine, D.** (2007). Virtual reality: Exploring new dimensions for conversation, language, and learning. *Topics in Language Disorders*, 27(3), 209-210.
- Boden, C., **Smartt, J., Franklin Guy, S. & Scudder, R.** (2005). The relationship between personal epistemological beliefs and self-directedness: Implications for practice and for institutional change. *The International Journal of Learning*, 12(10), 133-142.
- Smartt, J.T. & Scudder, R.R.** (2005). Second language learners and self-repair: Creating a rubric for measuring second language acquisition. *International Journal of Learning*, 11, 361-365.

Invited publications

- Scudder, R. & **Carlson, T.** (2007). Doctoral Program Roundtable: Admissions Networking. *Proceedings of the Council of Academic Programs in Communication Sciences and Disorders*, 28.
- Carlson, T. & Strattman, K.H.** (2005, May/June). Assessing children who are unintelligible. In C. Westby (Ed.) *Word of Mouth*, 7-10.

Presentations

- Ellis, C. M. & Hodson, B. H.** (2010, November). *Kindergarteners with Disordered Phonological Systems: Three Case Studies*. Poster session at the meeting of the American Speech-Language-Hearing Association, Philadelphia, PA.
- Prezas, R., Goldstein, B., & Hodson, B.** (2010, November). *Evaluating and enhancing phonological skills of bilingual (Spanish-English) children*. Invited miniseminar at the meeting of the American Speech-Language-Hearing Association, Philadelphia, PA.
- Rajagopalan, J., Carlson, J., Goldberg, L.** (2010, November). *Interdisciplinary education in health care: The CLARION example*. Presentation at the meeting of the American Speech-Language-Hearing Association, Philadelphia, PA.
- Crumrine, D., Owens, J., Adams, M., Salamone, L., Self, T., & Chaparro, B.** (2010, September). *A Preliminary investigation of eye-gaze patterns on fast-mapping abilities of children with ASD*. Poster session at the meeting of the Kansas Speech-Language Hearing Association, Topeka, KS.
- Rajagopalan, J., Self, T., Coufal, K. L.** (2010, September). *Autism Spectrum Disorders screening and diagnostic practices: A survey of physicians*. Poster session at the meeting of the Kansas Speech-Language-Hearing Association, Topeka, KS.
- Coufal, K. L., Self, T., **Rajagopalan, J.** (2010, August). *Autism Spectrum Disorders screening and diagnostic practices: A survey of physicians*. Presentation at the 28th World Congress of the International Association of Logopedics and Phoniatrics, Athens, Greece.
- Crumrine, D., Owens, J., Adams, M., Salamone, L., Self, T., & Chaparro, B.** (2010, August). *A Preliminary investigation of eye-gaze patterns on fast-mapping abilities of children with ASD*. Poster session at the 28th World Congress of the International Association of Logopedics and Phoniatrics, Athens, Greece.
- Goldberg, L., **Rajagopalan, J.** (2010, August). *Carbonated liquids: Helping clinicians understand their value and use in dysphagia management*. Presentation at the 28th World Congress of the International Association of Logopedics and Phoniatrics, Athens, Greece.
- Rajagopalan, J., Self, T., Coufal, K. L.** (2010, July). *Autism Spectrum Disorders screening and diagnostic practices: A survey of physicians*. Poster session at the Autism Society National Conference and Exposition, Dallas, TX.
- Ellis, C. M. & Hodson, B. H.** (2010, April). *Severity and intelligibility measures of three kindergarten clients with disordered phonological systems*. Poster session presented at the International Child Phonology Conference, Memphis, TN.
- Rajagopalan, J., Kajese, T., Wagnon, A., & Fox, B.** (2010, April). *A restructured solution for a preventable death*. Case presented at the national competition of the Clinician/Administrator Relationship Improvement Organization (CLARION), Minneapolis, MN.

