

ODYSSEY



Language-Rich
Environments in
Deaf Education

ODYSSEY



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ODYSSEY • CLERC CENTER MISSION STATEMENT

The Clerc Center, a federally funded national deaf education center, ensures that the diverse population of deaf and hard of hearing students (birth through age 21) in the nation are educated and empowered and have the linguistic competence to maximize their potential as productive and contributing members of society. This is accomplished through early access to and acquisition of language, excellence in teaching, family involvement, research, identification and implementation of best practices, collaboration, and information sharing among schools and programs across the nation.

Published articles are the personal expressions of their authors and do not necessarily represent the views of Gallaudet University or the Clerc Center. The Clerc Center includes Kendall Demonstration Elementary School, the Model Secondary School for the Deaf, and units that work with schools and programs throughout the country.

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About the cover: Children exposed to accessible language from a young age, especially from birth, will acquire it naturally. Environments that include signed, print, and even spoken languages (when applicable) while incorporating visual tools (e.g., fingerspelling, visual aids, ASL videos) provide deaf and hard of hearing children with the support they need to develop strong cognitive skills for lifelong learning. Find out more in this issue of *Odyssey*! (Cover photo by Matthew Vita)

We would like to thank all of our student, parent, teacher, and staff models from the Clerc Center for their assistance in illustrating this Odyssey issue.



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FINGERSPELLING

OUR WAY TO READING

Fingerspelling Our Way to Reading is an evidence-based, supplementary literacy program for deaf and hard of hearing students in kindergarten to second grade.

This program has two components:
a three-day-per-week fingerspelling
program and a complementary two-
day-per-week reading comprehension
program.



clerccenter.gallaudet.edu/fingerspelling

CLERCCENTER
AT GALLAUDET

Unrestricted Learning Environments in Deaf Education: CENTERING LANGUAGE ACCESS AS THE FOUNDATION FOR OPTIMAL STUDENT LEARNING

“Literacy is the jump-off point from which all of life’s successes take flight.”

~ Lauri Fortino, American author of children’s picture books

At the Clerc Center, we emphasize the importance of language-rich environments and the interconnectedness and interdependence between every person involved in a deaf or hard of hearing child’s educational journey, from parents, to teachers, to professionals. We also call attention to the importance of a child being exposed not only to educational content in both American Sign Language (ASL) and English but also to creating incidental learning and language-immersion opportunities that they may not get elsewhere.

Through our new **State and School Partnerships initiative**, we are partnering with seven schools, school districts, and state departments of education seeking to improve outcomes for the deaf and hard of hearing children they serve. These programs recognize that real change happens not only in the classroom but throughout the educational experience, including support services, parent engagement, the school environment, and the decisions at the district and state levels that impact deaf and hard of hearing students—and they are seeking support in making real change to their programs. Our partnership with these schools and school systems has yielded new understanding, techniques, and strategies of how we can best serve deaf and hard of hearing students nationwide in a variety of educational environments. Through a combination of site visits, professional development, open conversation, and action plans, partner schools are creating language-rich learning environments designed to meet the educational and social-emotional learning needs of their students. We are seeking to create collaborations across all areas of a well-rounded educational program for deaf and hard of hearing students. If you are interested in serving as a trainer or a resource for the Clerc Center and our partner schools, please contact us at clerccenter.partnerships@gallaudet.edu.

In this issue of *Odyssey*, parent and professional authors share stories and experiences on a range of topics. Rob Hammel discusses how a public school’s dual language immersion program creates a language-rich environment for deaf and hard of hearing students. Kristen Secora, Marissa Ramos, Brittany Lee, and Cheryl L. Shahan discuss the importance of exposing young deaf and hard of hearing children to plentiful and accessible visual language, including and especially sign language, and explore strategies that may help parents, caregivers, and educational professionals increase their use of signs. Chelsea Hull, co-founder of the Hands & Voices Military Project, and parent and active duty Air Force spouse Connely Leis write about the difficulties of meeting a child’s educational needs while in a military family and the importance of looking at LRE not only as the least restrictive environment but also as the literacy-rich environment. Jacqueline Wunderlich and Anthony W. Verdeja share how their community-based organization, the Family Center on Deafness in Florida, is supporting deaf and hard of hearing children’s learning and family involvement. Check out these articles and more!

Thank you for helping to choose *Odyssey*’s 2025 theme! The next issue will focus on how deaf and hard of hearing students with disabilities are being provided with equitable access to education through resources, supports, and services. Please see page 74 to learn more. To submit suggestions for our 2026 theme, please scan the QR code.

—Marianne Belsky and Nicole Sutcliffe
Chief Academic Officer/Chief Administrative Officer
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Marianne Belsky



Nicole Sutcliffe



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Language- and Literacy- Rich Environments: Strategies for Young Deaf Children

By Kristen Secora, Marissa Ramos, Brittany Lee, and Cheryl L. Shahan

Young children do not develop language skills by studying grammar and rules for forming sentences. Children's brains are wired to acquire language naturally; all they need is exposure (Petitto, 2000). This exposure occurs in many forms. Children learn as they see language directed at them. They learn as they see language that flows around them in their environment. They learn as they observe adults interacting through language with each other, adults interacting with other children, and children interacting with each other. Many opportunities for language learning are lost to deaf children if they are not surrounded by other signers (Hauser et al., 2010). In fact, the loss can be so severe that deaf and hard of hearing children can be at risk for language deprivation (Hall et al., 2019), a neurodevelopmental disorder that negatively impacts cognitive, linguistic, behavioral, and social development.

Just as exposure to a spoken language supports language development for hearing children, exposure to sign language—incidentally as well as directly—supports language development for deaf and hard of hearing children. With exposure to a visual language, deaf and hard of hearing children acquire language naturally, meet appropriate language milestones, and develop strong language skills. In turn, strong language skills are important for social-emotional and academic development as well as for establishing healthy relationships within the home, school, and community.

To promote environments that are rich in language for deaf and hard of hearing children, our team of American Sign Language (ASL)/English bilingual researchers, university professors, and speech-language pathologists from institutions in different parts of the country present some

Photos courtesy of Marissa Ramos



Above: A speech-language pathologist models the sign again as a young child copies it.

practical strategies. These strategies can help parents, especially those who did not learn signs as their first language, to communicate more frequently with their young deaf or hard of hearing children and help ensure the development of their strong early language skills.

Strategies to Increase Use of Signs in the Home

For families who learn sign language after the birth of their deaf or hard of hearing child, signing may not be natural or easy at first. In fact, it may require planning and conscious implementation. However, it is essential. When a child's family and all members of the educational team know sign—and foster sign language-rich interactions with children—the result is robust exposure to various language models and development of strong early language skills.

Here are some strategies that may help parents, caregivers, and educational professionals to increase their use of signs inside and outside of the home, enriching the language environment for deaf and hard of hearing children:

- **Modeling**—Modeling is the act of exposing the child to a variety of linguistic stimuli (e.g., individual signs and sentences with

two or more signs). This means engaging and communicating with the child in ways that are authentic and enjoyable. Validate what the child says by acknowledging and responding to them. Focus on modeling signs that are used frequently. These signs are often the same as the spoken words you would use frequently with a young hearing child, including signs for *more*, *open*, *help*, *go*, and *stop*. Be sure to use the signs in different contexts to help the child develop a versatile vocabulary.

- **Narration**—Narration, sometimes referred to as self-narration, is articulating what is happening as it is happening. Articulate what is happening from your own perspective or from your child's perspective. This can occur throughout the day as you use language to describe your actions as you are eating dinner or as your child is taking a bath. Make sure to add how you are thinking or feeling as you make note of your actions through language.

Brittany Lee, PhD, CCC-SLP, is an assistant professor of communication sciences and disorders at Chapman University. She has previously worked with deaf students as both an English teacher and a speech-language pathologist. Her research focuses on language and literacy development for deaf and hard of hearing children.

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The authors welcome questions and comments about this article at ksecora@utk.edu, marissa@risesign.org, britlee@chapman.edu, and cshahan1@utk.edu.

Figure 1: Language Strategies at Home



Left: Modeling *more* during meal times can provide important language learning opportunities, even when the child does not copy it immediately.

these strategies into your daily routine. This will ensure children have ample opportunities for receptive and expressive language practice. Start by choosing one daily activity or a 10-minute period to focus on language. Figure 1 shares some ideas for integrating language and literacy into everyday routines.

Begin Building Literacy with a Signing Foundation

Literacy skills are built on the foundation of language skills. In fact, ASL skill and fingerspelling skill are two leading predictors of a child's reading ability (Sehry & Emmorey, 2022). A language-rich environment supports literacy skills by allowing children to explore text both in their books and in their environment. To help signing children connect language to literacy, try the following techniques:

- **Follow the child's lead**—Get on the child's level. Literally sit or kneel on the floor so you and the child are at eye level with each other. Join the child in activities that are naturally motivating, such as playing with stuffed animals or cars, and communicate with them about these activities.
- **Wait and prompt**—Children understand vocabulary before they can use words to express themselves. When you engage children, give them time to respond but do not require a response. This is sometimes called the expectant pause. This pause provides children with an opportunity to sign without pressuring them to do so.
- **Use more than nouns**—Instead of pointing to an object and merely naming it, add information, perhaps noting what the object does, how it is used, or what it looks like. Use verbs and adjectives. Adding fingerspelling reinforces vocabulary and develops pre-literacy skills.
- **Communicate for a variety of reasons**—Comment on a picture, request a snack, describe a toy, express your thoughts and feelings, persuade a friend, or protest activities you do not like or want to do (e.g., "I don't want a bath."). The child will observe, and learn how to use, the language you use to express your wants, needs, and preferences.
- **Incorporate signing into daily routines**—Integrate some or all of

A DAY IN THE LIFE

LANGUAGE STRATEGIES FROM BREAKFAST TO BEDTIME

PLAYTIME

- Rather than quizzing your child on the names, number, or colors of toys, build language by narrating what they are doing with them.



AT HOME

- Model a variety of ASL and English vocabulary as part of your everyday routines like washing the dishes or walking the dog



AROUND TOWN

- Draw attention to signs and logos. Understanding that symbols carry meaning is an important pre-literacy skill



OUTDOORS

- Play hide and seek with your child's favorite stuffed animal. Build joint attention by pointing to and exploring spots where the toy might be hiding.



MEALTIME

- Build ASL and fingerspelling games into everyday tasks. Think of signs that use the same handshape: FRUIT, FRENCH FRIES



BATHTIME

- Try repeating a new word in many phrases to build vocabulary: DUCK YELLOW, DUCK DIVE, THREE DUCK SWIM



STORYTIME

- Take turns pointing to pictures or words and labeling them with the sign or fingerspelling



BEDTIME

- Have your child reflect on their day and recount a story of one thing that happened to them that day



your child. For preliterate children, emphasize the overall movement of the fingerspelled word and match handshapes to printed letters as they learn to read. Fingerspelling can build awareness of signed and spoken phonology, which can both support reading.

- **Play language games in ASL**—Remember, signs are not made up of sounds but of handshapes, positions,

and movements. Think of the sign for *flower* and the sign for *home*. Note how the handshapes are the same, making these words rhyme in ASL much like *cat* and *bat* rhyme in English. Tell ASL number stories and ABC stories that play with handshapes. If you need help finding these stories, there are some good ones on the internet.

- **Place signs on the page near the print that represents the English translations**—It can be difficult for children to attend to pictures, text, and a signing communication partner all at once. Adjust the usual sign placement by producing the sign on the page or on the child's body to keep the child's attention focused on the story.
- **Connect concepts from the book to the real world**—This means books about sand or turtles might support a trip to the beach or the zoo. Ensure attention is drawn to the connection between the pictures of turtles in the book and the live ones at the beach or in the zoo.
- **Compare how you would say something in ASL and English**—For example, "Where do you want to have lunch?" might translate in ASL to two signs and a specific facial expression. Translating and noticing differences between languages builds metalinguistic knowledge for multilingual children.
- **Call attention to print in the environment**—Draw attention to signs and logos around town, like stop signs or the McDonald's arches. This builds awareness and teaches the important pre-literacy skill that symbols carry meaning.
- **Make reading special**—Trips to the library and bedtime stories are shared experiences that facilitate bonding and enjoyment and build positive attitudes toward reading.

For more suggestions, check out the



Left: A parent and a child both sign *pig* during a shared reading activity.

Laurent Clerc National Deaf Education Center's (n.d.) online resource, *15 Principles for Reading to Deaf Children*, at <https://clerccenter.gallaudet.edu>.

As Much as Possible As Often as Possible

Children—deaf, hard of hearing, and hearing—need exposure to accessible language from birth to develop strong language skills. Strong early language skills lay the foundation for social interactions, literacy skills, and educational success. Further, deaf children who do not experience access to language when they are very young may experience language deprivation

(Hall et al., 2019), which requires focused intervention from a variety of professionals, including teachers of the deaf, speech-language pathologists, Deaf Mentors, and the child's parents.

Children are naturally motivated to communicate. By following their lead, adults can model language and enrich their children's learning anywhere and at any time. Equally important, while helping them develop language and literacy skills, parents, caregivers, and educators will be communicating with their deaf or hard of hearing child and building interpersonal connections. With a bit of awareness and creativity, adults can nurture the language and literacy development of their deaf or hard of hearing child, enjoy meaningful communication, and form deep emotional bonds all at the same time.

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References

- Hall, M. L., Hall, W. C., & Caselli, N. K. (2019). Deaf children need language, not (just) speech. *First Language*, 39(4), 367-395.
- Hauser, P. C., O'Hearn, A., McKee, M., Steider, A., & Thew, D. (2010). Deaf epistemology: Deafhood and deafness. *American Annals of the Deaf*, 154(5), 486-492.
- Humphries, T., & MacDougall, F. (1997). *Adding links to the chain: Discourse strategies in ASL teaching*. Manuscript. Teacher Education Program, University of California, San Diego.
- Laurent Clerc National Deaf Education Center. (n.d.). *15 principles for reading to deaf children*. Retrieved from <https://clerccenter.gallaudet.edu/ndeclearlyintervention/15-principles-for-reading-to-deaf-children/>
- Petitto, L. A. (2000). The acquisition of natural signed languages: Lessons in the nature of human language and its biological foundations. In C. Chamberlain, J. P. Morford, & R. I. Mayberry (Eds.), *Language acquisition by eye* (pp. 41-50). New York: Psychology Press.
- Sehyr, Z. S., & Emmorey, K. (2022). Contribution of lexical quality and sign language variables to reading comprehension. *Journal of Deaf Studies and Deaf Education*, 27(4), 355-372.

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Fostering Language-Rich Environments to Enhance Educational Outcomes for Deaf and Hard of Hearing Students:

A Personal Perspective

By Scott Walsh

The use of “deaf or hard of hearing” throughout this article refers to all individuals with any hearing variability, including those who are d/Deafblind, d/Deaf with disabilities, or Deaf plus, regardless of communication modality. Also, once you have worked with one deaf or hard of hearing student, you have done exactly that—you’ve worked with one. Each of these students is unique, as are their needs and the way they access their academic and linguistic environments.

Senses, specifically sight and hearing, are the mechanisms through which we access and navigate our everyday lives, and use of language is the cornerstone of how we connect. For students who are deaf or hard of hearing, barriers to access and inability to effectively use language within an environment can have significant impacts.

How do we break that barrier? How do we ensure deaf and hard of hearing children participate in language-rich environments and, through these linguistic passageways, the cultures that surround them? How do we ensure deaf and hard of hearing children have full and continuous access? How do we increase literacy? How do we create opportunities for direct communication with peers and adults across all learning environments? The answer: It depends.

Just as no two fingerprints are alike, no two students are alike. Each deaf or hard of hearing student has their unique way of interacting with their peers, parents, teachers, and the world. From how they express themselves to how they receive the expression of others, from how they experience and advocate for their rights to how they interact with each

*Photos on pgs. 9 and 11 (center) and illustration courtesy of Scott Walsh
Additional photos by Matthew Vita, Laurent Clerc National Deaf Education Center*



Left: When you have someone in your corner who pushes you, challenges you, and inspires you to grow—someone who sees beyond any obstacles and recognizes the incredible potential within you—nothing can stand in your way. Carmelina Hollingsworth, my project director for RMTTC-DHH, has been that person for me.

other and their hearing friends, each student approaches each situation differently. A plethora of factors make a difference, of course, as hearing levels, communication modalities, and communication vary among students. Further these differences occur not just among students but even with the same student as that student goes about their day. Accessibility fluctuates constantly—environments change, communication partners change, and topics change. While it may be easy to navigate one environment or topic, a change in the setting, conversation, or communication partner can drastically impact a student's ability to receive, understand, and appropriately respond.

As educators, we often separate language learning into two domains: Basic Interpersonal Communication Skills (BICS) and Cognitive Academic

Learning Proficiency (CALP). BICS refers to everyday language that we use with each other. CALP is more complex language often used in academic settings. BICS serves students socially; CALP serves students academically. In traditional acquisition, a child develops BICS first and then develops CALP. This makes sense in that language usually develops first in the home, where everyday communication involves the child, parents, and siblings. Children have the capacity to learn any language (Marschark et al., 2006) as long as they have access. The brain doesn't care about modality, it just craves language (Kovelman et al., 2008). Since language learning progresses in both American Sign Language and English at the same rate, perhaps we can assume that BICS and CALP are synonymous in this progression as well.

