A Publication of Dual Language Education of New Mexico

So eado Promising Practices from the Field

Summer 2023

Broadening Bilingualism: The Case for Deaf Dual Language Education

by Devin Tankersley, Lobo Language Acquisition Lab, University of New Mexico

Bilingualism in the Deaf Community— Widespread, yet Diverse

Various myths and misunderstandings surround signed languages. For instance, some believe that there is one universal sign language that all deaf people use to communicate. In reality, there is a variety of distinct signed languages in

use around the world. Deaf people from varying backgrounds use different languages, and not all deaf people are exposed to visual language, instead needing to rely on lipreading, gesture, and/ or signs used only by those in their local environment, i.e., homesign. Additionally, many countries have their own national sign languages which differ dramatically from each



High-school students at the New Mexico School for the Deaf respond to a teacher's prompt.

within each signed language, such as in American Sign Language (ASL). Studies on ASL in New Mexico have found clear distinctions between the types of signing used by community members based on their background (Player et al., 2022). Such distinctions could be based on geographic

> differences, with the southern parts of New Mexico showing more influence from Spanish and Mexican Sign Language (Lengua de señas mexicana, LSM), while communities in or near the Navajo Nation may see influence from Indigenous signing, known as Hand Talk, Other environmental

factors play a large role as well: the ASL used in Santa Fe, where the New Mexico School for the Deaf is located, is often perceived as being "purer", while the ASL found in Albuquerque is thought to exhibit more English influence. That said, contrary to some popular attitudes, language scientists have found that all dialects of a language are equally legitimate in terms of adhering to grammatical patterns, even if there are differences in grammatical rules.

For the majority of deaf signers, bilingualism is the norm, as knowledge of at least one signed language in addition to the ambient spoken/written language is very common in deaf communities (Grosjean, 2008; Morford et al., 2011).

Inside this issue...

- Engaging Teenagers in Projects about Critical Conflicts ... Leveraging my Exposure to OCDE Project
- Rethinking ELD Through an International Lens
- How CLAVES® Changed my Teaching
- ☐ La Cosecha 2023

other and are not based on the shared language or culture of the local hearing population. For example, because of the history of deaf schools in Taiwan, there is more similarity between Taiwan Sign Language and Japanese Sign Language than between Taiwan Sign Language and Chinese Sign Language, even though the official spoken/ written language of Taiwan has been Chinese since the 1950s (Smith, 2005).

While global differences show a wide variation in signed languages, there are also important differences



By adding the spoken or written language of the community around them to their linguistic repertoire, deaf people are able to better connect with the largely hearing society they are a part of. However, deaf people may also find visual-spatial language to be more accessible and expressive, especially with friends and family. Knowing a signed language thus becomes advantageous for gaining not only knowledge, but community as well (Wilkinson & Morford, 2020).

With bilingualism as the norm, multilingual interactions dominate when deaf people navigate mixed deaf/hearing spaces. And yet, the deaf experience of bilingualism, their multilingual behaviors and patterns, and the benefits of bilingual-bicultural deaf pedagogy are rarely discussed in the wider context of bilingualism studies and promotion. Here, I hope to provide some insight into what bilingualism among deaf communities can look like, while highlighting the need for bilingual-bicultural approaches to education of deaf students.

It is difficult to describe broad patterns or features across such a wildly diverse group. A deaf person's access to language will depend on a range of physical and environmental factors, including the age when they became deaf, degree of residual hearing, access to hearing aids and speech therapy, having a family who know or are willing to learn a signed language, being in a community with resources for deaf education, interpreting services, and other accommodations. Accordingly, the way in which a bilingual deaf person exhibits their bilingual traits will depend on the community where their languages were acquired, and how the languages around them are used by others.

Bilingual Deaf Children— Different, not Deficient

A growing body of research has found that children acquiring multiple languages simultaneously do not show developmental delays, overturning many long-held assumption. While bilingual children may underperform when assessed as monolinguals, they are typically either on track or ahead in terms of linguistic milestones when assessed bilingually, as they may be familiar with certain concepts in one language, and other concepts in another (Paradis et al., 2011). As such, they will naturally switch between and blend their languages based on context. Rather than considering bilingual children to be deficient in one of their target languages, they should instead be viewed as having a complex linguistic system in development.

A key difference between hearing and deaf bilinguals is the precise form they experience. That is, hearing unimodal bilinguals typically express their languages in much the same way, via speaking and writing. Deaf bimodal bilinguals, however, may speak and sign at the same time (sometimes called Simultaneous Communication or SimCom), may speak or sign (one at a time), or may be more proficient at writing than speaking and therefore only sign for face-to-face communication. Specifically in the U.S., a range of different linguistic systems may be used and blended, including ASL, Signed Exact English, Cued Speech, and fingerspelling (see sidebar on page 12 for an explanation of each of these linguistic systems). As with spokenlanguage bilinguals, signing bilinguals' language use depends on their environment, with social and discursive factors influencing language and modality choice.

