CLD Corner: Apps for Bilingual Populations in Texas— Challenges and Resources



By: TSHA CLD Committee

The CLD Corner was created in an effort to provide information and respond to questions on cultural and linguistic diversity. Questions are answered by members of the TSHA Committee on Cultural and Linguistic Diversity (CLD). Members for the 2016-2017 year include **Raúl Prezas**, PhD, CCC-SLP (co-chair); **Phuong Lien Palafox**, MS, CCC-SLP (co-chair); **Mary Bauman-Forkner**, MS, CCC-SLP; **Alisa Baron**, MA, CCC-SLP; **Judy Martinez Villarreal**, MS, CCC-SLP; and **Irmgard Payne**, MS, CCC-SLP. Submit your questions to TSHACLD@gmail.com, and look for responses from the CLD Committee on TSHA's website and in the Communicologist.

Texas continues to experience an influx of new residents. As changes to the state demographics occur, clinicians are faced with the reality of providing services to individuals who speak a growing number of languages. Decisions as to which language to support and target in therapy are important, and there is information available to help make those decisions (see ASHA, 2013). Based on information from a recent survey, Spanish, Vietnamese, and Chinese are among the top three languages other than English spoken in Texas. In addition, more than one third of children under five years of age speak a language other than English (United States Census Bureau, 2013). Although there is an increased need for services and materials targeting other languages, printed resources for speech and language therapy and evaluation tools in languages other than English are very scarce in the U.S. The reality that only 6% of practicing speech-language pathologists (SLPs) in the U.S. identify as bilingual (ASHA, 2016) may be a factor and a deterrent to companies that invest a significant amount of money to create, publish, and print small quantities of physical materials in other languages. While the field of speech-language pathology also exists around the globe, clinicians in the U.S. may not search for materials created outside of the country or may not realize that they exist. One reason for such a localized set of tools is that purchasing physical tools outside of the country involves a great deal of research as well as the added cost of receiving materials from overseas. Interestingly, when given the definition of bilingualism as being the use of two or more languages in daily life, it is estimated that bilinguals account for at least half of the world's population (Grosjean, 2010).

Fortunately, over the last decade, a more technologically based and connected world has made it easier for individual clinicians who create their own materials to share them with others. Apps and self-publishing websites, such as *Teachers Pay Teachers*, are resources that are readily accessible and may serve as a tool for clinicians working with students from a

culturally and linguistically diverse background. Apps in particular may solve many of the challenges that might be experienced with printed materials. As an example, apps are flexible in that many of them can adjust to each particular student's language by offering alternate language options. In addition, there are typically no additional fees for purchasing apps from other countries; they are easily viewed and downloadable from a personal device. Moreover, apps generally have customization features that allow room for changing the stimulus based on the clinician's selection. A variety of apps are currently available that can be modified for individuals who are culturally and linguistically diverse or that cater to those populations specifically. Some apps created originally in American English have options for switching languages. Other apps have been created overseas by speech therapists and are in a native language other than English but are available to be purchased and downloaded anywhere in the world.

Apps that cater to speakers of other languages and focus on speech and language-related content have been a fairly recent development within the past few years. **Barbara Fernandes** is the developer of Smarty Ears Apps, a Texas-based company that specializes in speech and language apps for assessment and treatment. Fernandes not only has created usable apps for school-based SLPs but she also actively educates professionals on the use of technology in the therapy setting and regularly shares her knowledge through presentations throughout the U.S. and other countries. She has been described by one of her colleagues as being a "true visionary who has been instrumental in bringing the SLP world into the 21st century." The CLD Committee recently reached out to Fernandes and asked her to comment on language options that are available in apps as well as some of the challenges with featuring different languages and creating apps.

"As a developer, I try whenever possible to add other languages as an option within an app; however, this is not always a feat that is attainable," Fernandes said. "There can be such significant differences between the structures of some languages that a completely different app is necessary for that particular language. Therefore, creating language options within an app is not always possible, especially in the areas of syntax, articulation, and language. In these cases, developers such as myself often choose to create a separate application altogether. One other challenge when creating apps that will be sold worldwide is the differentiation and acknowledgement of regional dialects. Regional dialects can have significantly different vocabulary for word choices within an app. While paper products might need to address differences in vocabulary choices for targeted words, apps must also manage dialects of a language that are vastly different, as it is the case between English spoken in Ireland versus English spoken in the U.S."

As the CLD Committee began a search of available speech and language apps for bilingual populations, it became apparent fairly quickly that there are limited options currently available. Below we offer some app suggestions that may be useful for clinicians to use with their caseloads.

Assessment and Screening Apps

Historically, assessment apps have been in paper-based form. Within the last few years, we are seeing more and more assessments being conducted in electronic form (e.g., language assessments on tablets). Although apps for screening and assessment in languages other than English are very limited, a few options are readily available. Some can be used as qualitative measures only, while others have been standardized in the U.S.

An example is Bilingual Articulation and Phonology Assessment (BAPA). This standardized app allows for assessment of articulation and phonology skills in both English and Spanish. The data is then compared to groups of monolingual and bilingual speakers. The beauty of this assessment tool is that it can be used not only to assess Spanish but also English. Moreover, this app can be used to assess monolingual English speakers as well.

Augmentative and Alternative Communication (AAC) Apps

- Avaz: This AAC communication app provides limited support for 27 languages. The language
 of the application does not change; however, you can change the vocabulary in the picture
 mode. As a result, the spoken voice (audio) can change to speak another language. Some of
 the languages include Spanish, Mandarin, Arabic, Hindi, and German.
- Nova Chat by Satillo: The Nova Chat app is for children and adults with complex communication needs. The app allows users to easily switch to Spanish pages, which can be purchased separately from the original English app. You can read more about AAC apps in languages other than English in an article written by Fanourgiakis called "High Tech AAC for Spanish Speakers" (2016) on the ASHA blog.