While each deaf or hard of hearing student is unique, the single most important consideration for all deaf and hard of hearing students is **access**. Throughout their lives, access is key. Our students need access to the language-rich environments that surround them, especially at an early age. During the first years of life, the brain is constantly building new neurological pathways and strengthening existing pathways. Access determines whether these years are a catalyst to creating a solid foundation of language or a barrier for the rest of the child's life.

As educators we want to ensure students are immersed in a language-rich environment throughout the school day. This must start the moment students arrive in the classroom—or in the building's entrance way—and continue with every single interaction that occurs.



Above: Students need access to the language-rich environments that surround them, especially from an early age, whether at home, at school, or in the community.

Interactions with students, both academic and social, are moments that allow students to build new language, practice familiar language, and scaffold the language that they know with their knowledge and experience to synthesize more complex language.

Looking at your students through the perspective of using interactions to build language rather than through the lens of teaching designated subjects shifts the mindset—and the effects can be monumental. The first year I started as a new teacher at the Colorado School for the Deaf and the Blind, I had a mentor

teacher who met with me throughout the week. She advised me to teach in the moment—and in every moment. If a lesson took a turn from the intended path due to group discussion, she encouraged me to roll with it. These moments are hard to recreate, but when students are engaged, opportunities are rich with possibilities; teachers can teach, build, and scaffold new language as it unfolds in conversation.

However, language is more than a communication tool. Language leads to literacy, and literacy leads to meaningful engagement with the world, including directly to employment. Missing even a single part in the “language to literacy equation” can have detrimental effects on the success rates of students. Many factors contribute to a child’s successful literacy development—family

involvement, amplification, and the willingness of family members to learn and implement a new language. Still, “the single greatest risk faced by deaf [children] is inadequate exposure to a usable first language” (Gulati, 2023).

The most extreme result of lack of access is language deprivation. Language deprivation, or chronic lack of full access to language during the critical period of language acquisition, is completely preventable. In selecting what educators call a “communication mode,” parents should have one objective: picking a language that is fully accessible, both receptively and expressively. Instead of entertaining the never-ending debate of determining which language is “correct” or “the best,” instead of turning to the audiologist’s recommendation or settling for whatever language the school may offer, parents should focus on their child and use the language that is most accessible for that child.

Children are different, linguistic environments are fluid, and the complexity of navigating these environments may result in the student choosing to use one form of communication in a given environment and a different form of communication in another. It is the student who must code switch and navigate between two languages, and it is the student who should be free to decide what is the most accessible communication at any given time. As educators, we need to be prepared for this and encourage the student to advocate for their preferred communication modality in



Language infused throughout ALL aspects of the student's day
Rich accessible, & robust communication
Environments barrier free, developed intentionally for d/Deaf and hard of hearing students

each setting.

Accessibility of language takes place on multiple levels and affects everything in the academic environment.

Accessibility of language should be the prime determinant as parents and teachers face the question: *Where will students find themselves experiencing a language-rich environment?* An alternative to an all deaf classroom may be providing specially designed instruction through services to ensure a language-rich environment in all settings every day, wherever the student travels throughout their

Above: Walsh catches up with his former student, Jackson Swartzlander, who he taught while working as a teacher of the deaf in the public school system. **Below:** When teachers have high expectations of their students and believe they can succeed, then those students believe it, too!

Language is all around us, but if a person cannot access it, it holds no value.



academic journey.

In addition to recognizing that each deaf or hard of hearing student is different and ensuring they have access to language, professionals must set the academic bar high. They must also recognize that hearing loss is only a piece of their students' identity; students come from different cultures, and they have different passions and skills. Deaf and hard of hearing students can do anything their hearing peers can do except hear, and they need to know this. They need to know that they are smart, they are capable, and their hearing level does not define or limit what they are capable of achieving. However, the foundation to all of this, and the foundation of their success, will depend on their acquisition of language.

Language, whether auditory or visual, is a shared need of everyone. It should be established based on the needs of the

student, not on what's easily available for the school or the preferred modality of others. So, what can you, as an educator, do? Cultivate accessible language with your students during every possible moment. Be their fiercest advocate and let them know that they matter. And, above all else, believe in them; hold your expectations of them so high that they have no other option than to meet them. I am grateful for every one of the people in my life that believed in me, challenged me, and pushed me to become someone I never thought I would have an opportunity to become.

All deaf and hard of hearing children are different, but the accessibility to rich language that surrounds all of us is critical for everyone. Language is all around us, but if a person cannot access it, it holds no value.

References

- Gulati, S. (2023, October). *Language deprivation syndrome*. [ASL Lecture Series]. Providence, RI. https://www.youtube.com/watch?v=8yy_K6VtHJw&feature=youtu.be
- Kovelman, I., Baker, S. A., & Petitto, L.-A. (2008). Bilingual and monolingual brains compared: A functional magnetic resonance imaging investigation of syntactic processing and a possible "neural signature" of bilingualism. *Journal of Cognitive Neuroscience*, 20(1), 153-169. <https://doi.org/10.1162/jocn.2008.20011>
- Marschark, M., Lang, H. G., & Albertini, J. A. (2006). Language development and deaf children. *Educating deaf students: From research to practice* (pp. 89-112). New York: Oxford Academic. <https://doi.org/10.1093/oso/9780195310702.003.0010>



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Anthony W.

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The authors invite you to learn more about FCD at www.fcdpinellas.org and welcome questions and comments about this article at jacqueline@fcdpinellas.org and anthony@fcdpinellas.org, respectively.

Creating Language-Rich Environments with Intentionality at the Family Center on Deafness

By Jacqueline Wunderlich and Anthony W. Verdeja

The majority of deaf and hard of hearing children around the world are born to hearing parents, most of whom are not familiar with deafness or sign language. This can lead to language deprivation or delay and a lack of social interaction for these children. Below, article co-author Jacqueline Wunderlich shares her own story of growing up deaf, its impact, and how it influenced her work with the Family Center on Deafness (FCD) in Largo, Florida. The authors also share how FCD is collaborating with the local school district and other programs in order to empower the community's deaf and hard of hearing students and help provide them with language-rich environments in which to learn and grow.

Growing up I hated my hearing aids, but not for the reason you might assume. I constantly “forgot” to wear them or to change the batteries. I hid my bare ears under my hair so nobody would know. I got smarter as I got older and wore my hearing aids without turning them on (but my teachers figured that out). In sixth grade, I didn’t wear my hearing aids at all. A bigger school meant it was harder for teachers to keep track of me, and it was easier for me to get away with not wearing them. I spent most of the year reading books under my desk rather than paying attention in class. I set a school record for the number of books I checked out from the school library that year.

I learned in school, but not what I was supposed to be learning. I didn’t understand how to do

Photos courtesy of the Family Center on Deafness



Left: Youth and Family Support specialist Jasmine Hall works with an elementary student on improving his reading skills by connecting ASL and printed English words.

multiplication tables until college. I didn't have any idea what was going on in my classes, and yet I still would not wear my hearing aids. It wasn't because they were uncomfortable (even though they were). It wasn't because they were, paradoxically, both too loud and too quiet (which they were). It wasn't when other kids noticed my hearing aids, or how annoying it was to manage the FM system (even though it was), or even due to any other small indignities that happened daily. I hated my hearing aids because I hated taking them off. It still catches me off guard today, the roar and rush of sound when I turn on my hearing aids, and how, when I take them off, the world feels so still. As a child, that silence swallowed me up. In that moment,

every time I was confronted with the stark reality that I am not and never will be hearing ... to me, that meant being different, it meant failure, it meant never, ever fitting in. And so I chose not to wear my hearing aids at all.

When I became an adult and learned American Sign Language (ASL), my world exploded with possibility and language. Suddenly, hearing aids were simply an optional tool rather than *everything*. I put them on to listen to music, and I took them off whenever I wanted—sometimes for weeks, months, or years. I learned that deafness, which I had hidden from my entire life, was a source of belonging, inclusion, and joy.

Unfortunately, my story is all too

common. Ninety to 95 percent of deaf and hard of hearing children are born to hearing parents, many of whom are not familiar with deafness or sign language (Hall et al., 2023). This lack of familiarity often results in environments in which children are unintentionally deprived of the language and social interactions essential for their development. These adverse childhood communication experiences, such as language deprivation and communication neglect, can have severe, lifelong consequences (Hall et al., 2023; Kushalnagar et al., 2020).

Florida's Tampa Bay region is home to the third largest population of deaf and hard of hearing individuals in the United States. Yet with the Florida School for the



Left: Program manager Jacqueline Wunderlich and Youth and Family Support specialist Jackie Haig give a presentation at the Nova Southeastern University Dr. Kiran C. Patel College of Osteopathic Medicine on the importance of language-rich environments in preventing language deprivation.

students.

Today, FCD offers targeted educational and social support programs to deaf and hard of hearing individuals and their families, spanning from birth through high school graduation. These programs are grounded in the Deaf Community Cultural Wealth (DCCW) framework. DCCW changes the narrative from deficit-focused to

students but for their families and the broader community. We show families firsthand that deafness is not an obstacle but instead an identity to embrace and celebrate. We champion the power of connection by cultivating an accessible, language-rich environment that presents limitless opportunities for students to enhance their communication, education, and independence. Through our programming, parents and children alike are introduced to the six forms of capital that comprise DCCW: aspirational, navigational, social, linguistic, familial, and resistant (Johnson et al., 2020).

Embracing the DCCW framework involves intentional actions and decisions that align with the values we champion. This is evident in our commitment to a staff composition that reflects the diversity of the community we serve. Approximately two-thirds of our team are deaf or hard of hearing.

Below: FCD staff and summer camp participants enjoy a book bus visit from our community partner and supporter, the Juvenile Welfare Board of Pinellas County.

Deaf and the Blind situated just 200 miles away, most of these students are enrolled in mainstream public school settings just like I was, with non-signing and non-deaf peers. However, their stories don't have to mirror mine.

emphasizing the rich cultural assets, values, and resources inherent within the Deaf community (Johnson et al., 2020). This works to actively dismantle the stigma and misconceptions often linked with deafness, not only for the

Family Center on Deafness and Deaf Community Cultural Wealth

In 1995, recognizing a dire need for support in the Tampa Bay region, Deaf community leaders, educators, and health professionals rallied together, setting the foundation for what would become FCD by 2003, and officially a 501(c)(3) organization by 2010. FCD is one of the only nonprofits of its kind nationally. Through support from the Juvenile Welfare Board of Pinellas County, FCD is able to actively collaborate with the local school district and other programs in order to empower deaf and hard of hearing



Every staff member is proficient in ASL, with some also fluent in both English and Spanish, making them trilingual. This not only enriches our programs with a variety of perspectives but also demonstrates our commitment to the community in practice.

Charlie's Story

"Charlie" arrived at FCD with zero functional language and a traumatic history of abandonment and adoption.

Within these settings, children like Charlie are surrounded by Deaf role models and take part in engaging activities designed to foster their language acquisition.

We are intentional about the way language is presented and utilized in our environments, mindful of its impact on children and their families. For example, deaf or hard of hearing staff may choose to use their voices at times to demonstrate that ASL and spoken

together. Such meaningful engagement is critical for children's language acquisition and self-esteem. Ultimately, by exposing families to successful Deaf role models and demonstrating the effectiveness of ASL in a nonjudgmental environment, we open the door to families using ASL in other aspects of their lives. Building language is more than a one-time event, and it does not stop at age 5. With that spirit in mind, FCD intentionally creates language-rich environments for elementary, middle, and high school students as well.

Throughout elementary school, Charlie attended our Raising Expectations & Achievement of Children with Hearing Loss (R.E.A.C.H.) program that is focused on enhancing educational and developmental outcomes. It emphasizes cultural and linguistic enrichment, aiming to build a comprehensive development foundation for these students, their siblings, and hearing children of deaf adults (CODAs). The involvement of hearing siblings and CODAs has been critical to supporting families in ensuring everyone can have effective communication in all aspects of their lives. A fundamental goal of R.E.A.C.H. is to fill the gap in accessible extracurricular opportunities for deaf and hard of hearing students.

Many mainstream deaf students historically have had limited access to activities that cater to their developmental needs due to communication barriers. R.E.A.C.H. addresses this by allowing the students to communicate directly with signing adults and Deaf role models. The program, which is a licensed child care center through Pinellas County, offers various activities, including life skills, social-emotional learning, tutoring, and Girl Scouts.

Beginning in middle school, our program allows students to dive more deeply into their interests. Weekly tutoring and support continue. Some students join Robotics Club, while others choose to participate in



Above: Volunteer Tatianna leads a scavenger hunt color-finding activity with deaf and hard of hearing toddlers and kids of deaf adults.

He was only 4 years old, but his family had already been told that he would not be successful in school and that he was not capable of learning. They believed that he had been severely impacted by language deprivation and that he would never be able to catch up or achieve proficiency in any language. Then Charlie's parents became engaged with FCD and set him on an extraordinary path of growth and discovery.

FCD's birth to 5 years old programming emphasizes embedding language learning opportunities into everyday experiences and community outings. We do this through initiatives such as the Shared Reading program and Promoting Language Acquisition for Youth (P.L.A.Y.) group programs.

language can coexist rather than seeing ASL as merely a lesser alternative. Conversely, hearing staff members sometimes prioritize signing over speaking, even in situations where vocal speech is the norm, to reinforce the importance and validity of ASL. This intentional approach to communication allows us to introduce families to the rich diversity of Deaf identities and Deaf culture. By leveraging familial capital, FCD encourages families to view their child's deafness not as a barrier but as a unique opportunity to strengthen their bond and grow

Environmental Club. Others learn about 3D printing, leisure activities, and life skills. Students begin participating in FCD's Deaf mentorship Learning Is For Everyone (L.I.F.E.) program, in which deaf and hard of hearing students are paired with Deaf adult role models and attend monthly outings together. Here, they are given guided and explicit instruction of self-advocacy, self-determination, and transitional skills through the example of our mentors and staff. This utilizes the navigational and aspirational capital of the Deaf community, encouraging the students to learn to successfully navigate the challenges of the hearing world and to continue dreaming big and realize they can achieve their dreams. The program also instills a sense of resilience and

advocacy, teaching students to challenge societal perceptions of deafness and to advocate for their rights and needs. Charlie's participation in our program throughout middle school fostered his blossoming Deaf identity and language skills to prepare him for high school.

By high school, Charlie was initiating conversations, participating with others, and had made friends with his peers. He was once deemed incapable of learning, and yet with the incredible support and access to a language-rich environment, Charlie is now on the brink of graduating high school. Recently, he participated in a public speaking competition in which he discussed how he had overcome many challenges and remains optimistic about his future.

Samantha's Story

Not all FCD students join us as young as Charlie did. For example, consider the story of "Samantha." She was a sophomore drowning in her mainstream classroom. Her family had recently immigrated to Florida, and she was the only child in her class with hearing loss. Samantha had navigated her early education experiences with minimal support. By chance, she saw an FCD booth at a back-to-school event and discovered that there were services specifically for students like her. She began attending our after-school program and quickly began learning ASL. Samantha joined absolutely everything she could—Robotics, Academic Bowl, LIFE mentorship, driver's education, and more.

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Part of creating a language-rich environment for Samantha meant acting with intentionality. Although infants can learn language solely through observation, this is not true for older children and adults. Samantha required explicit teaching of ASL, with FCD providing interpreters so she could have access to our programming as she learned. This was a turning point for Samantha and her academic performance soared, placing her in the top ranks of her class. Trilingual interpreters made it possible to support her family's acquisition of ASL, and her siblings were encouraged to join our summer camps. This meant that Samantha went home to a language-rich environment, too. Just like I was while growing up, Samantha was hungry for not only accessibility but for genuine inclusion—finding somewhere she truly belonged. We, at FCD, are so happy that she has found it in us.

Inclusion Makes the Difference

We believe that belonging is not just a feeling but a foundation for growth. It's the beauty of inclusion, where every student feels valued and sees themselves reflected in the staff and FCD

community. FCD is a place where all deaf and hard of hearing individuals know they belong.

Authors' note: The uppercase 'D' in "Deaf" is used to describe people who identify as culturally Deaf and are actively engaged with the Deaf community.

References

- Hall, W. C., Dye, T. D., & Siddiqi, S. (2023). Associations of childhood hearing loss and adverse childhood experiences in deaf adults. *Plos one*, 18(6), e0287024.
- Johnson, S., Stapleton, L., & Berrett, B. (2020). Deaf Community Cultural Wealth in community college students. *Journal of Deaf Studies and Deaf Education*, 25(4), 438-446.
- Kushalnagar, P., Ryan, C., Paludneviene, R., Spellun, A., & Gulati, S. (2020). Adverse childhood communication experiences associated with an increased risk of chronic diseases in adults who are deaf. *American Journal of Preventive Medicine*, 59(4), 548-554.

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Across All Settings: Fostering Environments Rich in Language Comprehension

By Sarah Brandt, Maddy Gibson, and Amy Szarkowski

In line with current recommendations (Garberoglio et al., 2019), the authors use the term ‘deaf’ inclusively to refer to audiologically deaf, culturally Deaf, and hard of hearing individuals, while ‘deafdisabled’ refers to those who are deaf, Deaf, or hard of hearing and have one or more disabilities.

