 WKU CSD Fall 2018 Research Newsletter

Department Head Welcome: Dear Students, Faculty, and Alumni, I invite you to read about advances in research and creative works in the Department of Communication Sciences and Disorders (CSD). An important development this year was that WKU’s Board of Regents approved a strategic plan on August 3, 2018 that will serve as the roadmap for the university for the next 10 years. “Climbing to Greater Heights: The WKU Strategic Plan 2018-2028”. The plan focuses on student success and encourages applied research as a vehicle for engagement in the region, state, and around the world. In the Fall 2018 edition, I am especially pleased to see the growth of research conducted by our current students and recent graduates, who have been mentored by the department’s faculty. Many of the writers express the benefit of research mentorship when preparing for today’s workforce.

Research starts with imagining the future and dreaming about what might be possible. The Department of Communication Sciences and Disorders has enjoyed tremendous support and opportunity that have resulted in incredible outcomes in 2018. Author: Dr. Jean Neils-Strunjas

Awards and Recognitions

1. C.J. Martin, an office assistant in CSD, will be graduating with a Bachelor of Interdisciplinary Studies – Technology Emphasis from WKU in December. CJ has assisted us with creation of surveys used in research projects.
2. Senior CSD student Rachel Peavler was awarded an Honors Development Grant by the Mahurin Honors College to fund her Capstone Experience Project. The project, entitled “Through Children’s Eyes: Teaching Inclusivity and Understanding of Communication Disorders with Children’s Books” will include the creation of five children’s books that each explain a different communication disorder in ways that children can understand and find interesting. Rachel will fully illustrate and write the stories. The grant is awarded by the Mahurin Honors College to honors students seeking to expand their education by pursuing special projects or opportunities. Dr. Leigh Anne Roden-Carrier is serving as her Capstone Project Advisor.

3. Graduate students Elizabeth Batson, Spencer Otto and Brian Clark presented Bingocize research at the Kentucky Rural Health Conference in Bowling Green, KY. Their poster, Bingocize: An Evidenced-Based Program to Improve the Quality of Life of Kentucky Certified Nursing Facility Residents was selected as one of the top five posters!

4. Cara Richman, a 2017 WKU Alumni, was awarded second place in ASHA’s Student Ethics Essay Award competition. The prompt was to present an ethical dilemma or challenge that may be faced by a clinician or researcher related to disclosure, misrepresentation, and/or conflict of interest. Then, using ethics resources and the ASHA Code of Ethics (2016), identify one or more Principles and the corresponding Rule(s) that you believe have been violated, and provide a rationale for your choice(s). Finally, discuss what action(s) you would take to resolve this dilemma. Cara’s essay is titled On Defrost, Disclosure, and Professional Drive and can be found online at https://www.asha.org/Practice/ethics/2018-Student-Ethics-Essay-Award-Second-Place/
ASHA 2018 Research Presentations

Several WKU CSD students and faculty attended this year’s American Speech-Language Hearing Association’s national convention in Boston. The convention took place November 15th-17th with “Revolutionary Learning Evolutionary Practice” as its theme. Listed below are the presentations made by WKU CSD’s faculty members at ASHA 2018:

- “Parent Implemented Adapted Dialogic Reading With Preschoolers With Autism” - McKenzie Ward and Janice Smith
- “Assessment of Academic Vocabulary in Early Adolescents Using Novel Language Sampling Procedures” - Amber Cline and Janice Carter Smith
- “Clinical Measurement of Problem Solving in Children with Autism” - Megan Martin, Janice Carter, Jo Shackelford
- “The Dixit Method of Language Sampling in Early Adolescence” - Tanner Smith and Janice Smith
- “Cross-Cultural Comparison of French Dialectal Variations & Potential Impact on Business Communication” - Anna Greene and Janice Smith
- “iKAN: Kentucky Advocacy Network the emPOWERment of Members” - Lacey Back, Janice Smith, and Kelly Kleinhans
- “Observational & Self-Report Measures of Social Engagement During an Intergenerational Exercise Program in Nursing Homes” - Lauren Stevens, Jean Neils-Strunjas, K. Crandall, Megan Smetana, Janice Smith
- “An Evidence-Based Health Promotion Program to Improve the Quality of Life of Nursing Facility Residents” - Jean Neils-Strunjas and K Jason Crandall

Author: Dr. Janice Smith
Graduate Student Spotlight- Lacey Drennan (Campus Cohort, 2019)

MY EXPERIENCE AT WKU
My name is Lacey Drennan, and I’m from a small town outside of Little Rock, Arkansas. I grew up there with my parents, sister, and more animals than I could count. I completed my undergraduate degree in Communication Sciences and Disorders at the University of Central Arkansas in 2017. I am currently in my last year of pursuing a Master of Science in speech-language pathology at WKU.

