the use of phone apps help us in our daily lives, in our businesses, and they entertain us. We have our phones to help us know how many steps we have taken each day. We have games on our computers to help us learn new languages, math skills, the list goes on and on. Dr. Lisa Kopf of the Communication Sciences and Disorders department at the University of Northern Iowa is taking these ideas and applying them to her interests in voice research.

Voice research includes the physical anatomy and physiology of the vocal folds (cords), disorders, vocal health, therapy, and the physics of sound. One of the more common disorders is vocal nodules which are calluses formed on vocal folds due to excessive use. Professions that use their voice extensively are at risk for this. These careers include teachers, singers, coaches, sales people, and call center workers, just to name a few.

Dr. Kopf’s background in music and gamifying therapy has led her to the research and possible development of an application (app) to be used by people within these professions. The app would be akin to a pedometer. It would measure how and how much she uses her voice throughout a given day.

Published research has shown that nearly 1/3 of the workforce is at risk for voice disorders (Roy et al., 2005). This is the basis for the research and development of an app where the user could monitor his/her voice so as to potentially avoid developing a voice disorder.

The research begins with the end user as an integral part of the creation. This approach, called user-centered design, involves multiple iterations (versions) of a design that are tested with potential users before a final design is created. The goal of this approach is to develop a final product that will be intuitive and supportive of user goals.

Dr. Kopf started her undergraduate studies at the University of Virginia (UVA) with the intent of being a Speech Pathologist in a school system. She was involved in choir and in her third year she had the opportunity to work with and meet professional soloists. One of the soloists asked what degree she was pursuing. After learning what her goals were he said that his friend “does that and works with singers.” This opened up a whole new avenue of study for Dr. Kopf, one she had not thought about—combining her love for music and helping people with voice disorders. Soon after this conversation, Dr. Kopf connected with Dr. Aliaa Khidr, a UVA faculty who specialized in voice. Dr. Khidr became Dr. Kopf’s mentor, providing a welcoming environment and opportunities for undergraduate research.

At the suggestion of her mentor, Dr. Kopf moved to Iowa to complete her masters at the University of Iowa. The U of I Speech Pathology Department is well known the for its courses in voice disorders and ranked number one in the country (out of 224 schools) by US News and World Report (2016). She worked
"There are so many avenues you can take in this profession. I believe this is what makes it so cool."
-Dr. Lisa Kopf

as a full-time clinician in a hospital setting for two years before returning to graduate school. She started her PhD at the University of Florida and finished at Michigan State University. Because she wanted to see and experience different areas of voice, her PhD advisor, Dr. Rahul Shrivastav, was instrumental in allowing Dr. Kopf to explore multiple areas before deciding to focus on just one area. She was able to narrow her focus through the relationships she developed with faculty, the gaming community, and the learning more about user centered design. Today, Dr. Kopf is one of the few experts in voice and gamifying therapy. She is hoping to inspire others to go in this direction of study as it is an exciting and new.

Although she has only been on the UNI campus since August of 2017, Dr. Kopf has found that she has amazing faculty and staff support which has helped her get settled. She feels like she has an open line of communication with everyone so that she can ask anyone anything and they would be willing to help.

Work-life balance is also important to the department. She was able to come into an environment where she was able to structure her research and teaching to what works best for her allowing her to be a better researcher and instructor. Her research is off and running with a lab with both graduate assistants and undergraduate support in collecting data.

She enjoys working with students and her favorite part of working with undergraduates and graduate students is their enthusiasm. All the students she works with have been helpful, try their best, and work hard. They have a willingness to learn and are very engaged in what they are doing.

Dr. Kopf is interested in trying new things in the classroom and doing her best as an instructor to enhance her students’ learning. She tries new and different activities. She is continuously asking for feedback from students to learn what worked, how it worked, what things could make the class better in the future.

“Speech Pathology is such a broad field. There is something here for everyone,” Dr. Kopf stated. Speech Pathology is constantly changing as new discoveries are being made and more research being conducted. The profession can lead a student to working in schools with children, hospitals, skilled nursing facilities, and rehabilitation clinics. Professionals may work with those who have suffered from a stroke or brain injury, with those who may have a voice disorder, swallowing challenges or even people who stutter. “There are so many avenues you can take in this profession. I believe this is what makes it so cool.”