For deaf children—as for all children—exposure to a language-rich environment is a cornerstone of developmental and educational opportunity. An environment rich in language promotes natural, direct, and responsive communication (Mugweni, 2019) and contributes to building a language comprehension foundation. Language comprehension is tied to literacy development, which in turn impacts life skills, independence, and postsecondary employment (Donnellan & Mathews, 2021).

Some deaf children acquire and apply language naturally through daily experiences, conversations, and interactions in an accessible first language. However, some deaf children, including those children who have experienced language deprivation (Hall et al., 2017), those with insufficient early language access (Szarkowski, 2018), and those who are deafdisabled (Guardino et al., 2022), may benefit from explicit strategies that transform language-rich environments into language comprehension-rich environments. These environments explicitly foster the development of language comprehension skills to support learners who do not yet possess the language foundation “to learn through language.”

Professionals in our setting—The Children’s Center for Communication/Beverly School for the Deaf (CCCBSD)—embed foundational language comprehension strategies within language-rich environments. This occurs in traditional classrooms as well as in a variety of other settings, such as therapeutic services, programs in related arts (e.g., art, music, physical education) and STEAM (science, technology, engineering, the arts, math), and community-based activities. Professionals in these

Photos courtesy of CCCBSD



Above: A student plays basketball during a schoolwide tournament, building both background knowledge and categorical understanding of sports-related concepts.

settings strive to make their learning environments not just language-rich but also rich in fostering the development of foundational language comprehension skills.

The Foundations of Language Comprehension

Language comprehension consists of many elements, such as understanding vocabulary, inferencing, and monitoring meaning (Oakhill et al., 2019). For learners without a strong language foundation, exposure to a language-rich environment may not be sufficient to develop these skills. For these learners, foundational language comprehension skills may need to be explicitly taught. According to DiPerri (2013), foundational language comprehension skills include:

- **Background knowledge**—The knowledge created as children experience the world, integrate and organize new knowledge, and develop critical thinking skills.
- **Negation skills**—The ability to say “no,” identify when something is incorrect, or

indicate if something does not make sense.

- **Categorical understanding**—The awareness of relationships among concepts, including significant attributes and identification of objects that contribute to them belonging or not belonging in the same group.

These foundational language comprehension skills are highly related to one another. For example, if students understand the categories “fruit” and “dessert” (*background knowledge*) and try brownies for the first time, they need to determine that brownies do not fit in the “fruit” category (*negation*) but share characteristics with other sweet food items, placing them in the “dessert” category (*categorical understanding*). This is how experiences become background knowledge.

Education professionals can use these

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The authors welcome questions and comments about this article at sarahbrandt@cccbsd.org, maddygibson@cccbsd.org, and amyszarkowski@umb.edu.



Left: Language comprehension—and fun—are both a big part of physical therapy in the pool!

connectedness, and community belonging (Gillon et al., 2020; Grajo & Gutman, 2019).

Eileen Tran, a physical therapist who supports CCCBSD students from 3-22 years of age, incorporates activities to strengthen the concept of negation in her practice, believing this is critical to student autonomy, independence, and safety. Given the complex physical needs of some of her students, hands-on support is often required. Tran fosters her students' ability to apply their negation skills by encouraging her students to indicate their preference for where and when activities take place or ask for a different or modified activity. For example, a student may be given the option to use a stander during a math activity or during reading or to select between the use of a treadmill or a stationary bike to complete an exercise routine. By giving the students more control over how and when they engage in physical therapy services, Tran promotes the development of a powerful skill that directly supports language comprehension among her deaf learners.

Focusing on Categorical Understanding In Physical Education

Benefits of participation in related arts and STEAM include gains in vocabulary, comprehension, reasoning, creativity, critical thinking, collaboration, and interpersonal communication (Gordon et al., 2015; Wahyuningsih, 2020).

After learning about the role of foundational language comprehension, adaptive physical education teacher Shannon Morris focused on supporting the development of *categorical understanding* for her deaf students. "I knew we were doing a great job of introducing conceptual language through movement," she said, "but I wanted to find another way to provide access to literacy." To achieve this, she created a communication word wall that included laminated, removable cards with language and symbols related to adaptive physical education class. Each set of symbols is categorized by its function within an activity, such as requesting (e.g., wait, break, stop, go) or commenting (e.g., like, don't like). The word wall supports learners' *categorical understanding* by illustrating how various responses go together, and this understanding can then be applied throughout the class.

concepts to design environments rich in language comprehension to support all deaf learners. At CCCBSD, all professionals—including teachers, teaching assistants, related service providers/therapists, and specialists—participated in professional development on building language comprehension across contexts. The following examples illustrate how CCCBSD professionals supported students by fostering language comprehension-rich environments in a variety of settings.

Strengthening Negation In Physical Therapy

Therapeutic service providers, including speech-language pathologists, occupational therapists, and physical therapists, bring unique discipline-specific knowledge to a child's educational team. While therapists typically address a child's goals related to their area of service, there are also benefits to addressing language comprehension skills during therapy; teachers can create opportunities for vocabulary growth, social

Developing Background Knowledge In the Community

Community-based instruction promotes meaningful learning for students in authentic contexts and contributes to successful postsecondary outcomes (Walker et al., 2010). While this instruction is focused on the development of life skills, such as making purchases or promoting safety, helping students develop foundational language comprehension skills can also be embedded in community-based programs, such as transition.

Transition coordinator Alexandria Gullage designs community-based learning opportunities for students 14-22 years of age. She noted that learning about language comprehension was “insightful, comprehensive, and practical,” particularly because it “highlighted the importance of considering academic content that will increase our students’ independence.” Gullage was struck by the importance of *background knowledge* for her transition-age students. “To support our students in the community, background knowledge must be built. One way to do this is through a thematic approach to instruction. For example, students



Above: While on a community outing to a farm, a student develops background knowledge that can support future learning opportunities.



Above: A student in adaptive physical education class practices negation skills by making choices about preferred activities.

explored a theme on retail stores and built background knowledge on different types of clothing.” With this background knowledge, students engaged in tasks such as selecting clothing items based on an activity (e.g., job interview versus lunch with friends), clothing care (e.g., laundering and storing clothing), and clothes shopping (e.g., locating items in a store based on category). Gullage’s experience illustrates that even in a nontraditional learning space like the community, students can address foundational language comprehension skills.

Comprehension at the Foundation Engaging the World

A solid foundation in language fosters the ability to understand and engage with the world. Without it, students face challenges in health outcomes, cognition, social-emotional skills, school readiness, and academic success (Hall et al., 2017). While many deaf learners acquire foundational language comprehension skills through daily interactions, this may not be true for all learners, particularly those with limited language

Right: A language comprehension-rich environment extends beyond the classroom, such as to instruction that occurs in the community.

access and those who are deafdisabled. For these students, foundational skills may need to be taught. Training educational professionals throughout the school to recognize opportunities for developing these skills promotes not just a language-rich environment but one that is language comprehension-rich.

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References

- DiPerri, K. A. (2013). *Bedrock literacy curriculum*. Bedrock Literacy & Educational Services.
- Donnellan, L., & Mathews, E. S. (2021). Service providers' perspectives on life skills and deaf and hard of hearing students with and without additional disabilities: Transitioning to independent living. *European Journal of Special Needs Education, 36*(4), 547-561. <https://doi.org/10.1080/08856257.2020.1776982>
- Garberoglio, C. L., Palmer, J. L., Cawthorn, S., & Sales, A. (2019). *Deaf people and educational attainment in the United States: 2019*. U.S. Department of Education, Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes. https://nationaldeafcenter.org/wp-content/uploads/2022/11/Deaf-People-and-Educational-Attainment-in-the-United-States_-2019.pdf
- Gillon, G., McNeill, B., Denston, A., Scott, A., & Macfarlane, A. (2020). Evidence-based class literacy instruction for children with speech and language difficulties. *Topics in Language Disorders, 40*(4), 357-374. <https://doi.org/10.1097/TLD.0000000000000233>
- Gordon, R. L., Fehd, H. M., & McCandliss, B. D. (2015). Does music training enhance literacy skills? A meta-analysis. *Frontiers in Psychology, 6*(1777). <https://doi.org/10.3389/fpsyg.2015.01777>
- Grajo, L. C., & Gutman, S. A. (2019). The role of occupational therapy in functional literacy. *The Open Journal of Occupational Therapy, 7*(1). <https://doi.org/10.15453/2168-6408.1511>
- Guardino, C., Cannon, J. E., & Paul, P. V. (2022). *Deaf and hard of hearing learners with disabilities: Foundations, strategies, and resources*. New York: Routledge.
- Hall, W. C., Levin, L. L., & Anderson, M. L. (2017). Language deprivation syndrome: A possible neurodevelopmental disorder with sociocultural origins. *Social Psychiatry and Psychiatric Epidemiology, 52*(6), 761-776. <https://doi.org/10.1007/s00127-017-1351-7>
- Mugweni, R. (2019). Rich environments for language competence and narrative ability in early childhood development settings. *International Journal of Science and Research, 8*(2), 1590-1597. <https://www.ijsr.net/archive/v8i2/ART20195545.pdf>
- Oakhill, J. V., Cain, K., & Elbro, C. (2019). Reading comprehension and reading comprehension difficulties. In D. A. Kilpatrick, R. M. Joshi, & R. K. Wagner (Eds.), *Reading development and difficulties: Bridging the gap between research and practice* (pp. 83-115). New York: Springer.
- Szarkowski, A. (2018). Language development in children with cochlear implants: Possibilities and challenges. In N. S. Glickman & W. C. Hall (Eds.), *Language deprivation and deaf mental health* (pp. 235-262). New York: Routledge.
- Wahyuningsih, S., Nurjanah, N. E., Rasmani, U. E. E., Hafidah, R., Pudyaningtyas, A. R., & Syamsuddin, M. M. (2020). STEAM learning in early childhood education: A literature review. *International Journal of Pedagogy and Teacher Education, 4*(1), 33-44. <https://dx.doi.org/10.20961/ijpte.v4i1.39855>
- Walker, A. R., Uphold, N. M., Richter, S., & Test, D. W. (2010). Review of the literature on community-based instruction across grade levels. *Education and Training in Autism and Developmental Disabilities, 45*(2), 242-267. <https://www.jstor.org/stable/23879810>



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Chelsea Hull, MA, BEI, an active duty spouse, is co-founder of the Hands & Voices Military Project. She is Board for Evaluation of Interpreters (BEI)-certified for interpreting, as well as ASTra (Hands & Voices Advocacy, Support, and Training™) trained and certified. For 25 years, she has helped teach deaf and hard of hearing children, working as a teacher of the deaf, an American Sign Language interpreter, and an educational advocate. Hull's mother identified as deaf and inspired Hull's career in deaf education.

Connely Leis is an active duty Air Force spouse and a mother of three children. Her eldest, 8-year-old Tenley, is deaf; 7-year-old Cohen and 4-year-old Palmer are hearing. Their family is currently stationed in Baltimore, Maryland.

The authors welcome questions and comments about this article at chelseasbusyhands@gmail.com and connelyleis@gmail.com, respectively. If you are a military family seeking Individualized Education Program support, you can contact the ASTra program at www.handsandvoices.org/astra/index.html.

Choosing a School for the Deaf

When a Language-Rich Environment is the LRE

By Chelsea Hull and Connely Leis

"The limits of my language mean the limits of my world."

~ Ludwig Wittgenstein, Austrian philosopher

All parents of deaf or hard of hearing children face challenges as they strive to provide an environment rich in language for their child. For parents on active duty in the military, however, perhaps this challenge is most acute. Faced with decisions about their child's medical or educational needs, military families must act despite geographic separations, deployment requirements, and frequent moves. These families—required to enroll in the Exceptional Family Member Program—must also learn how to re-establish the child's medical and educational contacts each time they are reassigned and, on top of all this, there is still the Individualized Education Program (IEP) to be completed!

Hands & Voices, the parent advocacy and support organization, has a Military Project that offers information and support to families in the military. The Military Project connects parents—who move an average of every two to three years—with each other to find answers to questions related to insurance, audiology services, sign language support, and educational programs. It also connects families to the Hands & Voices Advocacy, Support, and Training program, which equips parents with the knowledge and confidence they need to work through their child's IEP.

Photos courtesy of Chelsea Hull and Connely Leis



Above: Hull's journey of becoming a military wife and raising two children with autism, in addition to her upbringing as a CODA [child of a deaf adult], has inspired her to support military families within the Hands & Voices network.



Above right: The Leis family checks out a carnival hosted by ASD (2018). **Right:** Tenley's first day of preschool at age 2 (2017).



Chelsea Hull, cofounder of the Military Project, educational advocate, and one of the co-authors of this article, frequently discusses what the law calls “the least restrictive environment” (LRE) with parents. The LRE translates to where and how a child receives their education. Does the child belong in a public school classroom with hearing students? With an interpreter? With a special education teacher? In a special program? In a school for the deaf? When this difficult topic comes up, Hull tells parents to value conversations with other parents as much as conversations with professionals. Further, and perhaps most importantly, she advises parents to think of LRE not only as the least restrictive environment but also as the language-rich environment.

For one military family, the search for a language-rich environment was an

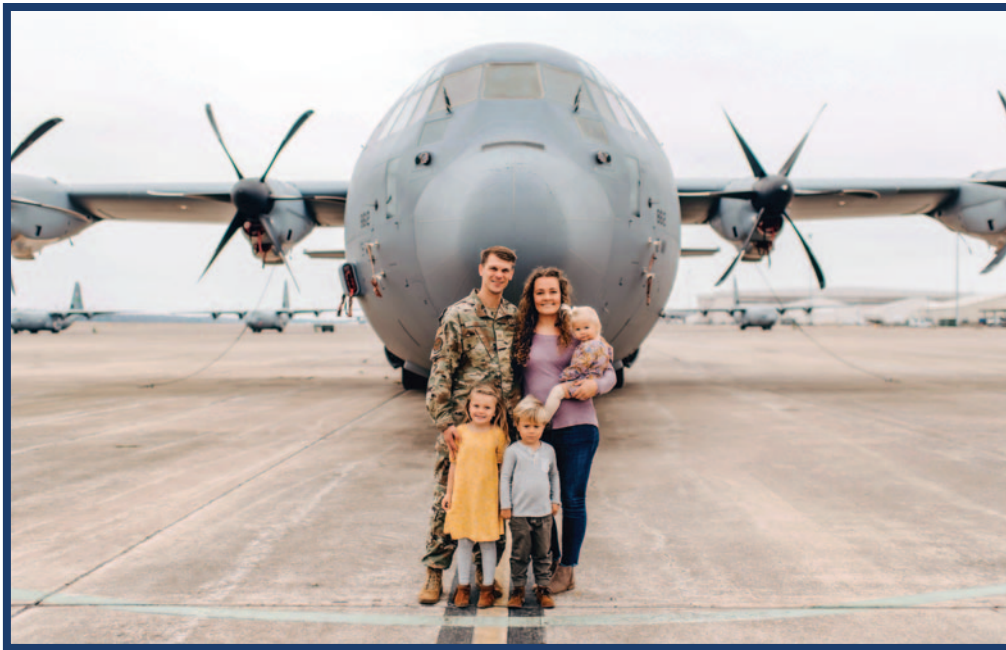
... perhaps most importantly, [Hull] advises parents to think of LRE not only as the least restrictive environment but also as the language-rich environment.

enlightening journey that ended when their child entered preschool in a school for deaf students. After working with an audiology team that recommended hearing aid trials and a cochlear implant, the family made the decision to allow their daughter to continue her education in American Sign Language (ASL). They requested and received a special reassignment from the military, moved to Little Rock, Arkansas, and sent their daughter to the Arkansas School for the Deaf.

Below is their story.

Tenley's Story **As Told by Connely Leis**

I credit our daughter's first service provider, Meg Mulone, with helping us to provide Tenley with the best support available. Tenley wore hearing aids and had a cochlear implant. The implant was not successful,



Left: Tenley (age 5), her siblings Cohen (age 3) and Palmer (age 1), and their parents (Connely and Ben) in 2021 on the Little Rock Air Force Base in front of a C-130 plane. **Right:** Tenley (left) poses for a photo with her friend, Liz (from MSD), at their dance recital in 2024.

signing adult who would handle all her educational and personal communications was too upsetting for me to even think about. My husband and I wanted Tenley to have friends with whom she could communicate directly, not through a professional interpreter. We wanted our daughter to have direct academic instruction and social interactions in a

however, and we did not have a good experience with her therapy services. We were told not to use sign language, to only use speech. However, Meg, who helped us with early intervention services and Tenley's Individualized Family Service Plan, explained that we did not have to follow what is often referred to as "the medical model" exactly. She showed us the research about language acquisition, and we learned that if children are not effortlessly immersed in some language in their early years, they may never learn any language well at all. Most importantly, Meg introduced us to culturally Deaf people and a flourishing Deaf community. I don't know what we would have done without Meg; as we say, the first deaf person we ever met was our own daughter.