Why Did I Choose CSD?
I have always pictured myself in a healthcare setting. Initially, I bounced between nutrition, pharmacy, and eventually therapy was brought to my attention by a high school teacher. Even still, it took me months to decide on speech therapy because I thought I preferred occupational therapy. I quickly learned that being knowledgeable of every single bone, muscle, tendon, etc. in the body was not something on my bucket list. Fortunately, I had enrolled in the Intro to CSD course early on in my undergraduate studies and decided to change my major within the semester of taking the Intro course. I haven’t looked back since.

Why Did I Choose WKU?
I found WKU while searching for graduate schools that offer study abroad experiences. At this time, I had just returned from a study abroad in Costa Rica, and I prioritized the opportunity to participate again. I was also chasing a change in scenery, so moving outside of Arkansas didn’t scare me away. After narrowing down my options to two universities, I was able to complete a campus and degree tour. After speaking with a few of the professors and clinic staff and touring the clinic spaces, I decided WKU was the place for me.

What Research Am I Involved In?
I am currently completing my fourth year as a CSD research assistant. While at WKU, I work under Dr. Brian Weiler. Most of our research focuses on child language abilities including the ability to repeat multiple sentences types, pseudowords, and to identify passive versus active tenses. Within the past year, I have presented two research posters at university-, state- and national-level conferences. I am currently preparing an additional poster with hopes of presenting in the coming year.

On June 6, 2018, I began a three-day excursion full of firsts. I traveled to Madison, Wisconsin, for the first time. I attended a specialized research conference for the first time as well. The Symposium for Research on
Child Language Disorders, or the SRCLD, is one-of-a-kind. It is the only national conference solely focused on language impairments in pediatrics. The conference has approximately one hundred posters and over two hundred researchers and students in attendance (University of Wisconsin-Madison, 2018). Previously, I have only attended state-based and university-based conferences. While attending the SRCLD, I consistently compared my experiences to that of previous conferences. A quickly-noticed difference for me was that the SRCLD did not provide multiple lecture sessions at one time. The SRCLD offered eleven total oral presentations by diverse research professionals as well as graduate students where no other events occurred simultaneously. One of the most eye-opening aspects of the conference was observing the dynamic impact of renowned and highly respected child-language specialists such as Mabel Rice and Laurence Leonard being present at the conference. For example, when said individuals entered the room, the automatic reflex of most attendees was to slowly recede and stare as if not to scare away a timid creature. Each session included a 30-minute open question-and-answer portion. I was shocked to experience (what I thought to be) unnecesssarily frank queries from the audience. Needless to say, such a close-knit community of research specialists that are abundantly passionate can be can be quite intimidating as a first-timer.

I am extremely thankful to have accompanied Dr. Weiler to the SRCLD. The morning of June eighth, Dr. Weiler and I co-presented a poster titled, “Passive sentence comprehension in SLI using the Test of Active and Passive Sentences.” With this poster, we wanted to determine if and how six-year-old children with specific language impairment (SLI) differed compared to two groups of typically developing peers. All forty-nine participants were administered the Test of Active and Passive Sentences (TAPS). This test aims to assess comprehension of four sentence types: 1) actives (e.g. the cat washes the goat), 2) full reversible passives (e.g. the cat is washed by the goat), 3) ambiguous short passives (e.g. the cat is washed), and 4) short progressive passives (e.g. the cat is being washed). The child was shown 48 items, each depicting four pictures in which the child pointed to the appropriate picture corresponding to a sentence read by the examiner. Our results demonstrated 6-year old children with SLI scored significantly lower on the TAPS compared to their age-matched typically developing peers, but scored comparably to younger, 4-year old typically developing children that were matched on vocabulary scores. Following the data analysis, we found the difference between the children with SLI and their age-matched peers was driven by their performance on short progressive passive sentences. Our results support that these children may have deficits in using time-related grammatical aspect
cues to derive the correct meanings of sentences (POSTER). Breakdowns in this type of passive comprehension such as misinterpreting actions as states (i.e. interpreting the restroom being cleaned as “the restroom is cleaned”) can reflect subtle but meaningful differences in the linguistic profiles of children with SLI (CITE POSTER).