- Maeda, M., & Stratman, K.** (2010, March). *Integration and academic success of mainstreamed ESL students*. Poster session at the meeting of the Teachers of English to Speakers of Other Languages (TESOL), Inc., Boston, MA.
- Rajagopalan, J., & Goldberg, L.** (2010, March). *Evaluating unaltered and thickened carbonated liquids*. Poster session at the meeting of the Dysphagia Research Society, San Diego, CA.
- Crumrine, D., & Self, T.** (2009, November). *Pharmacotherapy and autism spectrum disorder: Family caregivers' perspectives*. Poster session at the meeting of the American Speech-Language-Hearing Association, New Orleans, LA.
- Ellis, C., **Crumrine, D., & Scudder, R.** (2009, November). *Scholarship of teaching and learning: What do PhD students know?* Poster session at the meeting of the American Speech-Language-Hearing Association, New Orleans, LA.
- Franklin-Guy, S. & Scudder, R.** (2009, November). *Students' tacit learning beliefs: The impact on academic language performance*. Presentation at the meeting of the American Speech-Language-Hearing Association, New Orleans, LA.
- Maeda, M., & Stratman, K.** (2009, November). *English vowel production for Japanese adults: Two treatments & effects*. Technical session at the meeting of the American Speech-Language-Hearing Association, New Orleans, LA.
- Tsai, M., Scherz, J., & DiLollo, A.** (2009, November). *Frame analysis of conversation contribution of augmented and typical speakers*. Technical session at the meeting of the American Speech-Language-Hearing Association, New Orleans, LA.
- Prezas, R.** (2009, October). *Phonological productions of Spanish-speaking children: Implications for services in the school-based setting*. Invited seminar at the meeting of the Kansas Speech-Language-Hearing Association, Wichita, KS.
- Prezas, R.** (2009, August). *Enhancing children's phonological and metaphonological systems with the cycles phonological remediation approach*. Invited seminar at the meeting of the Grand Prairie Independent School District, Grand Prairie, TX.
- Prezas, R.** (2009, August). *Understanding the phonological productions of Spanish-speaking children: Assessment protocol and implications for treatment*. Invited seminar at the meeting of the Grand Prairie Independent School District, Grand Prairie, TX.
- Prezas, R. F., Hodson, B. W., & Stratman, K.** (2009, June). *Exploring phonological systems and intelligibility of bilingual (Spanish-English) preschool children in both languages*. Poster session at the annual International Child Phonology Conference, Austin, TX.
- Prezas, R.** (2009, May). *Procesos fonológicos y consideraciones bilingües*. Invited seminar at Universidad Mayor, Santiago, Chile.

- Clark, P., **Crumrine, D.**, Shah, S., & Winslow, K. (2009, April). *The culture of health care: Where do we go from here?* Case presented at the national competition of the Clinician/Administrator Relationship Improvement Organization (CLARION), Minneapolis, MN.
- Maeda, M.**, & Stratman, K. (2009, March). *Two methods of training American English vowel production for Japanese adults: Computer and teacher assisted.* Poster session at the meeting of the Teachers of English to Speakers of Other Languages (TESOL), Inc., Denver, CO.
- Crumrine, D.**, Self, T., & Hale, L. (2008, November). *Therapist and family caregiver knowledge regarding medications to treat autism spectrum disorder.* Poster session at the meeting of the American Speech-Language-Hearing Association, Chicago, IL.
- Franklin-Guy, S.** & Scudder, R. (2008, November). *Language-learning disabilities and diminished self-concept II: Breaking the cycle.* Presentation at the meeting of the American Speech-Language-Hearing Association, Chicago, IL.
- Maeda, M.**, **Sechtem, P.R.**, & Scudder, R. (2008, November). *Peer reviews of teaching: Are they useful?* Presentation at the meeting of the American Speech-Language-Hearing Association, Chicago, IL.
- Prezas, R. F.**, & Hodson, B. W. (2008, November). *Measuring intelligibility of bilingual (Spanish-English) children in both languages.* Seminar at the meeting of the American Speech-Language-Hearing Association, Chicago, IL.
- Sechtem, P.R.**, & Scherz, J. (2008, November). *The CAT process and discovery of evidence: A critically appraised review of VitalStim therapy.* Poster session at the meeting of the American Speech-Language-Hearing Association, Chicago, IL.
- Maeda, M.**, & Stratman, K. (2008). Effects of training an American English vowel production for Japanese adults. Poster session at the meeting of the Kansas Speech-Language-Hearing Association, Overland Park, KS.
- Tsai, M.**, Scherz, J., Lee, H., & Yi-Jen, C. (2008, August). *Service provision of AAC in Taiwan.* Poster session at the 13th biennial meeting of the International Society for Augmentative and Alternative Communication, Montreal, Canada.
- Prezas, R.** (2008, March). *Assessing phonological skills of Spanish-speaking children.* Invited seminar at the meeting of the Ohio Speech-Language-Hearing Association Conference, Columbus, OH.
- Scherz, J., & **Tsai, M.** (2008, February). *A service learning project in AAC.* Poster session at the 8th annual conference of the American Speech-Language-Hearing Association's Special Interest Division 12, Long Beach, CA.
- Carlson, T.**, & Stratman, K. (2007, November). *Do babies increase vocabulary by viewing baby media?* Poster session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.