We wanted the absolute best education for Tenley. Knowing that the statistics about deaf children born into hearing families are pretty devastating, our goal was not to become one of those statistics. We quickly decided that an interpreter in a school setting was not the route we wanted to take. Tenley didn't even have language to begin with, so how would she understand an interpreter? She needed to be surrounded by language, specifically the visual language of American Sign Language (ASL), and she needed to sign with ASL role models. That was our main goal.

We also wanted her to feel comfortable socially. The thought of her being the only deaf child in a school with only one

language she effortlessly understood. Tenley is now 8 years old, and we are certain that advocating for her to attend a school for the deaf is one of the wisest decisions we made for our daughter.

At the Arkansas School for the Deaf (ASD), Tenley had the best preschool teacher! Lynn Brooks had taught at ASD for more than 40 years, and we felt that she became an integral part of our family. Lynn hosted events for the Deaf community, invited us, and, like our early intervention teacher, gave us the encouragement we needed. When we talked with her and saw how Tenley was developing, we knew everything would be okay. We were astounded at how quickly Tenley's signs caught up with those of her Deaf peers who came from signing families.

We knew, of course, that as Tenley's parents, we needed to learn ASL, too. We also knew that our family needed to learn it. As of today, we've taken numerous sign language classes, some of them joined by extended family and friends. While Tenley was at ASD, we were provided with many supports, including sign language classes, opportunities to meet Deaf adults, attend Deaf homecoming games, and even join in on school field trips. The experiences were wonderful and enlightening. We sometimes felt awkward and out of place at some of



Left: Tenley enjoys playing soccer. In 2022, she played for a city recreation league, using an interpreter to communicate with the team.

the events because most of the attendees were deaf or hard of hearing, and almost everyone except us was skilled in ASL. Still, we realized that this is how you grow, and adjusting to the Deaf bilingual and bicultural community became easier the more we participated. Our goal is for Tenley to feel included, comfortable, and safe in her own home.

One special support I received from ASD was hands-on help with my signing. I loved this. If I didn't understand what my daughter was saying, I videoed her with my phone, sent the video quickly to ASD, and they sent me back a translation. I

nonstop. Tenley will sign with people even if she knows they don't understand her. However, she will code-switch to easily understood gestures to get her point across. She makes hearing friends at parks and around the neighborhood. She plays on multiple hearing sports teams with an interpreter, and her teammates find the addition of a Deaf player, her sign language, and her interpreter fascinating if not a little intimidating. Tenley also enjoys playing with babies and toddlers; I delight in watching her sign to them. I treasure watching her grow, discover the world, and learn to advocate for herself.

I am fortunate to have received support from the Hands & Voices Military Project. It is difficult that, as a military family, we must move every three to four years. The military has a special plan for families like ours: the Exceptional Family Member Program. It is a lengthy and tedious process to be enrolled in the program; however, once enrolled, it allowed us to meet Tenley's educational and medical needs. Now she is at

the Maryland School for the Deaf (MSD), and we are thankful for the large Deaf community here. Tenley orders drinks at the "signing Starbucks," goes to deaf-owned restaurants, and has deaf and hard of hearing friends who live nearby.

There are times when I'm sure Tenley still feels left out. She still needs me to interpret for her every now and then. She is aware of how she is different from hearing people. However, I can say she is confident in her identity as a Deaf child.

"Knowing that the statistics about deaf children born into hearing families are pretty devastating, our goal was not to become one of those statistics."

~ Connely Leis, Tenley's mother



often joke that her teachers were probably sick of me because I had so many questions about ASL, but they knew I cared about proper language development, and they were always supportive.

Tenley is now a confident, strong-willed, and brave child. I love—and find it amazing—to pick her up from school and see her walking out with her classmates, signing with everyone, joking, laughing, and teasing. I enjoy going to performances, events, and games at her school. I love to have her deaf friends come over and see how they play, signing

I don't think any of this would have been possible without putting her in two of our nation's schools for the deaf.

Both ASD and MSD have provided an environment specially designed for her. Both schools had LREs—language-rich environments—that weren't even the slightest bit restrictive. With our support and the support of her teachers and friends, Tenley continues to flourish socially and educationally.

Learn more about the Hands & Voices Military Project, which provides specialized assistance to active duty and retired military families, at www.handsandvoices.org/resources/military. Military members can also join the private group on Facebook.



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Employment Standards for Our Students' Interpreters: Lacking and Badly Needed

By Laurie A. Bolster, Leilani J. Johnson, and Marty M. Taylor

Interpreters are some of the most important people in the lives of our deaf and hard of hearing students, yet hiring and retention requirements are weak, variable, or nonexistent. Despite this, many school interpreters have become skillful and effective professionals driven by their desire for competence and sense of integrity. State employment standards, however, have created a national emergency regarding interpreting services for our students. Establishing and strengthening standards to ensure high quality interpreting services is an urgent need in public schools. This article is about what is happening in schools and what change is needed.

Many deaf and hard of hearing students require sign language interpreting services to access a free appropriate public education. Interpreters provide the communication bridge between our students and everyone else in the school environment—peers, teachers, coaches, administrative staff, and other personnel. The individualized nature of children's evolving language, communication goals, academic learning needs, and social-emotional maturity requires specialized knowledge and advanced interpreting skills, especially when interpreting for younger students. When interpreter knowledge and/or skills are deficient, our students are excluded from equitable participation in the language-rich environments of public schools, limiting their learning opportunities and social development.

When "sign language interpreting" is added to an Individualized Education Program (IEP), the educational team members, including the student's parents, assume effective communication is occurring. This includes access to teacher-driven lessons, after-school activities, peer interactions, and the services of speech-language pathologists, school nurses, and other professionals. Too often school interpreting is inadequate, and sometimes incomprehensible or even erroneous. Students who are supposed to be provided a ramp into language-rich environments instead face an additional barrier.

Photos courtesy of the University of Northern Colorado photography staff



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On behalf of the authors, Bolster welcomes questions and comments about this article at LBolster@protonmail.com.

In 2004, the revised IDEA added educational interpreters as one of 11 categories of related services personnel (or RSP, including audiologists, counselors, and speech-language pathologists). These professionals work alongside teachers supporting students. In 2024, interpreters are the only RSP group that is not held to commonly accepted professional standards. The major reason is that interpreters are typically not hired or compensated as professionals and, despite the law, K-12 interpreters are not expected to meet the employment standards required of other professionals in public schools.

North America's Professions Built on Established Foundations

RSPs require specific foundations that individuals must document and maintain to be recognized as members of that profession. The four foundations of professional endeavor are typically recognized as:

- Academic preparation
- Professional credentialing
- Continuing education

Above: Interpreters provide the communication bridge between students and their peers, teachers, coaches, administrative staff, and other personnel in the school.

- Informed supervision and oversight

The first two foundations are necessary for entry-level professionals prior to being hired for the school environment. The next two foundations occur after interpreters are on the job. State education agencies are responsible for setting standards for hiring and retaining educational interpreters. By federal law, these standards are to be made publicly available.

In a 2021 national review of state education agencies' employment standards (Johnson et al., 2023), requirements varied widely among the 50 states and Washington, D.C. No state addressed all four foundations in their published standards. Six states had no published employment standard at all for school interpreters. Worse, states have exceptions allowing schools to hire individuals for our students who could not meet their state's minimum standard for interpreters.

Four Foundational Pillars for School Interpreting



Left: The four foundational pillars for school interpreting are pre-hire and post-hire requirements that individuals must document and maintain to be recognized as members of that profession.

Academic Credentials

A bachelor's degree, preferably in educational interpreting, is the minimum for a professional interpreter

in a school setting. However, only three states required classroom interpreters to have a bachelor's degree in any discipline in 2021. Seven states required an associate's degree. Nine states specified a high school diploma or GED. Thirty-two states (including the District of Columbia) had no published minimum academic preparation required. This means that students in 41 states could have had an interpreter who was less academically prepared for specific course content than they were.

Professional Credentials

The Educational Interpreter Performance Assessment (EIPA) has both a knowledge test and a skill assessment, and it is the

Prior to Employment

Academic Preparation and Professional Credentials

School interpreters should be some of the highest qualified practitioners in the interpreting profession. Their educational interpreting coursework should include child and language development, the impact of a hearing loss, learning theory, teaching/tutoring strategies, and working as a team member within school systems. They should have advanced expressive and receptive American Sign Language (ASL) and English proficiencies and be able to move seamlessly between interpreting and transliterating to accommodate students' individual language abilities, complexity of course content, expectation of class participation, and relationships of individuals with whom they interact.

To effectively interpret throughout the school day, interpreters continually assess a child's overall language, comprehension and expression related to meaning and intent. Appropriately prepared interpreters can contribute these insights to the IEP team, make recommendations about communication that works well for the child, and identify issues that need further consideration.

Right: Interpreters should have advanced expressive and receptive ASL and English proficiencies and be able to move seamlessly between interpreting and transliterating to accommodate students' needs.



most common evaluative system in the United States specifically designed for K-12 school interpreters. [See EIPA sidebar.] Prior to beginning their work in schools, interpreters should demonstrate successful completion of the EIPA Written Test and a minimum average score of 4.0 on the 5-point skill assessment. However, in the 2021 count, only 19 states required successful completion of the EIPA Written Test, and 42 states required, or included as an option, the EIPA Skills Assessment in their published employment standards. An EIPA average score of 4.0 was specified by only 11 states; other states set an average score of 3.0 or 3.5 on the 5-point scale, which is utterly inadequate for full access to the language-rich academic environment.

On the Job

Continuing Education and Oversight

Continuing education and oversight are two commonly accepted aspects of professional life. Most educational professionals expect to take higher education coursework or professional training to maintain their credentials, as well as for retention and advancement in the workplace. This was not the case for school interpreters in 2021.

Continuing Education

Interpreters, like other professionals who work in education, should engage with and be supported in lifelong learning. They should be expected to meet standards like other RSPs to maintain and renew their credentials, as well as for retention and advancement in the school system.

However, expectations for interpreters are highly variable regarding type, frequency, and substance and, as of 2021, 26 states (including Washington, D.C.) had no published requirements at all for continuing education.

Informed Supervision and Oversight

As most school interpreters are hired without having appropriate academic and professional interpreting foundations, they must receive informed supervision by a knowledgeable member of their field. However, no state has published a supervision and accountability system for school interpreters. Weirick (2021) found that only 23 percent of interpreters received any knowledgeable supervision, meaning 77 percent of the nation's interpreters work autonomously. They—and too often our deaf and hard of hearing students—are on their own.

How Low Can the Bar Go?

In addition to missing or inadequate employment standards, some states take two other actions that have a harmful effect on our students.

First, most states permit schools to hire interpreters who cannot meet the state standards by calling them “temporary,” “provisional,” “emergency,” or “developmental.” Some systems allow that status to be renewed for years. When the renewals are finally exhausted, another unqualified person may be hired, basically to start their “on-the-job training.” On-the-job training cannot “catch up” individuals who do not have the necessary knowledge and skill foundations to begin interpreting work; it simply lowers the bar for the entire workforce.

Fitzmaurice (in Johnson et al., 2023) showed that in a state with no published standard, after five years of state-sponsored, free of charge workshops, classes, mentoring, and EIPA testing, the interpreting workforce showed negligible improvement in their

interpreting skills and on average remained at well below acceptable competencies.

Second, instead of hiring qualified interpreters, schools sometimes reclassify interpreting positions as “sign language assistants,” “communication aides,” and “signing paraprofessionals.” Regardless of the title, these individuals are assumed by others in the environment to function as interpreters. In fact, such “interpreting services” force deaf and hard of hearing students to make their own sense of whatever these non-professionals provide.

A Cautionary Tale

These types of practices have already resulted in a successful administrative complaint and lawsuit. In 2023, Miguel Luna Perez, from Michigan, sued the school district for monetary damages when he and his parents learned he was so poorly educated that he could not graduate with a high school diploma. The administrative complaint was settled when the school agreed to provide an additional year of schooling, but they fought the simultaneous ADA lawsuit—maintaining that Perez had no right to sue until all remedies under IDEA were resolved. The

U.S. Supreme Court ultimately ruled against the school system, saying nothing in law prevented lawsuits under both IDEA and ADA simultaneously, and returned the case to the lower courts for financial resolution. Perez may still receive the compensation he asked for, but he is an adult now. His youth has passed. His right to access a language-rich environment for his first 12 years of education has been lost (RID/NAIE, 2023).

When interpreter knowledge and/or skills are deficient, our students are excluded from equitable participation in the language-rich environments of public schools, limiting their learning opportunities and social development.



Left: Skilled school interpreters strengthen students in every way—in learning, information processing, interactive skills, and social-emotional maturity.

must demand states adopt the four foundations identified for school interpreters to make certain that level of interpreting service becomes the norm for all of our deaf and hard of hearing students.

Authors' note: This article is based on research published in 2023 in Complexities in Educational Interpreting: An Investigation into Patterns of Practice (2nd ed.), which was co-authored with three other authors.

The case of Luna Perez shows how sub-standard interpreting services can continue for a student's entire public school life. The cumulative effect is deficient and fragmented access to communication, resulting in learning failures compounded year after year. This type of failure is generally invisible to school personnel and parents.

The Bottom Line **Our Students Deserve Better**

Interpreters are critical. Skilled school interpreters strengthen students in every way—in learning, information processing, interactive skills, and social-emotional maturity. We must require that the state education agencies embrace and enforce standards for interpreters as they have for other RSPs; that means academic preparation and professional credentials prior to hiring, and continuing education and informed oversight once they are on the job.

In 2019, the National Association of Interpreters in Education (NAIE) published the *Professional Guidelines for Interpreting in Educational Settings* (<https://naiedu.org/guidelines/>) using the four foundations for school interpreters discussed in Johnson et al. (2018). The NAIE has advocated for standards that would ensure quality interpreting services for our students, but state education agencies are either unaware or have chosen to disregard them. NAIE now maintains a map of state education agencies' employment standards for the nation's school interpreters (<https://naiedu.org/state-standards/>).

Everyone—parents/caregivers, students, school personnel, and decision makers—concerned with the education of our deaf and hard of hearing students must take a stand. Without access provided by truly qualified interpreters, our students cannot take advantage of the language-rich school environments to which they are entitled. Not just their education—which is critical—but their cognitive and social development are also at stake.

Now, after decades of talking, it is time to act. There are some schools that employ highly qualified interpreters who perform as professional members of the educational team. We

References

- Educational Interpreter Performance Assessment. (n.d.). Retrieved from <https://classroominterpreting.org>
- Individuals with Disabilities Education Act. (2004). Retrieved from <https://sites.ed.gov/ideal>
- Johnson, L. J., Taylor, M. M., Schick, B., Brown, S. E., & Bolster, L. (2018). *Complexities in educational interpreting: An investigation into patterns of practice*. Interpreting Consolidated.
- Johnson, L. J., Taylor, M. M., Schick, B., Brown, S. E., Bolster, L., & Girardin, E. G. (2023). *Complexities in educational interpreting: An investigation into patterns of practice* (2nd ed.). Interpreting Consolidated.
- National Association of Interpreters in Education. (2019). *Professional guidelines for interpreting in educational settings*. NAIE. <https://naiedu.org/guidelines/>
- RID/NAIE Joint Position Statement on Luna Perez v. Sturgis County Schools System. (2023). <https://rid.org/rid-naie-joint-position-statement-perez-v-sturgis/>
- Taylor, M. M., Schick, B., Brown, S., & Girardin, E. G. (2023). *School interpreting: The layering complexities* [Conference presentation]. Registry of Interpreters for the Deaf. Baltimore, MD.
- U.S. Supreme Court. (2023). *Luna Perez v. Sturgis Public Schools et al.*, No. 21-887. https://www.supremecourt.gov/opinions/22pdf/21-887_k53m.pdf
- Weirick, W. (2021, Summer). The Educational Interpreter Supervision and Support Survey: Part 1. *American Annals of the Deaf*, 166(3), 284-308. <https://doi.org/10.1353/aad.2021.0031>

A Look at Interpreting Assessment: The EIPA

By Laurie A. Bolster, Leilani J. Johnson, and Marty M. Taylor

The Educational Interpreter Performance Assessment (EIPA) has a written and an interpreting skills component. The EIPA is psychometrically valid and reliable, having undergone continuous reviews and revisions over the last 30+ years to maintain reliability and validity.

The EIPA Written Test is pass/fail, measuring interpreters' knowledge of nine education-related topics. These are: child language development, culture, education, English, interpreting, linguistics, literacy and tutoring, professionalism, and technology. Each topic is scored 0-100 percent.

Analyzing approximately 800 interpreters' tests showed the mean scores ranged from 70-85 percent in the different categories (Johnson et al., 2023). Due to which topics an interpreter may have low scores in, it is imperative for those hiring interpreters to scrutinize applicants' scores *per category* to ensure they are appropriate to support a specific student's needs. If a student is struggling with English, for instance, an interpreter with a low score in English may not be able to effectively provide the support the student deserves and the parents expect.

The EIPA Performance Assessment measures 39 proficiencies in sign language and English, using a 5.0 Likert scale, in four categories (Vocabulary, Voice to Sign, Sign to Voice, and Overall Factors). Professionally prepared school interpreters should demonstrate a minimum overall average rating of 4.0 out of 5.0. This is the EIPA score needed to provide more equitable access to a language-rich environment. (See Cates, 2021; Fitzmaurice, 2017; Girardin, 2023; Schick et al., 2006; Williamson, 2020.)