I would like to thank Dr. Weiler, the Department of Communication Sciences and Disorders as a whole, as well as the College of Health and Human Services for funding my travel and stay in Madison, Wisconsin. The SRCLD has played a significant role in my professional development and made a lasting impression of how critical frequent review of current research is, whether the purpose resides in academics or in the clinical atmosphere. Upon graduation, I hope to return to central Arkansas and pursue my first job as a speech-language pathologist in the medical setting. I’m sad to leave Kentucky and all of the friends I’ve met along the way. It has truly been a blessing to be educated at WKU. Words cannot express the gratitude I have.

Author: Lacey Drennan
Maintaining social engagement, a connection to other people, is vital to healthy aging; therefore, assessments of social engagement are needed. Graduate student Lauren R. Stevens and WKU faculty developed the Fun and Social Engagement Evaluation (FUSE) to measure nursing home residents during a health promotion program, Bingocize®, which promotes socialization and exercise using the familiar game of Bingo. The results were presented in Boston at the 2018 American Speech-Language-Hearing Association which provided participants with experience using the FUSE to rate a video-recorded interaction of a nursing home resident during Bingocize®. While attending the American Speech-Language and Hearing Association’s (ASHA) national conference, Lauren had the opportunity to closely interact with the audience and practice professional speaking and presenting skills, which will be valuable as she pursues a career as a speech-language pathologist.

Author: Dr. Jean Neils-Strunjas
I continue to be supported and mentored by my thesis chair from WKU through this rich, beautiful, and sometimes daunting first year as a clinician. My passion is to both treat and prevent speech, language, and feeding disorders while building a family’s confidence to be the primary agents of change in their child’s life. Treating children in their home environment allows me to better embrace their family culture and individualize treatment according to family preferences and values.

Author: Sharon Calvino, CCC-CFY

Pictured: Sharon Calvino, a 2018 WKU Alumni

CSD Alumni Spotlight- Sharon Calvino (B.S. in Communication Disorders, May 2016)

I currently have the privilege of serving as a community-based clinician in my hometown of Greenville, SC traveling to homes and daycares to provide early intervention services. I am thankful that
CSD Alumni Spotlight- Hannah Guy (B.S. in Communication Disorders, May 2016)

Hannah Guy is a 2016 graduate of WKU’s Communication Sciences and Disorders undergraduate program and a 2018 graduate of the department’s Master of Science program in Speech-Language Pathology. Soon after graduation in May of 2018, Hannah accepted a clinical fellowship position with Warren County Public Schools (WCPS) in Bowling Green, KY as a Speech-language pathologist. Hannah’s existing interests in serving culturally and linguistically diverse populations were well-matched for her position with WCPS, as the district hosts students and families from over 35 different countries speaking over 50 different languages and dialects. Hannah attributes much of her success to the training and various fieldwork experiences she was able to have during her time in the CSD department at WKU, and is a proud CSD Hilltopper Alumnus!

Author: Hannah Guy, SLP-CFY

Pictured: Hannah Guy, a 2018 WKU Alumni
Let’s Talk About Memory Program at WKU

Let’s Talk About Memory (LTAM) is a 10-week research program designed by The Center for Applied Science in Health and Aging (CASHA) to promote the awareness and prevention of dementia and other cognitive impairments. LTAM incorporates metacognition strategies, which is the ability to analyze one’s own abilities and develop coping skills. The program promotes awareness of age-related cognitive changes while increasing participants’ confidence with practical skills related to different cognitive functions. The 10-week study is broken down into three phases: two weeks of pre-testing, six weeks of group-based intervention, and two weeks of post-testing. The intervention phase of the program is comprised of an interactive, group-treatment design with a focus on the following cognitive functions:

• Memory
• Orientation
• Social use of language
• Problem solving, reasoning, and decision making
• Visual-spatial skills

A sixth session focused on goals and strategies related to exercise, diet, and wellness, and community social opportunities to promote brain health. LTAM offered graduate level students studying speech-language pathology the opportunity to gain professional and clinical skills with the aging population. SLPs evaluate and treat adults with cognitive disorders that occur with Alzheimer’s dementia, Mild Cognitive Impairment (MCI), Vascular Dementia (VD), Lewy body disease dementia, and other diseases and disorders. SLPs work with individuals with these diagnoses to increase cognitive and communicative functioning during everyday tasks and as a result, enhance quality of life. Let’s Talk About Memory incorporates intervention techniques utilized by SLPs to prevent cognitive decline. The premise of the program is that cognitive decline is on a continuum and risk may be reduced through a healthy lifestyle and by employing metacognitive strategies. If individuals who are relatively healthy benefit from recommended strategies, then those with mild cognitive impairment may also benefit. The program is IRB approved. Data analysis will take place with assistance from undergraduate student, Baylee Lackey, who is completing an honor’s thesis in Communication Disorders.