- Franklin-Guy, S.,** Scudder, R., Apel, K., Schommer-Aikins, M., Strattman, K., & McDowell, K. (2007, November). *The interrelationships among written language ability, self-concept, and epistemological beliefs*. Presentation at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Prezas, R. F.,** & Hodson, B. W. (2007, November). *Comparing picture and object naming responses by Spanish-speaking preschoolers*. Poster session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Prezas, R. F., Gluszek, A.,** & Self, T. (2007, November). *Using the picture exchange communication system to treat selective mutism*. Poster session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Shaver, M., Carlson, T., Prezas, R., Taylor, J.S.,** & Scudder, R. (2007, November). *Peer review of teaching: Internal, external, & emeriti rating differences*. Poster session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Tsai, M.,** & Scherz, J. (2007, November). *Communication opportunities provided to children with developmental delays in classrooms*. Technical session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Tsai, M.,** Johnson, J., & Scherz, J. (2007, November). *Graphic communication facilitates development in communication acts and communicative functions*. Poster session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Tsai, M.,** Scherz, J., Lee, H., & Yi-Jen, C. (2007, November). *Service provision of AAC in Taiwan*. Poster session at the meeting of the American Speech-Language-Hearing Association, Boston, MA.
- Rvachew, S., Hodson, B., **Prezas, R.,** & Lewis, B. (2007, June). *Encyclopedia of language and literacy development: Speech-sound disorders*. Panel presentation at the meeting of the Canadian Language and Literacy Research Network, Calgary, Alberta.
- Carlson, T.,** & Strattman, K. (2007, March). *Influence of baby media on vocabulary development*. Poster presentation at the State Capitol Review, Topeka, KS.
- Prezas, R. F.** (2007, March). *Improving assessments for Spanish-speaking children with communication disorders in Kansas*. Poster presentation at the meeting of the Wichita State University Foundation National Advisory Council, Wichita, KS.
- Prezas, R. F.** (2007, March). *Improving assessments for Spanish-speaking children with communication disorders in Kansas*. Poster presentation at the annual Capitol Graduate Research Summit, Topeka, KS.
- Shaver, M.D.** & Sun, X.M. (2007, March). Effects of negative middle ear pressure on spontaneous otoacoustic emissions (SOAEs). *Bulletin of the American Auditory Society Annual Meeting*, 32(1), 53.