The averaging of the four EIPA skills categories to create the Overall Score is problematic. Frequently, an especially high rating in Vocabulary can pull the overall EIPA score up, even with unacceptably low ratings in Sign to Voice, Voice to Sign, and/or Overall Factors (e.g., message cohesion, coherence, and completeness). That average score might technically satisfy the state employment standard, but clearly vocabulary alone (e.g., knowing a lot of signs and words) will not create comprehensible messages for the student.

If Voice to Sign Interpreting (e.g., teacher talking to student) is weak, the person interpreting cannot reliably produce grammatically intact sentences and paragraphs, and the student receives less than meaningful information. If Sign to Voice Interpreting (e.g., student signing to teacher/others) is weak, it might be incorrect, incomplete, or sound odd. That can result in incongruous visual responses to the student from others, confusing and embarrassing

them, and leading them to withdraw from further participation. The Overall Factors score documents the interpreter's level of knowledge and skills necessary to adapt language and information by delivering rich, conceptually intact equivalent messages to an individual student in a specific situation. And, in turn, these interpreters can do the same when the student is expected to interact with teachers, peers, and staff.

Readers are strongly encouraged to review the contrasting videos and written transcriptions comparing an interpreted message as conveyed at EIPA overall average scores of 2.5, 3.0, 3.5, and 4.0 at <https://eipa.boystown.org/eipa-levels-in-action>.

References

- Cates, D. M. (2021). Patterns in EIPA test scores and implications for interpreter education. *Journal of Interpretation*, 29(1). RID, Article 6. <https://digitalcommons.unf.edu/joi/vol29/iss1/6>
- Fitzmaurice, S. B. (2017). Unregulated autonomy: Uncredentialed educational interpreters in rural schools. *American Annals of the Deaf*, 162(3), 253-264.
- Girardin, E. G. (2023). *American Sign Language fluency: A foundational competency for future school interpreters* [Unpublished doctoral dissertation, Johns Hopkins University].
- Johnson, L. J., Taylor, M. M., Schick, B., Brown, S. E., Bolster, L., & Girardin, E. G. (2023). *Complexities in educational interpreting: An investigation into patterns of practice* (2nd ed.). Interpreting Consolidated.
- Schick, B., William, K., & Kupermintz, H. (2006). Look who's being left behind: Educational interpreters and access to education for deaf and hard of hearing students. *Journal of Deaf Studies and Deaf Education*, 11(1), 4-20.
- Williamson, A. C. (2020). *Deaf students' experiences of engagements of a mediated education: It is what it is*. (Publication number: 28257482) [Doctoral dissertation, Gallaudet University]. <https://search.proquest.com/openview/a0e3db8f4cb32295aa557358eab28012/1?pq-origsite=gscholar&cbl=18750&diss=y>

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Building Language and Literacy at the Same Time: Strategies for Classroom and Home

By Pamela Luft

As teachers, paraprofessionals, and parents, we recognize the importance of providing deaf and hard of hearing children with full access to the languages around them. Language is the primary means by which children acquire knowledge of the world and academic content to become successful adults. Additionally, it allows us to make and maintain friendships and to engage with others in working and participating in the community. We have also seen the poor outcomes that result when children don't have full access to language; reading and academic achievement remain far below intellectual capabilities.

To help our deaf and hard of hearing students attain grade-level skills, we can take advantage of the interrelationships between language and literacy and help students gain language and literacy skills at the same time. The Continuum of Reading Activities (described by French, 1999) provides us with strategies that allow us to advance students' language development and address core literacy standards (Ohio Department of Education, 2017; Reutzel & Cooter, 2019).

This continuum consists of four steps:

1. **Teacher-led reading aloud:** Teachers read to students using the students' preferred language and communication modality to engage them in the text.
2. **Shared reading:** Teachers ask students to read with them and share their decision making as they negotiate the text.

Photos by Matthew Vita, Laurent Clerc National Deaf Education Center



Left: Teacher-led read-alouds help young students engage in the text.

3. **Guided reading:** Teachers divide text into segments. Students individually predict what will happen, then amend and discuss their predictions after reading each segment.
4. **Independent reading:** Students read independently across a range of genres and topics, with teachers offering occasional support, if needed.

When these steps are followed sequentially, they provide a gradual release of the teacher's involvement as students read with increasing independence (Hall et al., 2021). The interactive activities implicit in the Continuum have been effective in increasing students' reading independence, including the reading independence of students who struggle (Hall et al., 2021). The gradual release of teacher responsibility—often abbreviated GRR—includes:

- **Initially ... explanation and modeling:** Teachers retain primary

responsibility for demonstrating key skills but may probe and ask students to respond.

- **Then ... guided practice:** Teachers begin to shift responsibility for learning, decoding, and comprehending to the students, providing additional explanation, modeling, scaffolding, and peer support as needed.

- **Finally ... independent practice:** Students apply new skills and strategies without assistance from peers or teachers (Hall et al., 2021).

The four steps of the Continuum support the teacher's gradual move from guidance and modeling of skills and cognitive processes to sharing or supported reading and full student use of independent skills and strategies (see page 38). This process utilizes peer-to-peer and student-to-teacher interactions that promote full language fluency across all communication modalities and

Language is the primary means by which children acquire knowledge of the world and academic content to become successful adults.



Left: During shared reading, teachers ask students to read, sign with them, and share their decision making as they negotiate the text.

teacher and peer interactions. These procedures should be applied equally to nonfiction as well as fiction to prepare students for textbook reading that will intensify after the third grade and that often are neglected (National Council of Teachers

of English, 2023;

Zakariya, 2015). These strategies can help students with mathematics, science, social studies, or social science texts. Collaboration among all teachers in the use of these strategies will allow for shared approaches that can increase student achievement in all academic areas. The use of student-centered topics of interest is an important means for increasing students' motivation and engagement (Wiggins & McTighe,

language preferences. At the same time, students' individual language, reading, and cognitive skills are strengthened and refined.

The Continuum supports all learners—those who are just beginning to read, those who struggle, those who are developing and maturing, and those with and without disabilities (Luft, 2023). The teacher-led activities support increasing amounts of shared and independent reading while also providing students with multiple opportunities for social learning and language use. As texts expand in length and content, activities based in the Continuum provide increasing linguistic and cognitive challenges, all of which are mediated and scaffolded through teacher and peer interactions.

Shared and guided reading prepares students to take leadership roles in expressing and discussing their skills and strategies while they become increasingly independent readers. As teachers combine these activities with interactive and

dialogic bridging and directed reading and thinking activities, students build toward full independence, all the while expanding and refining their language skills and cognitive development.

Continuum strategies emphasize student participation and class-wide interaction to facilitate ongoing instructional engagement. These strategies provide increasing linguistic and cognitive challenges, all of which are mediated and scaffolded through



Right and far right: Shared and guided reading prepares students to take on leadership roles while they become increasingly independent readers.

Right: In independent reading, students read independently across a range of genres and topics with minimal teacher support.

2018).

Parents may provide similar activities at home. With guidance and encouragement from teachers, parents can begin with read-/think-alouds. As their children develop reading skills, parents can use shared and guided reading to discuss meanings. Families should be encouraged to talk with their children about their texts, even as the children become independent readers.

These strategies support the language and literacy development of deaf and hard of hearing children. They support meaningful and stimulating interactions through bridging and scaffolding, from beginning to well-established skills, and they are effective for deaf and hard of hearing students with and without disabilities. They allow them to engage socially with their peers, family members, teachers, and other adults to build language, reading, and cognitive skills—and to become successful adults.



References

- French, M. M. (1999). *Starting with assessment: A developmental approach to deaf children's literacy*. Washington, DC: Pre-College National Mission Programs, Gallaudet University.
- Hall, C., Dahl-Leonard, K., Denton, C. A., Stevens, E. A., & Capin, P. (2021). Fostering independence while teaching students with or at risk for reading disabilities. *TEACHING Exceptional Children*, 54(2), 124-133. <https://doi.org/10.1177/0040059921994596>
- Luft, P. (2023). Promoting independent literacy for ASL readers with disabilities. In N. R. Nield & P. J. Graham (Eds.), *Strategies for promoting independence and literacy for deaf learners with disabilities* (pp. 20-70). IGI Global. <https://doi.org/10.4018/978-1-6684-5839-6>
- National Council of Teachers of English. (2023). *Position statement on the role of nonfiction literature (K-12)*. <https://ncte.org/statement/role-of-nonfiction-literature-k-12/>
- Ohio Department of Education. (2017). *Ohio's learning standards: English language arts*. Retrieved from <https://education.ohio.gov/getattachment/Topics/Learning-in-Ohio/English-Language-Art/English-Language-Arts-Standards/ELA-Learning-Standards-2017.pdf.aspx?lang=en-US>
- Reutzell, D. R., & Cooter, Jr., R. G. (2019). *Strategies for reading assessment and instruction: Helping every child succeed* (6th ed.). New York: Pearson.
- Wiggins, G., & McTighe, J. (2018). *Understanding by design*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Zakariya, S. B. (2015). Learning to read, reading to learn: Why third-grade is a pivotal year for mastering literacy. *Center for Public Education*, 1-15.





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Continuum of Reading Activities: An In-Depth Look

By Pamela Luft

Step 1: Teacher-Led Read-/Sign-/Think-Alouds

Teachers present the text in their students' chosen language and communication mode and model targeted reading skills. When doing so, they ensure students have visual access to the text either through use of a big book or by using a classroom projection system. Teachers read aloud in spoken English or with a visual cueing system, or they can read by "signing aloud" in American Sign Language (ASL). Teachers may pause frequently, modeling how to use phonics or word families to make informed guesses to decode words. They present, explain, and demonstrate a variety of word- and phrase-level reading strategies that support comprehension of connected text (Fisher et al., 2011).

Teachers also model comprehension-checking strategies, periodically stopping, asking questions about word and passage meanings, and noting how their comprehension aligns with text comprehension up to this point. Teachers describe their own decision making using "think-aloud strategies." This has been shown to be effective with deaf and hard of hearing middle school students, including those with disabilities. Fisher et al. (2011) reported a statistically significant difference and large effect size in the use of think-alouds. They also increased teachers' awareness of students' use of reading strategies.

Step 2: Shared Reading/Signing

Teachers engage students through instructional bridging. They ask students to share their own think-aloud and decision-making processes and to give reasons for their choices. Individual students volunteer to read and demonstrate their read-/sign-/think-aloud skills. Rather than rely solely on volunteers, teachers may wish to call on students, who can ask for class help if unsure. Another strategy: fake mistakes! Teachers' "mistakes" are often extremely motivating in soliciting enthusiastic student "corrections," including from those who are otherwise very shy.

The shared reading classroom discussions provide further interaction experiences for students, reinforcing skills in providing details and abstract explanations of their strategies and rationales for decision-making and cognitive strategy

choice. These expand their linguistic abilities to use of increasingly complex syntactic relationships and semantic elements and simultaneously support advanced reading skill acquisition and refinement.

Step 3: Guided Reading

This step utilizes the Directed Reading Thinking Activity, also called DRTA (Stauffer, 1969; Stahl, 2008). Teachers divide a piece of connected text into segments based on the students' abilities. The teacher shows students the title and asks questions to prompt a discussion of experiential and text-based background knowledge. This increases students use of background experiences and related context to support word recognition and meaningful comprehension (Kyle & Cain, 2015; Marschark & Wauters, 2008; Schirmer, 2003; Schirmer et al., 2004). Teachers emphasize application of experiences and skills for comprehending the text to support students' increasing confidence; they do not review vocabulary.

After a conceptually focused introduction, students make a prediction about the book. Each student reads the first segment silently and then engages in class discussions related to their predictions of what will occur next. The teacher probes for further explanations and asks students to read aloud their evidence. Teachers do not ask comprehension questions; instead, they use the discussions to probe, scaffold, and support comprehension.

Step 4: Independent Reading

This is the ultimate goal. Students select materials and read across a range of genres, using their cognitive and linguistic resources to problem solve any comprehension challenges. Teachers support this process through the use of whole class reading selections, literature journals, literature circles, and reading workshops (Schleper, 2006; Tracey & Morrow, 2017). Peer and teacher feedback can help to verify individual comprehension and interpretations and offer opportunities to extend perspectives and insights. If needed, teachers provide individual attention and intervention to specific students or small groups. Teacher conferencing monitors and supports students' skill refinement.

References

- Fisher, D., Frey, N., & Lapp, D. (2011). Coaching middle-level teachers to think aloud improves comprehension instruction and student reading achievement. *The Teacher Educator*, 46(3), 231-243.
- Kyle, F. E., & Cain, K. (2015). A comparison of deaf and hearing children's reading comprehension profiles. *Topics in Language Disorders*, 35(2), 144-156.
- Marschark, M., & Wauters, L. (2008). Language comprehension and learning by deaf students. In M. Marschark & P. C. Hauser (Eds.), *Deaf cognition: Foundations and outcomes* (pp. 307-350). Oxford University Press.
- Schirmer, B. R. (2003). Using verbal protocols to identify the reading strategies of students who are deaf. *Journal of Deaf Studies and Deaf Education*, 8, 157-170.
- Schirmer, B. R., Bailey, J., & Lockman, A. S. (2004). What verbal protocols reveal about reading strategies of deaf students: A replication study. *American Annals of the Deaf*, 140, 5-16.
- Schleper, D. R. (2006). *Literacy—It all connects: A manual of special interest to educators, families, and dorm personnel*. Washington, DC: Laurent Clerc National Deaf Education Center, Gallaudet University.
- Stahl, K. A. D. (2008). The effects of three instructional methods on the reading comprehension and content acquisition of novice readers. *Journal of Literacy Research*, 40(3), 359-393.
- Stauffer, R. G. (1969). *Teaching reading as a thinking process*. New York: Harper & Row.
- Tracey, D. H., & Morrow, L. M. (2017). *Lenses on reading: An introduction to theories and models*. New York: Guilford Publications.

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Dual Language Immersion Program

Creates a Language-Rich Environment for Deaf and Hard of Hearing Students

By Rob Hammel

In October 2023, a new deaf student, “Zuri,” showed up in my second grade classroom. This often happens. Parents move into and out of the district for work, and it is common to get a new student in the middle of the year without warning. Zuri’s eyes were wide when she came into the classroom, and she looked scared. Who were all these hearing children, and what were they doing? Who were these hearing adults, and what were they saying? Was she doing the right thing? She froze.

I waved Zuri over to our table, where I was about to start a small group. I told my hearing students that Zuri was new, and she would be joining our group on Fridays. One of the hearing girls immediately introduced herself in American Sign Language (ASL). “HELLO! MY NAME #ALLISON,” she signed excitedly. Zuri visibly relaxed. Her shoulders let go of some of the tension from this new place and all the new people. She smiled, waved back to Allison, and sat down on a stool. I started the group, and we discussed ways to use ASL classifiers to describe how frogs jump. Zuri did not know it yet, but she had just joined the only Dual Language Immersion (DLI) program for ASL in the United States. At OB Gates Elementary, just outside of Richmond, Virginia, we teach math and language arts in both English and ASL at the same time. We have found that we can create a language-rich environment for both our deaf/hard of hearing students and our hearing students without sacrificing content or instructional time.

Photos courtesy of Rob Hammel



Left: Hammel works with two deaf students on basic handshapes with a group of third and fourth graders.

Setting Up a DLI Program

Five years ago, OB Gates had four deaf kindergartners start at our school in the same year. We usually have one, sometimes two, but four was unprecedented. As the teacher of the deaf and the classroom teacher began to plan, the task of differentiating the instruction for these four students, all with different language needs, seemed daunting, if not impossible. They came up with a clever solution: teach the entire kindergarten class ASL. They realized they could conduct calendar time and math instruction in ASL for the entire class. These are new concepts for almost all kindergartners, so teaching them in a foreign language would not be that much more challenging than teaching math in their first language. At the same time, our principal was working on a DLI program for Chinese. Everyone combined their ideas, and our ASL DLI program was born.

Two years later, the district hired me as their first full-time ASL DLI teacher. I had worked as an interpreter in the county for more than five years. I also hold a master's degree in deaf education from Radford University. I knew that one of the biggest challenges deaf and hard of hearing students face in a mainstream school is a lack of opportunities for social and emotional learning with their peers. They also face a general lack of exposure to language itself. While hearing students overhear an abundance of information every day, deaf and hard of hearing children wait for us to teach them what they need to

know. I had seen that turmoil of isolation for deaf and hard of hearing students play out many times in my role as an interpreter. We all agreed that the first focus of our program had to be socialization.

Games in ASL Make Learning Fun

The main goal for ASL DLI at OB Gates is for our hearing students and deaf/hard of hearing students to be able to communicate as both groups develop language skills. I actually spend most of my time working with the hearing students, as they typically know the least ASL. The first year of the program, I made sure each class that had a deaf or hard of hearing student in it knew a few ASL games. I taught the kids how to play playground games, such as Red Light, Green Light, in ASL. I also taught games from deaf schools, such as The Elephant Game. Finally, I incorporated ASL into some classroom favorites like Tic-Tac-Toe and Hangman.