Submitted by Madelyn Boyles, the campus graduate class of 2019, Baylee Lackey, and Dr. Jean Neils-Strunjas
Study Abroad in CSD
EUROPE: Dr. Kimberly Green and Mrs. Leisa Hutchison will be taking a group of speech-language pathology students abroad to study and learn more about the world of communication sciences and disorders. The group will be traveling within Europe to London, Paris, and Gent. We visit various sites such as universities with speech programs. We also meet with professionals in the field of SLP, visit clinical settings, and engage in diverse cultural experiences. This course can be used by both undergraduate and graduate CSD students as a 3 elective credit hours.

Author: Dr. Kimberly Green
Projects- Undergraduate and Graduate Research Students

Exciting things are happening in the Communication Sciences and Disorders Student Research Lab! Undergraduate and graduate students are continuing to make progress toward the development of their respective studies. Listed below is information about the studies that are underway:

My research is about language sampling methods. Dr. Smith and I have created a language sampling method that specifically elicits academic vocabulary from the STEAM content areas; science, technology, engineering, arts, and math. Our method is an adaptation of the Dixit Method created last year by Dr. Smith and Tanner Smith. We have pre-selected Dixit cards that reflect the STEAM categories and the students will sort them into the categories and then will describe the cards using academic language they know. We are doing the research with adolescents age 10-12:11 and in 6th grade. Our goal is to see if this language sampling method will elicit low frequency words such as academic vocabulary. From the data, we hope to identify if there are gaps in knowledge pertaining to academic language. We will share our findings with the teachers, which they can utilize to help guide their instruction of academic vocabulary. We are hopeful that this research will produce positive data about language sampling and academic language. I was interested in this project because there is no research that Dr. Smith and I could find about academic language in relation to speech language pathology. There is a gap in the field in relation to this topic, and with schools becoming more centered around STEAM, SLPs need to have a way to identify students who are struggling with this area. SLPs will be able to use this information to help identify students on their caseloads with gaps in their academic language and help build their vocabularies and success in the classroom.

Author: Amber Cline

Pictured: Amber Cline discussing her research “Assessment of Academic Vocabulary in Early Adolescents Using Novel Sampling Method.”
Pictured: Allison Glasscock discussing her research at ASHA.

Pictured: Amber Cline, Dr. Janice Smith, and Anna Greene

Pictured: Anna Greene explaining research at ASHA.
During the summer and fall of 2018, CSD student teams have been moving along in their next stages of research development. After receiving funding from various grants, they are continuing the production phase of their research. This phase includes developing curriculum for studies, and recruiting subjects and research assistants. The next phase for all of the above projects will be data collection. Research teams are synthesizing and analyzing literature they have reviewed.

For more information on these students’ projects and their developments, view their research blog at: the-csd-researchsquad.blog.wku.edu.

Author: Dr. Janice Smith

Dr. Richard Dressler, Professor

Dr. Dressler has been teaching at WKU since 2001 and 2 years before that as an adjunct instructor. Prior to coming to WKU he worked as a speech-language pathologist in various medical facilities including hospitals and rehabilitation facilities. He is the author of the Language Activity Resource Kit (LARK) which provides materials for speech pathologists to use with adult patients. He has presented at numerous meetings on topics ranging from the use of computers in treatment of speech disorders to teletherapy methods. Currently he teaches courses in Motor Speech Disorders, Neurology, and Speech Science. He has also led study abroad programs for students to the UK, France, Belgium, Italy, Austria, Switzerland, and Spain. With over 20 years of clinical practice Dr. Dressler shares first hand experiences with students in the classroom to help them with application of classroom instruction to clinical work.

Dr. Dressler has received funding through WKU’s Research & Creative Activities Program to investigate the use of body worn cameras in conjunction with a program being offered by the Kelly Autism Program (KAP) at the Clinical Education Complex. The Career Success and Sustainability Program (CSSP) being offered by KAP to college students teaches pragmatic communication skills. Those skills involve initiating
conversations, maintaining conversational topics, sharing information, and conversational repair. Dr. Dressler and Abbey Tolbert, a graduate student in the Speech Language Pathology program will investigate the benefits of using a body worn camera to assess those students’ use of communication skills in everyday situations. The video captured by the camera will allow the student to self-analyze their performance as well as provide a way to measure their success in using pragmatic communication skills with others.

Author: Dr. Richard Dressler

Pictured: Dr. Richard Dressler