- Tsai, M., & Scherz, J.** (2007, February). *Communication opportunities presented to children with special needs*. Poster session at the 7th annual conference of the American Speech-Language-Hearing Association's Special Interest Division 12, Atlanta, GA.
- Franklin-Guy, S., Scudder, R., Apel, K.** (2006, November). Environmental Print and Spelling Ability: A Case for Evidence-Based Practice. Presentation at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Kelman, M., Hodson, B., Strattman, K., Schommer-Aikins, M., McDowell, K., Coufal, K., & Scudder, R.** (2006, November). An Investigation of Preschool Children's Primary Literacy Skills. Presentation at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Kelman, M., Hodson, B., Strattman, K., Schommer-Aikins, M., McDowell, Coufal, K., & Scudder, R.** (2006, November). An investigation of preschool children's primary literacy skills. Technical session at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Prezas, R. F., & Hodson, B.** (2006, November). *Determining optimal Spanish words for assessing children's speech-sound productions*. Technical session at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Scherz, J., & **Tsai, M.** (2006, November). *Adult preferences between two symbol sets: Comparing Boardmaker and Overboard*. Poster session presented at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Scherz, J., **Kanekama, Y., Prezas, R. F., Taylor, J. S., & Tsai, M. J.** (2006, November). Webquests for speech-language pathology and audiology: Four examples. Poster session at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Scott, C., Strattman, K., Hodson, B., Schommer-Aikins, M., Scudder, R., & Coufal, K.** (2006, November). *A comparative analysis of atypical and typical spelling ability*. Presentation at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Scott, C., Strattman, K., Hodson, B., Schommer-Aikins, M., Scudder, R., & Coufal, K.** (2006, November). *Language and learning in school-age children and adolescents: A comparative analysis of atypical & typical spelling ability*. Technical presentation at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Scudder, R., **Kanekama, Y., Tsai, M.-J.** (2006, November). *Evidence for university teaching: Web-enhanced classes*. Presentation at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Self, T., Scudder, R., **Crumrine, D., Siebert, T., Weheba, G., Shahin, F. & Chambers, L.** (2006, November). *Safety first: Demonstrating safety teaching modules for children with ASD*. Seminar at the meeting of the American Speech-Language-Hearing Association, Miami, FL.

- Self, T., Scudder, R., **Crumrine, D.**, Siebert, T., Weheba, G., Shahin, F. & Chambers, L. (2006, November). *Testing traditional and venturing to virtual for children with ASD*. Poster session at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Sun, X.M. & **Shaver, M.D.** (2006, November). *Intra- and inter-subject test-retest reliability of distortion product otoacoustic emissions*. Presentation at the meeting of the American Speech-Language-Hearing Association, Miami, FL.
- Kanekama, Y.**, Liu, C. & Sun, X.M. (2006, September). *Preliminary study on hearing in noise and auditory efferent function*. Presentation at the meeting of the Kansas Speech-Language-Hearing Association, Wichita, KS.
- Sun, X.M. & **Shaver, M.D.** (2006, February). Comparison of the effects of negative middle-ear pressure and ear-canal pressure variation on distortion product otoacoustic emissions [Abstract #1067]. Presentation at the 29th Annual MidWinter Research Meeting of the Association for Research in Otolaryngology, Baltimore, MD.
- Champley, J.**, Scherz, J.W., DiLollo, A., Ellsworth, R., Rogers, M., Schommer-Aikins, M., & Stratman, K.H. (2005, November). *Reading materials and strategies used by typical older adults*. Poster session at the meeting of the American Speech-Language-Hearing Association, San Diego, CA.
- Sun, X.M. & **Shaver, M.D.** (2005, November). *Compensated otoacoustic emissions in humans with negative middle-ear pressure*. Presentation at the meeting of the American Speech-Language-Hearing Association, San Diego, CA.
- Wolter, J.**, Apel, K., DiLollo, A., Ellsworth, R., Hodson, B.W., & Stratman, K. (2005, November). *Orthographic fast-mapping in children with and without typical language abilities*. Poster session at the meeting of the American Speech-Language-Hearing Association, San Diego, CA.

Awards

Rajagopalan, J.