Even though the hearing students did not have enough signs to really communicate in the first few weeks of the program, I wanted them to still have ways to understand and relate to their deaf and hard of hearing peers. The Elephant Game was everyone's favorite, hearing and deaf/hard of hearing. To play, students stand in a circle around a person who is "it." The person in the center, "it," spins around and points to a random player. The player they point to must hold up two fists in front of their nose like an elephant's trunk. The players on either side



Above: Hammel shows the directional verb LOOK to the kindergarten class.

Right: Whole group instruction with the kindergarteners.

of them must give the elephant “ears” by reaching out a B handshape to the player with the trunk. If a player misses the pointing, or holds up the wrong elephant part, they are out. The circle gets smaller and smaller until one person is left. That person is then “it” for the next game. We played The Elephant Game over and over that first year. The students learned to pay attention with their eyes, as they must in ASL, and they learned how to have fun without speaking English. Most importantly, this game put our hearing and deaf/hard of hearing children all on equal footing for easy socialization.

Fingerspell Friday is another game that I started that first year. It has become a big hit for the third and fourth graders. The students divide into teams and try to understand fingerspelled words. Sometimes we use a website to generate the words, and sometimes I use their current list of spelling or science words. This allows the students to practice with curriculum vocabulary. Even with a random list, the students

have to recognize and spell a variety of words. Students at every reading level can enjoy this game, as they mainly need to watch for letters. The teams work cooperatively to puzzle out the words based on what letters everyone caught. The kids become extremely excited for this game every week. Of course, their receptive fingerspelling skills have greatly improved as well.

DLI Small Group Instruction Helps Students Excel Academically

The first year of the program encompassed three grade levels: kindergarten, first, and second. Our deaf and hard of hearing students in second grade got older, naturally, so we expanded into third grade for the second year. As the content got more difficult, we also made our ASL classes more challenging. At this point, there was not an available classroom in the building for me. I was extremely limited in the tools and technology that I could utilize. Most of the ASL instruction was done in a small group push-in setting. I took four to five students to a table in the back of the classroom and showed them a

slideshow on my laptop. We also used play money to “buy” food and practice math skills. I kept my instruction light and flexible so I could hold a group anywhere, at any time. We focused on the complex aspects of ASL that English does not have: classifiers, contrastive structure, non-dominant listing, and non-manuals. The plan was to get the students familiar with the building blocks of ASL so they could create sentences on their own or communicate with deaf and hard of hearing students and staff.

This year, my co-teachers and I saw the opportunities for differentiation that this small group setting offered. My co-teachers will usually create the small groups based on interventional small groups that

they need to pull for classroom instruction. We will take turns pulling the students for ASL time with me or for remediation with the classroom teacher. As the classroom teacher can only pull one or two remediation groups per day, the rest of the students had been doing independent work on their Chromebooks during that time. We thought it was simply a creative way to get in ASL instruction without making major schedule changes, but we soon saw that the students were learning a lot more than how to sign.

During math instruction, my second grade co-teacher and I realized that word problems presented us with an opportunity



to teach the structure of English sentences and ASL sentences. She reads a word problem in English, and I teach the students to sign it. We do this sentence by sentence. We talk about the ways the two languages are similar or different—how, for example, in English the question word is at the beginning, but in ASL it's at the end. ASL uses space to make a list, putting this group to the left of the signing space and this one to the right, while English uses commas. Teaching grammar in this way had a huge anecdotal impact on the students. We do not yet have data on this group from standardized testing, but anecdotally my class surpassed all other second grade classes in writing skills. Instead of a bunch of arbitrary grammar and



Above: A second grade student practices place value skills in ASL.

syntax rules, the students had a whole other language to compare and contrast. While this benefit of DLI has been documented for many spoken languages, we had no idea it would work so well for the combination of a signed and spoken language. That second year, our third grade ASL DLI class outperformed all the other classes in their standardized testing. Not only were our hearing students enjoying ASL, but they were also excelling academically. Even the underserved and at-risk students saw an increase in their test scores.

Including Families and School Staff Through ASL Classes and Events

Parents at our school showed a lot of excitement about the program. We showed off what we had learned at our inclusive school celebration that December. Classes performed songs and poems in ASL alongside performances from all of our grade levels. We also invited parents in for several special performances, during which our younger students signed nursery rhymes and songs. As an increasing number of staff members expressed interest in the program, I began teaching a weekly ASL class for adults before school.

Our second grade class also began a weekly discussion about Deaf history and culture. Beginning with the history of ASL

itself and then expanding into a wide-ranging discussion of all the ways deaf and hard of hearing people participate in our lives and culture, this weekly lesson is a highlight for me. I love to see the deaf and hard of hearing students watch a deaf or hard of hearing adult teach martial arts or climb a mountain. Our students know that deaf and hard of hearing people make a big contribution to our world. We also have a weekly Deaf Lunch for our deaf and hard of hearing students from all across the school. They have the opportunity to socialize and play games once a week, and the older students invite two hearing students to participate as well. These weekly events have made Deaf culture an integral part of our school culture.

Finally, to reach hearing students outside the classes I serve, we added ASL to the morning announcements. Our third grade students learn the Pledge of Allegiance in ASL at the beginning of the year. Once they are comfortable with it, I film them doing the pledge and add a voiceover of the assistant principal leading the pledge in English. This has become how we do the pledge all year long. Every day the assistant principal shows a different video, and a different third grader leads us all in the pledge in ASL and English. We also have a Sign of the Week and a Deaf History Month section of the morning announcements to further encourage all students to use ASL with deaf and hard of hearing students and staff.

Fully Accessible Environment Allows Zuri to Flourish

Zuri is now much more comfortable in her classroom. The shy, wide-eyed little girl who was so scared to sit at my table last year has all but disappeared. I am constantly asking her to stop signing with her friends on the carpet and to pay attention to me during our calendar lesson. While she sometimes challenges my classroom management skills, I am so proud to see Zuri socializing with her friends. She thrives in our language-rich environment, where all her peers know how to say hello, introduce themselves, and ask her to play a game.



Above: The second grade class works on their fingerspelling during calendar time.

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Empowering Parents and Caregivers: Supporting Families with ASL at Home

By Leah C. Geer and Razi M. Zarchy

“... I only made it through 3 of 10 classes. I dropped out because I was so overwhelmed ... I couldn't keep up.”

~ Grandparent of a deaf child, who tried to learn ASL in a community education program

We tell hearing parents that it is critical—and wonderful—to learn a signed language for their deaf or hard of hearing children, and parents report that classes in sign language are one of the most helpful ways to support their children's language-learning journey (Lieberman et al., 2022). While programs exist for families, unfortunately parents and other family members sometimes have a discouraging experience when they attend traditional classes in American Sign Language (ASL).

Families of deaf, hard of hearing, deafblind, deafdisabled, and late-deafened children need a unique program—a program that is suited to the needs of adults and families (Snoddon, 2015). Several organizations and programs (e.g., American Society for Deaf Children, ASL Connect, Hands & Voices, Heritage Sign Languages Center, Oklahoma School for the Deaf) offer ASL instruction, some of them without cost. This is important as the needs of parents, grandparents, and other family members are different from teenagers who take ASL in high school, or young adults who take ASL in college, or people who take ASL to become interpreters or teachers of the deaf.

The needs of parents and family members of deaf and hard of hearing students are

Photos courtesy of Alee and Nick Capps



Left and above: Deaf and hard of hearing children benefit from their parents and other family members learning sign language. With full access to language in the home, understanding and learning increase and frustration decreases for all.

unique. Not only do they face courses that are structured without regard for their needs, but they also endure other significant barriers. In-person ASL classes can be cost prohibitive and require expenses in addition to tuition, such as transportation, parking, and, for many families, childcare. The rigor of many courses, especially those at community colleges and universities, may be unsuitable.

Further, courses designed for teenagers and young adults do not teach the vocabulary or address the communicative situations that families of young deaf and hard of hearing children face in everyday living. Most of these classes do not touch on other issues that are important to

**Caselli et al. (2021)
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is 6 months old.**

families, such as the importance of families feeling success in everyday interpersonal interactions that they have with their deaf children (e.g., Wittkowski et al., 2017). Parents who choose to learn signs are sometimes bucking professionals. They may need affirmation as they take classes against the advice of experts who told them that signs would impede the development of their child's speaking skills (Mauldin, 2016).

To combat all these barriers—the costs, rigor, programming, and need for affirmation—we wanted to develop a curriculum to assist teachers and professionals who work with families called ASL at Home (Zarchy & Geer, 2023).



reported that they had been empowered with language and with the knowledge that they can successfully raise their deaf child. They said that they felt they were building a strong, positive bond with their child through ASL and their other home languages. This initial success has inspired us to keep going, to keep building on what is offered in the curriculum.

Looking Toward the Future

At the time of this writing, we are in the early stages of writing the next-level curriculum in what will become the ASL at Home series. This book, which will be free to parents of deaf and hard of hearing children who fill out a form on our website, will follow the same structure, basing each chapter on routines in the daily lives of children. The curriculum, for use with students ages 5-10 years



Left, above, and below: Programs and resources that support families in learning ASL help parents and caregivers to provide their deaf or hard of hearing children with full access to language-learning opportunities at home.

old, will feature in-depth grammatical instruction and teaching grammar concepts as they become relevant. It will also feature collaborations with other individuals and organizations that support our mission to empower deaf education providers and, most importantly, the families of deaf and hard of hearing children.

A message we hear from parents and family members of deaf children is that they have felt—and they have been told—that ASL is too hard for them to learn, so they should only focus on teaching their deaf children oral language. Recent research shows that this is not the case at all. Caselli et al. (2021) found that children can have age-level vocabulary growth when parents start learning ASL by the time their deaf child is 6 months old. Pontecorvo et al. (2023) found that learning ASL does not

ASL at Home: A Family-Centered Curriculum **How It Began**

When Razi Zarchy—co-author of this article and a speech-language pathologist who works with deaf newborns and young children—founded an ASL class for families of children in his school district, he struggled to find a curriculum that would honor Deaf experiences and provide lessons that hearing families with deaf and hard of hearing children needed. Leah Geer—co-author of this article and linguist who is deaf and who teaches ASL and specializes in second language acquisition—had experience in curriculum development. When the COVID-19 pandemic hit and parents, students, and teachers were forced to learn through Zoom, Zarchy and Geer teamed up. After brainstorming for many sessions and putting down ideas for a new curriculum that would teach and empower parents and their deaf and hard of hearing children, ASL at Home was born. It is a family-centered curriculum that focuses on the daily routines in young children's lives.

While we had intended to create something to meet our clinical needs, we found that, more importantly, parents—specifically the five mothers who worked with Zarchy during his doctoral research—



hinder English development. Additionally, Zarchy (2023) noted in his doctoral capstone project how much parents increased their signing with only an eight-week class.

Language Access Is Key

ASL at Home is among the projects available to provide support for parents and caregivers who want to learn ASL. It allows the

most critical individuals in their children's lives to experience communication and to reinforce connection with their deaf and hard of hearing children. Most importantly, it supports these parents and caregivers in providing their deaf and hard of hearing children with full access to language-learning opportunities at home and allows those children to be fully contributing members of their families.

Resources for Families

To learn more about this curriculum as well as several other programs and resources that support parents and caregivers in providing a language-rich environment at home for their deaf or hard of hearing child, check out:

- **American Society for Deaf Children** (ASDC, <https://deafchildren.org/knowledge-center/asl-resources/online-asl-classes/>) – ASDC offers a wide variety of free and low cost online classes covering signs for use in the home.
- **ASL at Home** (www.aslathome.org) – As described in this article, ASL at Home is a family-centered curriculum designed for families with young deaf or hard of hearing children and the professionals who support them.
- **ASL Connect** (<https://gallaudet.edu/asl-connect/>) – These courses in ASL, posted by Gallaudet University, allow parents, caregivers, and other interested parties to learn ASL online on their own time at home.
- **Hands & Voices** (<https://handsandvoices.org/fl3/index.html>) – Hands & Voices has a Leadership in Language and Learning Center for Families to optimize the language, literacy, and social-emotional development of children who are deaf or hard of hearing.
- **Heritage Sign Languages Center** (<https://hsl.center/>) – Virtual and in-person family sign language services are provided by “connectors, who are culturally deaf, compassionate, friendly, professional, and fluent signers.”
- **Oklahoma School for the Deaf** (OSD, <https://courses.osd.k12.ok.us/>) – OSD offers free, online, noncredit classes for families and others taught by the school's ASL specialist.

You can also check with your local deaf school, community program, or center for family resources or to learn about any offered ASL classes.

References

- Caselli, N. K., Pyers, J., & Lieberman, A. M. (2021). Deaf children of hearing parents have age-level vocabulary growth when exposed to American Sign Language by 6 months of age. *The Journal of Pediatrics*, 232, 229-236. <https://doi.org/10.1016/j.jpeds.2021.01.029>
- Lieberman, A. M., Mitchiner, J., & Pontecorvo, E. (2022, May 23). Hearing parents learning American Sign Language with their deaf children: A mixed-methods survey. *Applied Linguistics Review*, 15(1), 309-333. <https://doi.org/10.1515/applirev-2021-0120>
- Mauldin, L. (2016). *Made to hear: Cochlear implants and raising deaf children*. Minneapolis, MN: University of Minnesota Press.
- 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), 1291-1308. https://doi.org/10.1044/2022_JSLHR-22-00505
- Snoddon, K. (2015). Using the Common European Framework of Reference for Languages to teach sign language to parents of deaf children. *Canadian Modern Language Review*, 71(3), 270-287. <https://doi.org/10.3138/cmlr.2602>
- Wittkowski, A., Garrett, C., Calam, R., & Weisberg, D. (2017). Self-report measures of parental self-efficacy: A systematic review of the current literature. *Journal of Child and Family Studies*, 26(11), 2960-2978. <https://doi.org/10.1007/s10826-017-0830-5>
- Zarchy, R. M. (2023). *Effects of family-centered ASL instruction on hearing parents' child-directed signing* [Unpublished doctoral dissertation (SLPD Capstone)]. Rocky Mountain University of Health Professions.
- Zarchy, R. M., & Geer, L. C. (2023). *American Sign Language at home: A family curriculum* (2nd ed.). <https://aslathome.org>

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Language, Deaf and Hard of Hearing Youngsters, the IEP... and a Pathway to Literacy

By Patrick Graham, Raschelle Neild, and Jennifer Gentzke

The Individualized Education Program (IEP), the child's plan to ensure specialized instruction and services, can help deaf and hard of hearing children develop critical literacy skills. Deaf and hard of hearing children are entitled to an IEP when they turn 3 years old, and parents and teachers should begin to incorporate foundational literacy skills into the IEP immediately.

Over the past two decades, policy makers, researchers, and educators have focused on understanding and improving reading outcomes, especially important as reading—literacy—impacts all areas of academic and lifelong success (Lederberg et al., 2014). One of researchers' most important findings has been the importance of early foundational skills. The National Early Literacy Panel (2008) notes the importance of children having these foundational skills prior to entering elementary school.

Traditionally, literacy starts with decoding, which is “the ability to apply knowledge of letter-sound relationship, including knowledge of letter patterns to correctly pronounce written words” (Moats, 2024). Once students have decoding skills, they transition to mapping, which means words are memorized through reading and then stored in long-term memory (Ehri, 2014). For hearing students, these two fundamental strategies, decoding and mapping, begin with accessing the phonological code of English. Understandably, deaf and hard of hearing children may find accessing decoding and mapping through audiological means to be

Photos by Matthew Vita, Laurent Clerc National Deaf Education Center



Above: Young children learn social skills and language through play.

difficult; they may not be able to fully access the phonological code for decoding printed English. Therefore, literacy goals on the deaf or hard of hearing student's IEP should include specialized strategies, such as visual phonics, fingerspelling, explicit instruction, contextual clues, and whole word recognition. Without this additional and specialized education, skills required for early literacy development for deaf and hard of hearing children may continue to be a challenge and their future academic development compromised (Kelly & Baarac-Cikaja, 2007; Kyle & Harris, 2011). Below are some literacy activities to include in the child's IEP.

For the Youngest Children Play and Assessment

For the very youngest children, parents and teachers want to make sure that two seemingly unrelated activities are incorporated: play and assessment. Infants and toddlers—hearing, deaf, and hard of hearing—learn a significant

amount of language through play. For deaf and hard of hearing children, play should include purposeful language modeling.

Play is an integral part of childhood. When infants and toddlers play together, they develop a variety of social skills, such as sharing, communicating, arguing, and negotiating. Joined by a teacher, parent, or other language model—who engages and interacts with the child—playtime also becomes a rich opportunity to learn language naturally.

Playtime should include meaningful language that children connect to objects that they see and touch. It doesn't matter if this language occurs through sign language or spoken language as long as the language is fully accessible to the child. Children thrive on incidental language and learning through interactions with peers and caregivers. This

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Left: Purposeful language modeling is an important part of children's language skills development. **Below:** When exploring new texts, students benefit from pre-reading vocabulary, identifying and signing new words, self-correction, and answering questions.

up, playing indoors and outdoors, and narrating and discussing life experiences. All of this increases literacy opportunities in the school.

As Students Progress Language and Goals Evolve

As students progress and assessment continues, language and learning goals evolve and become more specific. Teachers and students become aware that reading is not just signing the words as they appear on the page but also understanding and showing understanding by responding to questions and discussing the text.