Acceptance of bilingual behaviors among deaf children has not been widespread. The long-standing approach taken by medical professionals and speech-language pathologists has been to focus on a deaf child's acquisition of spoken English to the exclusion of all other languages (Humphries et al., 2017). Where such professionals support the use of manual communication, they often opt for artificial sign systems that represent the dominant spoken/ written language, rather than a full, natural signed language (Scott & Henner, 2021). Given that these signing systems are not in use by a cohesive language community and instead function as proxies for spoken languages, those individuals who use such systems cannot be considered as being bilingual, since the underlying linguistic structures are the same, even if the delivery methods differ. Reliance on such systems can also disrupt children's acquisition and comprehension of the language, since its practitioners vary widely in how they utilize such systems (Stewart, 1992). This makes advocacy of such systems over full, natural languages like ASL questionable as good pedagogy. Instead, bilingual education should focus on providing rich, authentic examples of each target language, rather than using one language as a means to achieving fluency in another.

—continued from page 10— Language Exposure— Intentional, not Incidental

A daunting concern that many hearing parents face upon learning that their child is deaf is that they have to learn a new language in order to communicate with them. Speech language pathologists and medical professionals may tell these parents that, as adults learning a new language, they will not achieve the same level of fluency as their child (Humphries et al., 2017). This rhetoric discourages parents from even trying to learn a language that would ultimately be the most accessible to their child. Proponents of a strictly oral approach might point to parents' limited signing ability as a reason to focus solely on speech, but research has found that this contention does not hold true.

Singleton & Newport (2004) found that a deaf child growing up in a signing household developed a strong understanding and use of ASL grammar despite the parents not being native ASL users, utilizing grammatical structures with regularity that were only rarely found in the parents' ASL. More recent work on early ASL acquisition has found that deaf and hard-of-hearing children born to hearing parents reach similar developmental milestones as deaf children born to deaf parents (Caselli et al., 2021). Crucially, this exposure to ASL must begin soon after birth, by about six months, but it is not necessary that the parents themselves already be fluent in the language for linguistic development to be on track.

Framing parents as the sole linguistic role models for the child also ignores the value of a larger linguistic community. While parents do provide children with foundational linguistic abilities, deeper language acquisition requires a wider range of inputs and exposure. In fact, research into predictors of deaf children's ASL fluency has found that the amount of signing used at school predicts ASL fluency even when ASL is the primary language used at home (Villwock et al., 2022). In addition, increased connections to a community provides important, long-lasting social and mental-health benefits that would not be as strong for a deaf person who has been denied access to a signed language (Wilkinson & Morford, 2020).

Bilingualism for Deaf Signers— All Pros, no Cons

Research into the impacts of bilingualism has consistently shown a variety of benefits. Whether it provides an increased ability to process information, deeper and more varied sociocultural ties, or greater success in a competitive marketplace, having multiple options for communication should always be seen as an advantage. However, the education of deaf students and the medical establishment have traditionally pushed for a monolingual, oral approach to language (Humphries et al., 2017), denying deaf children access to the many benefits of bilingualism and placing the onus of accommodation on the child rather than adults. The goal here is to emphasize that it need not be this way, that bilingual education is not only possible, but optimal for deaf children.

Children who are exposed to full, natural languages (including ASL) are also better able to acquire a spoken language (such as English) and benefit from having linguistic experiences in multiple languages. While it may seem like the optimal goal for educating deaf children would be early and consistent exposure to English, studies have instead found that strong signing skills in ASL predict better proficiency in English reading and writing compared to other factors (Piñar et al., 2017), and that knowledge of ASL does not have a negative impact on spoken English ability (Pontecorvo, et al., 2023). Additionally, some studies have found deaf students recognize written English words faster than hearing native speakers of English (Villwock et al., 2021), suggesting that deafness can provide unforeseen benefits. Such studies demonstrate that not only is it possible to acquire a spoken language in addition to a signed language, but that signed languages can provide a foundation for acquiring literacy.

A monolingual, oral-only approach for those born deaf or deafened at a very young age can also lead to serious cognitive and linguistic delays. Deaf infants not exposed to a signed language will miss out on crucial opportunities to develop language skills while they await hearing aid fittings and surgical procedures, and once their hearing is amplified enough for speech therapy to be feasible, spoken language is still not acquired naturally, but only through



intensive training to make sense of the degraded auditory signal (Hecht, 2020). This gap during which language input is diminished can have long-lasting deleterious effects on cognition and language development, which could be avoided if another, more accessible language was also provided (Humphries et al., 2017).