- **3rd place in national CLARION competition: Rajagopalan, J.**, Kajese, T., Wagnon, A., Fox, B. (2010). *A Restructured Solution for a Preventable Death*. CLARION National Case Competition, Minneapolis, MN.
- Minority Student Leadership Program Award – American Speech-Language-Hearing Association - **2009**
- Honor Society of Phi Kappa Phi
- Award of excellence for volunteering in Pulse Polio Immunization program in India

Crumrine, D.

- Phi Kappa Phi Honor Society member (2006 to date)
- Good Apple Award: Received from the Wichita Public School District. (2008)
- International Research Travel Award (IRTA) to attend IALP Congress (2010)

Shaver, M.

- Starkey Laboratories, Inc., 2009 Outstanding Student Clinician Scholarship (2009, \$1,000).
- WSU Graduate School, the Ollie A. & J.O. Heskett Graduate Fellowship (2009, \$3,000).
- National Institutes on Aging (NIA) selected attendee to the 2008 Grants Technical Assistance Workshop. (2008, funded).
- American Speech-Language-Hearing Foundation, Graduate Student Scholarship (2006, \$4,000).
- WSU Graduate School, Delano Maggard, Jr. Graduate Research Grants (2006, \$250).

Prezas, Raúl FranciscoNational Professional Recognitions

- Summer Institute in Communication Sciences and Disorders, CAPCSD, University of Iowa (2007)
- Graduate Student Scholarship, American Speech-Language-Hearing Foundation (2007)
- ASHA Convention Registration Award for Recent Graduates (2007)
- Minority Student Leadership Award, American Speech-Language-Hearing Association (2006)

University Recognitions/Awards

- Outstanding Doctoral Student (2008)
- Delano Maggard Research Award (2008)

Other Notable Accomplishments

Masako Maeda, Chris Scott, and Phil Sechtem were each asked to present their GRASP research posters at the Capitol Review in Topeka, KS.

Demonstrate student need and employer demand for the program.

Doctorates Awarded 2000-2010

During the period between 2000 and 2010, the Department of Communication Sciences and Disorders [formerly Communicative Disorders and Sciences] at Wichita State University has awarded 22 Doctor of Philosophy degrees (an average of 2.2 per year).

Fiscal Years

- 2000** Angie Burda, Deborah Hwa-Froelich, Lesley Magnus, & Zarin Mehta (spring 2000)
- 2001** Elizabeth Hester (summer 2000); Terre Graham & Kathy Strattman (spring 2001)
- 2003** Jennifer Cripps Ludlum (fall 2002), Mary Ann Fenske, Pam Hart, & Nicole Niessen (spring 2003)

- 2005** Jill Champley & Julie Wolter (spring 2005)
- 2006** Christi Barb (fall 2005)
- 2007** Sherri Franklin Guy (summer 2006), Margot Kelman & Emily Whiting (fall 2006),
Chris Scott (spring 2007)
- 2009** Raul Francisco Prezas (fall 2008); Yori Kanekama (spring 2009)
- 2009-10** Meng Ju Tsai (Fall 2009)
- 2010** Mark Shaver (Fall 2010)

Current Doctoral Students [semesters]-Fall 2010

Scott Taylor [8th]
 Masako Maeda [5th]
 Phil Sechtem [5th]
 Daiquirie Crumrine [4th]
 Carol Ellis [4th]
 Jag Rajagopalan [3rd]
 Kayla Stone—[3rd]
 Jennifer François [1st]
 Elizabeth Tinch [1st]

Applications 2009-2010

Four new applications were considered: 1 deny, 3 accepted

Two started the program in the Fall, 2010, and one determined not to attend (international student)

The continued demand for speech-language pathologists and audiologists reflects openings in all areas of professional practice locally and nationally. Of particular note is the urgent need for PhD graduates in speech-language pathology and audiology and speech, language, hearing sciences. The aging professoriate has left the academy with a paucity of new academics to fill the continued need throughout the nation. WSU-CSD is working to provide a continuing number of graduates to address that need. Currently, with 11 faculty holding dissertation chairing status, there are 9 PhD students enrolled and 3 that have graduated in the past year. The commitment of time and resources to each student is considerable and is not reflected in the number of credit hours in which the student is enrolled. Faculty spend substantial time with each student advising them, directing ongoing research activities, mentoring them in teaching and research, and evaluating the student's work. The resulting productivity and success of the students brings visibility to the University and a continuing interest among prospective students. As is evident in the Select Student Achievements section of this report that highlights faculty-student collaborations through publications and presentations at every level-local, state, national, and international.