Foundational literacy goals are helpful as students progress through elementary and intermediate grades. Goals may be set before students start reading and additional goals set and achieved as students make their way through their assignments. These goals—outlined at various stages of the process—help students advance their skills:

- **Pre-reading ... Discuss new vocabulary—***When given selected*

language occurs, for example, as children share toys, ask for help, settle disagreements, and seek explanations. When language is shared and understood, children make meaning and map concepts with words in their memory. According to Westby & Wilson (2017), the linguistic knowledge that a child gains through play can become the child's foundation for literacy. Lack of opportunities to interact with parents, teachers, or friends who serve as language models can prove detrimental not only to the development of the child's language but also to that child's cognitive and social-emotional development (Westby & Wilson, 2017).

An additional factor—accurate assessment—across all areas is critical in young children attaining foundations in language and literacy. Assessing the child's language supports educational placement, curriculum development, and instruction as well as IEP goals (Neild & Fitzpatrick, 2018). Results of assessment allow educators, interpreters, families, and adult language models to communicate with and instruct

individual students and to meet each student on their level of language use (Beal, 2024).

Parents and family educators can adjust the goals to challenge language milestones and increase incidental language opportunities. As Batamula et al. (2020) emphasize, language planning should include at-home activities such as interacting with the child in waking



words, phrases, and sentences from an instructional-level text, students will point to the words and sign them with 90% conceptual accuracy. This activity allows exposure to vocabulary—and vocabulary concepts—prior to reading a text. By previewing the text’s words, phrases, and sentences and focusing on conceptually accurate signs, student comprehension and reading fluency improve.

- **Word recognition ... Identify and sign new words**—*Students will identify and accurately sign five new vocabulary words per week in isolation and in the context of an instructional-level text with 90% accuracy.* Identifying the words in isolation is a good way to document student progress in learning vocabulary. However, providing the correct sign for a word does not guarantee that the student is understanding. Students should be able to make connections, identify, and sign the words accurately in the context of their instructional reading.
- **Self-correction ... Encourage students to correct themselves**—*While reading a text, the student will recognize when a sign does not match a word’s meaning by stopping and rereading the word, phrase, or sentence with minimal prompting and with 85% accuracy.* When students provide a conceptually incorrect sign—such as using the sign *can* that means *ability* when the text reads *put the paper in the can*—stop the student. Allow the student to self-correct by going back to the text and re-reading it.
- **Pose questions**—*During and after reading, students will be able to answer three to five “Wh-” questions, through American Sign Language (ASL) or writing, with 90% accuracy.* This goal can be broken down into benchmarks to focus on specific *Who, What, Where, When, and Why*

Goals may be set before students start reading and additional goals set and achieved as students make their way through their assignments.

Teachers provide students with visual examples of the type of sentence pattern they need for a specific writing task. Focusing on a targeted writing pattern can help improve skills. For younger students, introduction and building on a *Noun + Verb* pattern (e.g., *The boy reads*) can be beneficial. As students learn to write, it is important to give them constructive and positive feedback on the structure of their sentences. Encourage students to use symbols, a

Below: Asking “Wh-” questions of students is beneficial in helping them focus on the text in order to achieve language goals.



questions. Structured instruction of “Wh-” questions and the types of responses expected for each would be beneficial before expecting students to focus on this goal.

Writing Goals

Writing can be difficult for anyone. Students may know what they want to write, but they may feel unsure of how to put their ideas into written English. Here are some ideas that may help:

- **Practice sentence patterns**—*When given a model of a sentence pattern (e.g., Bobby eats yummy candy), students will write at least three sentences using the pattern to describe a picture or experience with minimal support and with 90% accuracy.*

picture, or other visual markers when they struggle with spelling. This will help to increase motivation, stamina, and fluency in their writing.

- **Pre-writing strategies**—*Students will independently complete a graphic organizer, including relevant details, and use this to create a narrative, expository, or persuasive piece of writing.* Use graphic organizers, such as thinking maps, sequencing charts, Venn diagrams, or brainstorming webs. In pre-writing, this strategy allows students to support development of their thoughts and ideas. The graphic organizer can model a key idea and provide structure for sequencing thoughts. Sequencing charts help organize

Students should be guided in how to identify the main idea and supporting details. Summarizing should be done in the student's primary language; allowing students to summarize what they have read in their primary language gives them the opportunity to comfortably share what they have learned without the added stress of writing answers.

main ideas and key details. Venn diagrams help classify ideas into like and unlike categories. Brainstorming webs—where the main idea is in the center and the details branch out in lines—help connect supplemental details to the main idea.

- **Organization**—*Students will use video to make a recording to help organize their ideas, including details, and create a structure to begin writing.* Video allows students to express what they want to write by signing it first, organizing their thoughts and ideas in a language in which they

Right: When children develop a strong foundation in language from a young age, they are able to build on and grow these skills throughout their K-12 experience.

may be more comfortable. The video then functions as a guide, allowing them to make smoother connections to and transitions in written English. It is key that the teacher review the video prior to writing to ensure the student incorporates the required components and meets the expectations of the assignment.



Incorporating ASL

The following strategies may be helpful in bilingual classrooms:

- **Activate background knowledge**—*Before reading an instructional-level text, students will analyze and describe the picture(s) using at least three descriptors with relevant details.* Discussing what students know regarding a text before they start to read it will strengthen comprehension. Take time to look at the pictures and have students describe what they see in order to make connections to the English text while they are reading.
- **Encourage summarization**—*When presented with an instructional-level text, students will independently and accurately summarize the main ideas and key details with 80% accuracy through ASL and written English.* By developing goals related to summarizing, students can more actively engage in reading to gain a deeper understanding of the text. Students should be guided in how to identify the main idea and supporting details. Summarizing should be done in the student's primary language; allowing students to summarize what they have read in their primary language gives them the opportunity to comfortably share what they have learned without the added stress of writing answers.
- **Ask students to infer and predict**—*When presented with an instructional-level text, the student will make inferences or predictions based on implicit and explicit information.* Making inferences requires the reader to go beyond the literal meaning of the text. It combines information from the text as well as background knowledge from the student. Examples of inference can include making predictions, understanding a character's feelings or actions, and making connections.

For younger students, taking time to look at the pictures, talk about a character's facial expressions or make predictions for what will happen next can prepare them for language they will see in the text and increase comprehension.

For all students, it is important to discuss what they read. As teachers facilitate the discussion, give students the opportunity to do the following:

- **Make connections to their own lives**—Reading, writing, and language goals do not only need to be focused on in English Language Arts classes; they should be applicable to all areas of experience throughout the day.
- **Apply what they read to their everyday life and learning**—Students should be able to connect their learning to their everyday lives; they should also be able to apply what they read to their continued learning.
- **Develop their purpose for learning**—Goals should be focused on students' area(s) of need for language and literacy. When they are young, learning should be immediately applicable to their lives. As they get older, they should be aware of the purpose of learning. When students know why they are learning, it can increase motivation.

Many deaf and hard of hearing students struggle to develop a strong foundation in language and reading (Qi & Mitchell, 2012). Effective education in language and literacy requires collaboration among educators, general education and special education teachers, speech therapists, and families from the earliest days of the child's life. By age 3, these language and literacy goals should be specified within the child's IEP. Clear goals within the IEP can foster literacy and language and ensure children develop early literacy skills prior to entering elementary school.

As students progress, these literacy

goals progress with them. Goal setting and achievement are essential as students continue to build on their skills and progress successfully through school.

By working together, parents and

teachers can support deaf and hard of hearing preschoolers in the first steps toward language and literacy and continue their support throughout their children's K-12 education.

References

- Batamula, C., Kite Herbold, B. J., & Mitchiner, J. (2020). Family language planning with deaf and hard of hearing children: Fostering multilingual development. *Odyssey, 21*, 8-13.
- Beal, J. S. (2024, January). American Sign Language assessments for deaf children. *Journal of Deaf Studies and Deaf Education, 29*(1), 102-103. <https://doi.org/10.1093/deafed/enad027>
- Ehri, L. C. (2014). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading, 18*(1), 5-21.
- Kelly, L. P., & Barac-Cikoja, D. (2007). The comprehension of skilled deaf readers: The roles of word recognitions and other potentially critical aspects of competence. In K. Cain & J. Oakhill (Eds.), *Children's comprehension problems in oral and written language: A cognitive perspective* (pp. 244-280). New York: The Guilford Press.
- Kyle, F. E., & Harris, M. (2011). Longitudinal patterns of emerging literacy in beginning deaf and hearing readers. *Journal of Deaf Studies and Deaf Education, 16*(3), 289-304.
- Lederberg, A. R., Miller, E. M., Easterbrooks, S. R., & McDonald-Conner, C. (2014). Foundations for literacy: An early literacy intervention for deaf and hard-of-hearing children. *Journal of Deaf Studies and Deaf Education, 19*(4), 438-455.
- Moats, L. C. (2024). *Speech to print: Language essentials for teachers* (3rd ed.). Baltimore, MD: Paul Brookes Publishing Company.
- National Early Literacy Panel. (2008). *Developing early literacy: Report of the National Early Literacy Panel*. Washington, DC: National Institute for Literacy.
- Neild, R., & Fitzpatrick, M. (2018). Overview of assessment of deaf and hard of hearing students. *Psychology in Schools, 57*(3), 331-343.
- Qi, S., & Mitchell, R. E. (2012, Winter). Large-scale academic achievement testing of deaf and hard-of-hearing students: Past, present, and future. *Journal of Deaf Studies and Deaf Education, 17*(1), 1-18. <https://doi.org/10.1093/deaf-ed/enr028>
- Westby, C., & Wilson, D. (2017). Using pretend play to promote foundations for text comprehension: Examples from a program for children who are deaf and hard of hearing. *Topics in Language Disorders, 37*(3), 282-301.

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Visual Strategies for Engaging Deaf and Hard of Hearing Children

*By Elaine Gale, Patrice Creamer, Deborah Chen Pichler,
and Diane Lillo-Martin*

All of the authors are part of Family ASL, a project focusing on bimodal bilingual language acquisition by deaf children and their hearing parents. Family ASL is supported by the National Institute on Deafness and Other Communication Disorders of the National Institutes of Health under Award Number R01DC016901. The content of this article is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

Suppose a tree falls but nobody is around. Does it make a sound? Similarly, if someone signs and no one is looking, is that communication? Without looking, children do not see signs and do not receive visual language. It does not matter how careful the signing is. If the child is not visually engaged, then that child does not have full access to language.

The first step in engaging deaf and hard of hearing children in language-rich environments is getting their attention. Deaf adults—parents and teachers—are sensitive to children’s visual needs (Graham, 2015; Harris, 2001; Mather, 1989; Singleton & Crume, 2022; Willie et al., 2018). They intuitively understand what it means to elicit and maintain a child’s attention visually, and they use specific strategies (e.g., taping, waving, moving into the child’s

Right: In order for a deaf or hard of hearing child to have full access to language, that child must be visually engaged.

*Screenshots courtesy of the Family ASL Project
Photos by Elaine Gale*



field of vision) to ensure the child receives their message.

Studies show that deaf children with cochlear implants who have Deaf caregivers have English scores comparable to those of their hearing peers (Davidson et al., 2014). Also, when compared with deaf children who did not have bilingual bicultural language experiences, they had higher communication, language, vocabulary, and knowledge of English syntax (Watkins et al., 1998), potentially a result of this early experience with signing and visually sensitive caregivers. However, people who hear, including hearing parents with deaf children, do not have the same sensitivity to visual attention. In fact, hearing parents need assistance to understand the need for the visual strategies, to develop them, and to effectively use them

(Jamieson, 1994; Waxman & Spencer, 1997; Willie et al., 2020).

It may seem surprising that hearing people need support in doing what Deaf people do naturally, but perhaps it should not be. Hearing teachers intuitively raise their voices as they enter their classes to get students' attention; Deaf teachers intuitively wait for the students to look at them. Deaf sign language teachers report that when hearing students wore earplugs for an extended period, the students continued to rely primarily on their auditory sense, even when they knew it had been inhibited. On debriefing, the hearing students recounted narrowly escaping accidents that they would have easily avoided if they had relied on their visual sense. One earplugged student was nearly hit by a car. The student's behavior—still

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relying on sound, though he knew he had put in earplugs—starkly contrasts with the instinctive behavior of Deaf individuals, who look more purposefully in each direction before crossing a street.

As early as the 1980s, researchers looked at differences in the way Deaf and hearing teachers and parents interact with deaf children (Mather, 1989; Meadow-Orlans et al., 1981). These studies resulted in identifying specific strategies that Deaf adults use that help deaf children engage with their families for early communication—and later engage in print and develop early literacy skills. Today, we know that the first step in providing young deaf children with a language-rich

**Today, we know that
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environment is the use of visual strategies that have been intuitive for Deaf adults. We recognize that these strategies are necessary to get and maintain attention, and we know that these strategies are sometimes not intuitive for adults who hear, including hearing parents.

When hearing parents learn these strategies—from the explicit teaching of Deaf adults or from participation in structured mini-lessons—they develop these skills themselves. Gaining and maintaining their deaf children's attention, parents ensure their children receive their messages, and this provides one of the first steps in their children's access to a language-rich environment.

Resources for Learning Visual Strategies

By Elaine Gale, Patrice Creamer, Deborah Chen Pichler, and Diane Lillo-Martin

An environment rich in the visual language of signs is essential, and strategies to ensure access are critical. Deaf and hard of hearing children, like all children, need full access to language in their early years. The first step in every educational plan is to provide an early language-rich environment. Check out the following to support your child in the visually language-rich environment you create.

DEAF LEADERSHIP INTERNATIONAL ALLIANCE

TIP SHEET ON STRATEGIES

The Deaf Leadership International Alliance, an organization that advocates for involvement of Deaf adults in early intervention for deaf children and their families, suggests various strategies to communicate with children, read books to children, and prepare deaf children for literacy. The full list of strategies can be seen in Figure 1. For more information, see www.dliaconnect.org.

SKI-HI DEAF MENTOR CURRICULUM

ASL FOR FAMILIES

The SKI-HI Deaf Mentor Program (Pittman, 2001) is a curriculum with four sections: a) Introduction and Overview, b) ASL for Families, c) Early Visual Communication Program, and d) Deaf Culture Program. The Early Visual Communication Program has 18 lessons focused on visual strategies from evidence-based research. For more information, see <https://deaf-mentor.skihi.org>.

ASL AT HOME

TECHNIQUES AND STRATEGIES

ASL at Home (Zarchy & Geer, 2023) is a family curriculum, with chapters that are organized around common routines for families with children from birth to 3 years of age. Each chapter includes a technique that aligns with visual strategies. For more information, see www.aslathome.org.

FAMILY ASL MINI-LESSONS

DEVELOPED BY RESEARCHERS

We, the co-authors of this article, are part of a research team studying how deaf and hard of hearing children learn to use ASL with their hearing parents. The material we put together consists of short and focused lessons that are about 5-10 minutes each. Each mini-lesson introduces the strategy, shares demonstrations of the visual strategies with photos and videos of parents using the strategy, provides opportunities to practice the strategy, and clarifies any questions or misunderstandings. It includes an ASL specialist who meets with families and children remotely to support the children—and parents—in their ASL development. For more information, see <https://slla.lab.uconn.edu/family-asl/>.

Figure 1: DLIA Visual Strategies



12 WAYS DEAF ADULTS VISUALLY INTERACT WITH YOUNG CHILDREN

Attention	1	ELICIT ATTENTION WITH EYEGAZE EXAMPLE: move your eyes in the child's line of vision to elicit attention
	2	USE POINTING FOR REFERENCE EXAMPLE: point to object to direct child's attention
	3	COMBINE KINESTHETIC, TACTILE & VOCAL STIMULATION EXAMPLE: tap and wave in child's line of vision
Parentese	4	SIGN IN SLOWER TEMPO EXAMPLE: sign HAPPY slowly
	5	REPEAT SAME WORDS EXAMPLE: sign HAPPY multiple times in a row
	6	EXAGGERATE MOVEMENTS EXAMPLE: sign HAPPY big and with extremely wide eyes
Joint Attention	7	FOLLOW CHILD'S LEAD EXAMPLE: start an interaction with a toy a child looks at with interest
	8	PROVIDE TIME TO EXPLORE EXAMPLE: allow child time to explore before initiating or continuing an interaction
	9	ENGAGE IN SEQUENTIAL INTERACTION EXAMPLE: be sure the child is looking at you before initiating a conversation about a toy; if the child breaks eye contact, pause until the child returns their eye gaze back to you
Shared Reading	10	KEEP BOTH LANGUAGES VISIBLE EXAMPLE: have the book on your stomach facing out to the child and use miniature signs on the book
	11	USE ATTENTION MAINTENANCE STRATEGIES EXAMPLE: tap child lightly and shift book to attract attention
	12	ADJUST SIGN PLACEMENT TO FIT THE STORY EXAMPLE: sign on the book or child



* THE TERM "DEAF" IS AN INCLUSIVE TERM REPRESENTING ALL INDIVIDUALS WITH VARIOUS HEARING LEVELS AND CULTURAL EXPERIENCES.