Pediatric Articulation and Language Apps

Just as you expect from paper-based materials, this is by far the area that has the most options when it comes to apps in languages other than English. Clinicians can easily adapt game apps to target articulation and language goals. The list below is just a fraction of the apps available in Spanish for pediatric articulation and language. A simple Google search for "Apps for Bilingual SLPs" will most likely give you an array of options in this area. Here is a list of applications that can help you address both speech and language needs:

App Name	Languages Available	Target Area	Short Description
Fono Lógico	Spanish	Articulation	This app includes three activities and targets all Spanish phonemes at the word, phrase, and sentence levels.
Casa Artic	Spanish	Articulation	This app offers Spanish sounds that can be purchased separately. Words are presented at the phrase and sentence levels.
Articulation Station Español	Spanish	Articulation	This app offers six engaging articulation activities to address all sounds in Spanish.
Fun & Functional	English, Spanish, Portuguese	Language	This app targets comprehension and use of everyday vocabulary.
Go Sequencing	English, Spanish, Portuguese	Language (Sequencing)	Users can practice sequencing skills for

			more than 39 different situations.
WhQuestions	English, Spanish, Portuguese, French, Dutch	Language	Expressive and receptive WH-questions activities.
Yes No Barn	English, Spanish, Portuguese	Language	Practice answering a variety of yes/no questions.
Speech with Milo Prepositions	Spanish	Language	Milo demonstrates a variety of prepositions.
Peekaboo Barn	12 different languages	Vocabulary	Simple app that has cute animations of animals.

Language Rehabilitation Apps

A few apps that were designed with language rehabilitation in mind have been available in the app stores for quite some time and are listed below:

- iName it: This app targets naming skills of household items using context as its ally to elicit naming. Language options include Spanish and Portuguese.
- Language Therapy 4-1: This app offers four sets of apps in one. It targets language and reading comprehension as well as naming and writing skills. It is available in English, French, German, and Spanish.
- Language Trainer: This app includes four activities: picture identification, picture naming, divergent naming, and sentence complete. It is available in English, Dutch, Spanish, and Portuguese.
- Reading Rehabilitation Toolkit: This app targets reading rehabilitation skills such as word and phrase matching as well as reading comprehension. It is available in Spanish, Portuguese, English, and Dutch.

Getting Creative: Other Apps That Are Not Speech and Language Therapy Specific

Despite being an area that has exponentially increased the materials available to SLPs, the use of apps is still a relatively new phenomenon within our professions. The number of apps available in languages other than English and created by SLPs is also very limited. Currently, only a handful of companies are making the effort of adding language options or creating counterpart apps in different languages. However, it is important to mention that general educational apps as well as gaming apps that may promote tangential concepts such as imaginative play (e.g., Minecraft or Charades) have been greatly incorporated into practice by a variety of SLPs. Therefore, a variety of apps may yield communicative outcomes for our diverse populations.

There is much to be said for highly motivating tools in speech-language therapy, and the use of apps may be incorporated and adapted to fit into a therapy session. For example, the MyPlay Home application contains a digital home that can be manipulated. With a choice of family characters, the player can turn on the water in the bathroom, change the CD to play a different song, or turn out the light to make the room darker. This app, although not specifically designed to address bilingual

speech and language needs, provides an opportunity to address prepositions, increasing meanlength of utterance, articulation, and many more speech and language concepts. In the same vein, SLPs also can use apps that are in English for bilingual learners, with some modifications. Here are blog posts from the ASHA related to the use of apps:

- 7 Apps to Help You Get More Done in Less Time
- 5 Apps to Help People with Autism Learn Social Skills
- Apps Targeting Language for Middle Schoolers
- Top 10 Apps for Adolescents and Adults with Developmental Disabilities

Summary

As we support our diverse populations, the use of electronic applications and advances in technology can support our needs as speech and language professionals. SLPs are seeking effective and easy-to-use tools that address our children's and clients' communication needs and interests. In stating this, there is an understanding that that there is a continued need for research and product development in this arena. Specifically, we need to ensure that the use of apps should uphold the idea of providing evidence-based services for our culturally and linguistically diverse populations. Technology, as with all tools, can surely support our efforts as clinicians, and it is up to us as professionals to implement its use in a motivating and effective manner. What are some of your favorite apps to use in therapy? Share them with us at TSHACLD@gmail.com

References

American Speech-Language-Hearing Association. (2016). *Demographic Profile of ASHA Members Providing Bilingual Services March 2016.* Retrieved

from: http://www.asha.org/uploadedFiles/Demographic-Profile-Bilingual-Spanish-Service-Members.pdf

American Speech-Language-Hearing Association. (2013). *Bilingual Service Delivery*. Retrieved from: http://www.asha.org/PRPSpecificTopic.aspx?folderid=8589935225§ion=Key_Issues

United States Census Bureau. (2013). *Detailed Languages Spoken at Home and Ability to Speak English for the Population 5 Years and Over: 2009-2013*. Retrieved from: http://www.census.gov/data/tables/2013/demo/2009-2013-lang-tables.html

Fanourgiakis, V. (2016). High Tech AAC for Spanish Speakers. Retrieved

from: http://blog.asha.org/2016/03/08/high-tech-aac-for-spanish-speakers/

Grosjean, F. (2010). The extent of bilingualism. In Grosjean, F. (Ed.). Bilingual: Life and Reality. Cambridge, MA: Harvard University Press.