The number of applicants to the programs in CSD continues to reflect high demand for the program and exceeds the number of students that can be admitted annually. Additionally, the *U.S. News and World Report* and other economic predictions list speech-language pathology and audiology among the top 20 ‘hot jobs’ through the next decade, citing factors such as the aging population and the retiring professoriate as contributing to the need for more graduates in these fields. Tables 3-4 depict the applicant/admission pools for the past five years.

Table 3: Key Performance Indicators: Diversity/Globalization Data (student data by graduating class year)

CSD	2005	2006	2007	2008	2009
# total applicants	62	60	70	112	93
# of URM applicants	9	2	7	4	5
# of international applicants	0	4	4	6	8
# of URM graduates	0	0	5	2	5
# of international graduates	0	1	0	0	1

URM=Underrepresented minorities

Table 4: PhD

<i>Academic Year</i>	<i># of applicants</i>	<i># students admitted</i>
2006-07	7	5
2007-08	7	1
2008-09	3	2
2009-10	2	1
2010-11	6	2 (+1 pending)

The services the program provides to the discipline, the university, and beyond.

As noted under the qualifications of the faculty, all of the CSD faculty are involved in professional leadership activities. All faculty have served as editorial consultants for professional journals and/or book reviewers for major publishing companies. In addition, Dr. Coufal has been the editor of *Communication Disorders Quarterly* for seven years and is now an Associate Editor of that journal. Many faculty have served on national committees, such as convention program committees and professional education boards. Drs Scherz and Scudder have served as sight visitors for the ASHA-CAA and Dr. Scudder is currently a member of the CAA Board. Dr. Coufal has been elected to serve as the convention Co-chair for the annual ASHA convention to be held in 2011. Most CSD faculty members have held offices or chair positions within national or state organizations. Dr. Hull routinely serves on grant review and evaluation boards for such agencies as the Veterans Administration, Department of Health and Human Services, and the Department of Education. Also notable is the fact that the unclassified professionals also have a history of peer-reviewed publications, professional presentations, and leadership within state and national organizations.

Further, members of the Department serve on numerous college, university and professional committees and boards. For example, the department is represented in leadership roles with Heartspring, Kansas Speech-Language-Hearing Association, American Audiology Association, International Association of Logopedics and Phoniatrics, ASHA, Specialty Board on Child Language, the KS licensure board, Kansas Governor's Commission on Autism, and numerous other service commitments. At the University members of the Department serve on the Faculty Senate, Graduate Council, Doctoral Subcouncil, Faculty Senate Executive Committee, Tenure and Promotion committee, Assessment committee, and Research Council, to name a few. Within the College, all faculty members serve on at least one of the governance committees annually.

Of particular note is that Dr. Scudder serves the College and University through her role as Director of the CHP Leadership Academy. This constitutes 25% of her FTE. Dr. Goldberg has assumed leadership for the development, implementation, and enhancement of the CLARION project, now offered for course credit, in conjunction with KUMed-W. These are just two additional examples of contributions by members of the Department.