Not only does a bilingual approach to deaf education avoid the potential gap in language exposure necessary for cognitive development, it also potentially reduces long-term costs associated with a monolingual, oral-based approach. Here in New Mexico, many resources for learning ASL are free or subsidized for both child and parent alike. Speech therapy may be covered by some insurance companies, but it is nevertheless costly, as are the hearing aids, surgeries, and medications which might be necessary for such therapy to succeed. Moreover, outcomes for hearing aid and cochlear implant users vary dramatically, so providing additional support in the form of signing can mitigate some of the risks to language development associated with such interventions.

There are, therefore, a great number of reasons that deaf children and their experiences should be included in discussions around bilingualism. Looking beyond hearing bilinguals, we can better understand how bilingualism works as a human phenomenon, both in terms of cognition and social interaction. By emphasizing the need for bilingual approaches in deaf education, we bring greater attention to an underserved and at-risk population. And in widening the scope of how we define bilingualism, we normalize more ways of being and acknowledge the diversity of human experiences.

References

- Caselli, N., Pyers, J., & Lieberman, A. M. (2021). Deaf children of hearing parents have age-level vocabulary growth when exposed to American Sign Language. The Journal of Pediatrics, 232, 229-236.
- Grosjean, F. (2008). The bilingualism and biculturalism of the deaf. In Studying Bilinguals, by François Grosjean, 221-236. Oxford University Press.
- Hecht, J. L. (2020). Responsibility in the current epidemic of language deprivation (1990-Present). Maternal and Child Health Journal, 24, 1319-1322.
- Humphries, T., Kushalnagar, P., Mathur, G., Napoli, J. D., Padden, C., Rathmann, C., & Smith. S. (2017). Discourses of prejudice in the professions: The case of sign languages. *Journal of Medical Ethics* 43(9), 648-652.
- Morford, J. P., Wilkinson, E., Villwock, A., Piñar, P., & Kroll, J. F. (2011). When deaf signers read English: Do written words activate their sign translations? Cognition, 118(2), 286-292.

Paradis, J., Genesee, F., &. Crago, M. B. (2011). Dual language

- development and disorders: A handbook on bilingualism and second language learning. Baltimore, MD: Paul H. Brookes.
- Piñar, P., Carlson, M. T., Morford, J. P., & Dussias, P. E. (2017). Bilingual deaf readers' use of semantic and syntactic cues in the processing of English relative clauses. *Bilingualism: Language and Cognition*, 20(5), 980-998.
- Player, D., Morford, J. P., Occhino, C., & Wilkinson, E. (2022). Code-switching and assimilation of minority sign Language varieties in residential schools for the seaf [Conference presentation]. 15th Biennial High Desert Linguistics Society (HLS 15). Albuquerque, NM, November 11-13.
- Pontecorvo, E., Higgins, M., Mora, J., Lieberman, A. M., Pyers, J., & Caselli, N. K. (2023). Learning a sign language does not hinder acquisition of a spoken language. Journal of Speech, Language, and Hearing Research, 66(4), 1-18.
- Scott, J. A., & Henner, J. (2021). Second verse, same as the first: On the use of signing systems in modern interventions for deaf and hard of hearing children in the USA. Deafness & Education *International*, 23(2), 123-141.
- Singleton, J. L., & Newport, E. L. (2004). When learners surpass their models: The acquisition of American Sign Language from inconsistent input. Cognitive Psychology, 49(4), 370-407.
- Smith, W. H. (2005). Taiwan Sign Language research: An historical overview. Language and Linguistics, 6(2), 187-215.
- Stewart, D. A. (1992). Initiating reform in total communication programs. The Journal of Special Education, 26(1), 68-84.
- Villwock, A., Wilkinson, E., Morford, J. P., Petersen, B.T., & Allen, T. E. (2022). Language at home - Language at school: Factors shaping language proficiency in deaf children with deaf and hearing parents [Conference presentation]. Theoretical Issues in Sign Language Research 14 (TISLR 14). Osaka, September 27-30.
- Villwock, A., Wilkinson, E., Piñar, P., & Morford, J. P. (2021). Language development in deaf bilinguals: Deaf middle school students co-activate written English and American Sign Language during lexical processing. Cognition, 211(1), 104642.
- Wilkinson, E., & Morford, J. P. (2020). How bilingualism contributes to healthy development in deaf children: A public health perspective. Maternal and Child Health Journal, 24, 1330-1338.

Signed Exact English (SEE) is a signing system which aims to have a unique sign for each English word, as well as many prefixes and suffixes, and follows English word order.

Cued Speech is a system which uses manual gestures made near the mouth to visually represent the sounds of English.

Fingerspelling uses handshapes to represent letters of a written language and may be used on its own or in conjunction with signed languages.

However, it is important to recognize the differences between these systems and natural signed languages, keeping in mind that deaf bilinguals do not need representations of spoken language produced on the hands in order to become fluent in a written language.