A major contribution to the community is evident in the services provided by the Speech, Language, Hearing Clinic. This clinic is central to the academic program, providing students with the necessary clinical experiences needed to develop and demonstrate required clinical skills. As such, the clinic provides services to individuals across the life span who exhibit communication and related disorders of all types, including the need for auditory amplification. The clinic generates a modest revenue stream (RU dollars) which is needed to cover the majority of salaries and fringes for the clinical supervisors and clinic director, as well as operating costs. Because the clinical operations are central to the academic programs, many clients are provided services at no or token amount of fees paid (as little as \$5.00 for token payment). The clinic is supported in part by funds from the Kansas Scottish Rite, as a Rite Care Clinic. Those funds are earmarked for services to children with severe language and literacy disorders, such as children diagnosed on the autism spectrum.

Table 5: Key Performance Indicators: Engagement

CSD	2005	2006	2007	2008	2009
# of clinical affiliations/contracts	47	47	47	47	69
# of adjunct faculty	0	0	0	0	5
# of patients seen in clinic	1206	1725	2147	2116	2534
Value of patients seen in clinic (in dollars) Generated revenue (not cost/ value services as billed)		\$318,588	\$366,758	\$359,069	\$325,551
# of community service hours by faculty/faculty					273
# of community service hours by students					384
# of University awards by faculty	2	1	1	3	4
# of College awards by faculty	0	0	2	2	4
# of regional/national/international awards by faculty	1	3	3	4	4
# of student society activities					2
# of student society awards	0	2	3	5	6
# of collaborative projects between department and college	1	2	4	7	20

Table 6: Key Performance Indicators: Scholarship

CSD	2005	2006	2007	2008	2009
# of publications	9	1	15	10	25
# of presentations	46	5	0	41	108

There has been a consistently steady increase in the number of grant applications submitted by members of CSD and the amount of funding generated by those grants, as seen in Table 7.

Table 7: Key Performance Indicators: Grants

CSD	2005	2006	2007	2008	2009
Rate	50%	50%	60%	100%	68%
# of grants applied for	6	8	5	2	22
# of grants awarded	3	4	3	2	15
Value of grants awarded	\$14,500	\$403,931	\$399,472	\$395,006	\$537,140

The program's cost effectiveness.

Credit hour production continues to increase annually, with the increasing number of PhD students enrolled in the program. This represents a considerable revenue stream from tuition, in addition to the external funding garnered by CSD faculty and clinic revenue generated through the speech and hearing clinic.

Table 8: Key Performance Indicators: Student Credit Hours:

CSD	2005	2006	2007	2008	2009
Summer	416	174	586	583	561
Fall	1899	1898	2066	2125	2169
Spring	1826	1913	1894	1888	2210
Total	4141	3985	4546	4596	4940

One of the major contributions of a PhD program is the number of credit hours students enroll in both within the department and in other departments throughout the University. The students in the CSD PhD program contribute substantially to other departments based on the total number of credit hours in which they enroll, as shown in Table 9.

Table 9: Credit hour production of PhD students-contribution within CSD and to other departments

PhD Credit Hour Production	F '06	Sp '07	Su '07	F '07	Sp '08	Su '08	F '08	Sp '09	Su '09	F '09	Sp '10	Su '10	F '10	4-year Avg.
Head Count	11	9	8	8	8	7	9	8	8	9	8	8	10	8.54
CHP in CSD	69	62	38	71	55	18	57	61	21	63	46	23	62	49.69
CHP in Other Departments	19	25	3	2	16	3	26	13	3	26	14	7	11	12.92
Total CHP	88	87	41	73	71	21	83	74	24	89	60	30	73	62.62
% External Contribution	21.6	28.7	7.3	2.7	22.5	14.3	31.3	17.6	12.5	29.2	23.3	23.3	15.0	20.0

Examination of the WSU Accountability Planning Matrix for CSD reflects the following breakdown of state funds for each of the six areas:

Excellence: 6%

Intellectual Exploration (Research): 26%

Enhance Learning (Instruction): 44%

Support: 13%

Retain: 5.5%

Recruit: 5%

For a department that includes all levels of students, undergraduate, Master's, Doctor of Audiology, and PhD, this distribution of time and resources appears appropriate and reflects an efficient cost-benefit ratio.

Overall, we believe that the findings of this report reveal a healthy and vital program.