Figure 2: Example of a Family ASL Mini-Lesson



Family ASL Mini-Lesson for Repeating the Same Words

CONNECTION/INTRODUCE:

Introduce and connect the family with the visual strategy to repeat the same words multiple times. The ASL specialist explains that it is important as it provides children with more opportunities to connect words with concepts.

TEACH/DEMONSTRATE:

The ASL specialist teaches and demonstrates several ways to repeat the same words and in different contexts. The picture series to the left shows a Deaf adult signing *gas* multiple times in different ways and contexts. She first signs the word to introduce it. Next, she signs the word on the book page to show the iconic action of putting gas into the car, reinforcing the sign. Finally, the Deaf adult and the child make the sign together.

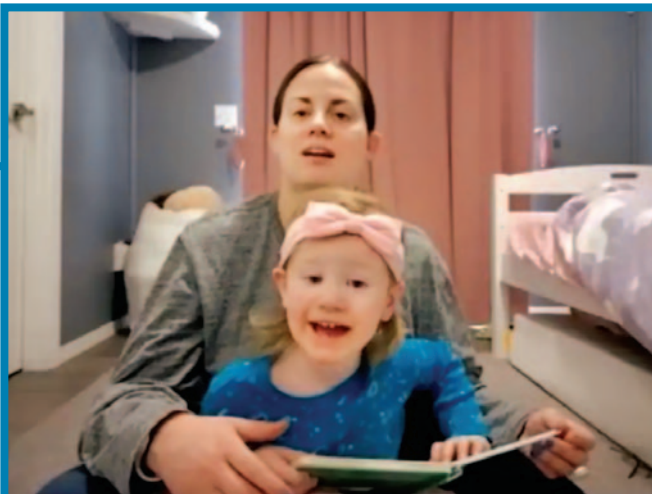
Another strategy involves showing videos by Hands Land (www.handsland.com), a nonprofit organization led by Deaf individuals promoting language play for early sign language development. Hands Land videos rhythmically sign daily activities using the same word or phrase multiple times. Sharing videos of other hearing parents repeating words multiple times effectively is another way to demonstrate visual strategies. Including other hearing parents using visual strategies is important to show those parents that other parents like them, with deaf children, can also effectively use visual strategies.

ACTIVE ENGAGEMENT/APPLY AND LINK/CLARIFY:

After the introduction and demonstrations, parents are encouraged to make a conscious effort to use the visual strategy for the week and to jot down comments and questions to discuss during the next ASL specialist session to clarify if needed.

Family ASL Mini-Lesson Structure

The mini-lesson structure (shown below) supports hearing families in understanding, developing, and effectively using visual strategies with their deaf or hard of hearing child. See Figure 2 for an example of a mini-lesson led by a Deaf ASL specialist.



REMIND:

Since it can take time for hearing parents to remember to use visual strategies, in future sessions it is helpful to remind them to use those strategies.

In the photo above, a parent was attending a session along with her child. During a book reading activity, they were both facing forward. This required the child to turn her head to visually interact with her parent. Following a lesson on eliciting attention with eye gaze, the ASL specialist gently reminded the parent to sit facing the child to maximize visual interaction.

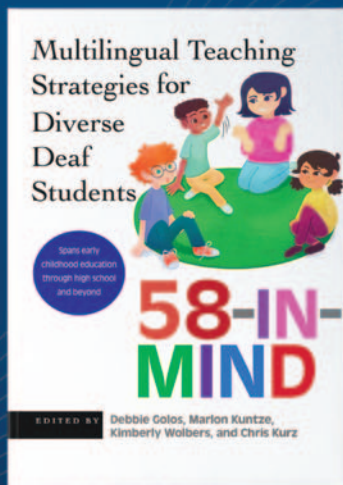


Above: Incorporating what she's learned from a family ASL mini-lesson, this hearing parent first signs *farm* to introduce the word to her child. Then she signs *farm* on her child to reinforce the sign. The parent and the child sit facing one another to maximize visual interaction.

References

- Davidson, K., Lillo-Martin, D., & Chen Pichler, D. (2014). Spoken English language development among native signing children with cochlear implants. *Journal of Deaf Studies and Deaf Education*, 19(2), 238-250. <https://doi.org/10.1093/deafed/ent045>
- Graham, P. J. (2015). Examining the need of attention strategies for academic development in deaf and hard of hearing children. *Journal of Education and Human Development*, 4, 16-21.
- Harris, M. (2001). It's all a matter of timing: Sign visibility and sign reference in deaf and hearing mothers of 18-month-old children. *Journal of Deaf Studies and Deaf Education*, 6(3), 177-185. <https://doi.org/10.1093/deafed/6.3.177>
- Jamieson, J. R. (1994). Instructional discourse strategies: Differences between hearing and deaf mothers of deaf children. *First Language*, 14(42-43), 153-171. <https://doi.org/10.1177/014272379401404102>
- Mather, S. (1989). Visually oriented teaching strategies with deaf preschool children. In C. Lucas (Ed.), *Sociolinguistics of the Deaf community* (pp. 165-187). Academic Press. <https://doi.org/10.1016/b978-0-12-458045-9.50014-8>
- Meadow, K., Greenberg, M. T., Erting, C., & Carmichael, H. (1981). Interaction of deaf mothers and deaf preschool children: Comparisons with three other groups of deaf and hearing dyads. *American Annals of the Deaf*, 126, 454-468. <https://doi.org/10.1353/aad.2012.1463>
- Pittman, P. (2001). *The Deaf Mentor curriculum*. SKI-HI Institute. <https://deaf-mentor.skihi.org>
- Singleton, J. L., & Crume, P. K. (2022). The socialization of modality capital in sign language ecologies: A classroom example. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.934649>
- Waxman, R. P., & Spencer, P. E. (1997). What mothers do to support infant visual attention: Sensitivities to age and hearing status. *Journal of Deaf Studies and Deaf Education*, 2(2), 104-114. <https://doi.org/10.1093/oxfordjournals.deafed.a014311>
- Wille, B., Allen, T., Van Lierde, K., & Van Herreweghe, M. (2020). The Flemish Sign Language diagnostic instrument for children up to two years old: Adaptation of the ASL VCSL Checklist. *American Annals of the Deaf*, 165(3), 311-334. <https://doi.org/10.1353/aad.2020.0020>
- Wille, B., Mouvet, K., Vermeerbergen, M., & Van Herreweghe, M. (2018). Flemish Sign Language development: A case study on Deaf mother-deaf child interactions. *Functions of Language*, 25(2), 289-322. <https://doi.org/10.1075/fol.15010.wil>
- Zarchy, R. M., & Geer, L. C. (2023). American Sign Language at home: A family curriculum. <https://www.aslathome.org>

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When the Educator Is a Parent:

A Perspective and Some Helpful Hints

By Jessica Wiley

I'm a special educator whose classroom was next door to the homeroom of my hard of hearing son. I had him as one of my students for special education literacy three times a week. I was fortunate to have the professional background, personal knowledge, and treasured relationships with colleagues—all of which helped me navigate the experience of giving birth to a child with hearing loss. What started out as a lone assignment quickly grew into a team effort! I share some of what I learned below.

I have always said that my teaching career prepared me to be a parent. Little did I know how true that would be. I began teaching in 2009. Two years later, in 2011, I became a mother for the first time when my daughter Katalyn was born, and then again in 2014 when my son Kristopher was born. Both of Kristopher's newborn hearing screenings showed that he had hearing loss, and a month later we were referred to Arkansas Children's Hospital, where an auditory brainstem response confirmed my biggest fear: hearing loss.

At 2 months, Kristopher was fitted with his first pair of hearing aids. Soon after came the next pair and a plethora of appointments, equipment, information, and batteries. As so many hearing parents know, the diagnosis of hearing loss begins a wild and sometimes difficult journey for the whole family.

As a teacher, I knew that a child's first experience with language is before they are born; hearing children recognize their mother's voice while still in the womb. After Kristopher's diagnosis, I wasn't sure what he could hear, but I was determined to expose him to language. During bottle feedings, I would talk to him about how he was a greedy eater. While doing laundry, he would watch me go by, and I would talk to him, carrying soiled loads of clothing and lots of love. During trips, I would speak to Kristopher from the driver's seat, showing him the passing billboards, and Katalyn would identify the colors

Photos courtesy of Jessica Wiley



Far left: Kristopher (age 2) sitting on the couch watching television with Mommy (2016). **Left:** Kristopher (age 4) reading one of his favorite books and riding in the car with Mommy (2018).

and types of cars that whizzed by. As he got older, we talked all the time, playing “The Floor is Lava” as he and his sister used a myriad of tactics to move around a room without stepping on the floor. We talked while eating pizza, and we talked while watching movies in pretend forts. Our imaginations would take over, and words would spill out in silliness and joy.

I had to be strategic. Kristopher was a wriggler, and lights and movement caught his attention, but when he heard my voice, he redirected and focused. I would put my face close to his and talk, deliberately moving my lips and exaggerating so he could see the movements. He responded, using intonations and vocalizations. Our favorite routine was at bedtime, when I would read Kristopher’s favorite book, *Eyes & Nose, Fingers & Toes*. He soon memorized the actions and speech associated with it. He would clap his hands, touch his toes, and wiggle his fingers. He would count his eyes and point to his nose while we counted together. When he got distracted, I would move my body and have him mimic my movements. That brought his attention back

to me.

I used speech. My husband, other family members, countless therapists, and I had many conversations about incorporating sign language. However, I focused on spoken

I had to be strategic. Kristopher was a wriggler, and lights and movement caught his attention, but when he heard my voice, he redirected and focused.

language, confident that Kristopher would excel in his use of speech. Somehow, I found resources and guidance. The learning situation I wanted, Pediatrics Plus Developmental Preschool, had a waiting list, but by age 2, Kristopher was in full attendance. He received speech therapy, occupational therapy, and physical therapy. He also needed to work on meeting his developmental milestones and getting ready for public school. I was thankful for Medicaid and not having to worry about how we would pay for services.

Then it was time for me to return to work. At first Kristopher stayed with his god-grandparents. However, as he grew older, we felt he needed socialization and exposure to other children his age, and his god-grandparents were growing older, too. We had to find daycare. I reached out to the Arkansas School for the Deaf (ASD) Outreach Support



Above: Kristopher (age 4) playing in his classroom at Pediatrics Plus Developmental Preschool (2018). **Right:** Kristopher with friends at his fifth birthday party at Hog Wild Family Fun Center (2019).

Services. Through ASD coordinator Karen Howard Lange, we found help in evaluating the daycare center I had selected. My daughter attended there at the time, and I was pleased with her care. Ms. Lange also provided recommendations for improving accessibility and for direct early intervention services. Therapists from Arkansas Therapy Outreach came weekly to provide speech and occupational therapy. Educational providers, therapists, support staff—these wonderful professionals were our saving grace.

In addition, I found Arkansas Hands & Voices, an organization that provides Arkansas families with resources, networking, and information to improve communication access and educational outcomes for their children. We met the first representative of Hands & Voices at Arkansas Children's Hospital. Mandy McClellan Jay was a parent advocate and the beginning of hope. Arkansas Hands & Voices provided options for communication, resources for therapy, outreach programs, and, ultimately, moral support.

From the beginning—from those very first days at daycare—Kristopher modeled the behaviors of his peers who surrounded him. He modeled mouth formations and body language. He, of course, learned some inappropriate behaviors as well, but that allowed us to teach what was a rarely used word: “No.” Kristopher made great improvements. His babbling became words and eventually one- to two-word sentences. He was meeting milestones and growing socially. He played with

Katalyn, who enjoyed her role as big sister, encouraging him to use words whenever he wanted something. Socially, Kristopher grew more independent. He played with and conversed with other children. He enjoyed joining in with our cleanup songs and sang his best as he followed directions. Unsurprisingly perhaps, his favorite word was “no.”

As a family, we also saw how Kristopher's disability was affecting us. The idea of not knowing what would happen next was the worst. Lingered deep down within my soul were the “What if” questions: *What if he regressed? What if his hearing couldn't be restored? What if it got worse? What if he would never be independent?*

As a literacy inclusion teacher, I worked in a different building, but in Fall 2023 I changed classrooms, and the three of us—Kristopher (beginning fourth grade), Katalyn (beginning sixth grade), and I—were all in the same structure. In fact, I was just next door to Kristopher's classroom. Any time his hearing device malfunctioned; I was there to problem solve. I was constantly involved in his educational programming—literacy services, math services, speech therapy, and occupational therapy—and three times a week I was working with him inside his classroom. It was a difficult adjustment; I moved constantly between the role of mother and teacher. We had a few bumps along the way, but I would say we had a successful year.





Today, Kristopher is 10 years old and entering fifth grade. He is in full inclusion classes, a notion encouraged by his third grade special education and general education teachers. He uses a Cochlear Mini Mic +2 during classroom instruction, activity classes, and transitions. His accommodations include preferential seating, instructions condensed into one to two steps (e.g., “Kristopher, come get your mic and

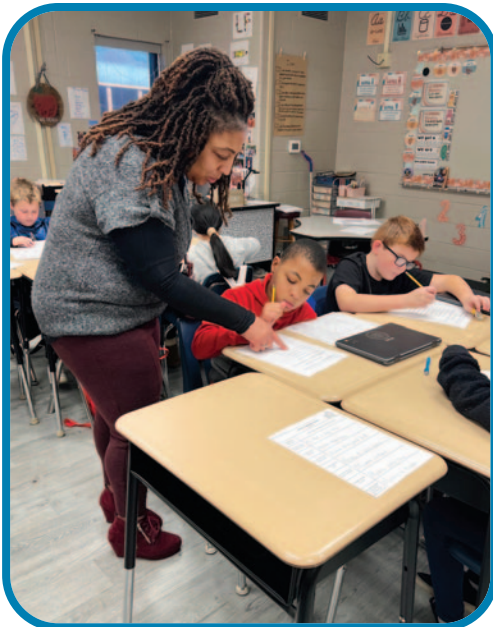
connect it to your

Chromebook” or “Kristopher, first read the passage and then highlight text evidence”), repeating and explaining back to check for understanding, and redirecting him when he rushes on assignments. While this is the best placement for Kristopher, there are hurdles. He interacts with his teachers and therapists only minimally. He has to be prompted and called on to participate in class activities and to interact with other students. Group work is difficult, especially the communication piece. He is still academically delayed.

However, outside of academic structure, Kristopher thrives.

Above:

Kristopher (age 5) reading at home on a summer day (2019). **Right:** Kristopher and Wiley work on an assignment in class (2023).



CREDIT: LINDSEY FRENCH

On to Literacy: A Mother's To Do List

Whatever communication decisions that families make for their deaf or hard of hearing children, they may find the following literacy strategies helpful:

- **Label everything.** Label items in the bathroom, bedroom, and living room. Periodically stop, point to the item and the label, and sign if the child uses American Sign Language (ASL). Note the spelling, too, and use the finger alphabet for signing children.
- **Include the child in all discussions.** Interactions with the child should occur throughout the day, in the communication that the child prefers, and especially (and consciously) at mealtimes.
- **Use print in the community.** Call the child's attention to functional print: restaurant signs, road signs, billboards, and marquee signs.
- **Engage in play with print.** Have your child look at a menu and order lunch from your kitchen “restaurant.” Create an in-house obstacle course or construction zone or reenact a scene from a television show.
- **Encourage the child to communicate using nonverbal cues.** Be deliberate with facial expressions. Part of communication includes verbal and nonverbal communication. If a child indicates by pointing, encourage the child to identify the word as well, using speech, sign, or another method. This supports multi-sensory engagement and conveys meaning.

He loves to play with his friends on the playground and in the cafeteria. He and his sister also participate in Community Connections, a nonprofit organization that provides sports and arts for children with disabilities. With Katalyn, Kristopher enjoys this inclusive and free organization, practicing martial arts, playing soccer, and taking part in the Neighborhood Pet Club. The respite literacy program and other respite services, such as going to Larry's Pizza and Action Jacks Family Fun & Entertainment, provide much needed breaks to engage with other families who are facing similar journeys—and just to breathe. As a result of my children's participation, I was asked to become a Parent Mentor, and I engage with parents to share

Right: Kristopher participates in Top Soccer, one of the free programs offered by Community Connections. **Center:** Kristopher was also interviewed for Good Night, one of the fundraisers for Community Connections (2023).

stories of difficulties and encouragement.

I feel that, with continued support from his educational team at Morrilton Intermediate School, some time to mature, and continued interactions with his peers, Kristopher will gain appropriate skills. Through the advancement of technology, continued practice, and opportunities to generalize skills, he will be able to grasp complex concepts and thrive. We still communicate successfully in spoken language, but in Arkansas, ASL is approved as a credit in the public schools, and if Kristopher wants to take it, I'll fully support his decision. The critical support from both Hands & Voices and professionals has continued. Further, we make frequent visits to Arkansas Children's Hospital for its Audiology and Ear, Nose, and Throat departments. We visit a local behavioral health care provider for medication management.

At the heart of every choice for the parent and educational team should be the best interests of the child. As parents, we need to establish good relationships with the professionals who help



CREDIT: SAMUEL PARSONS

us and ensure they are respectful and cordial. Also, we need to ensure the professionals are knowledgeable. As children continue to grow and change, their classroom modifications and technological accommodations will continue to change, too.

Today, there are advancements in hearing technology and software for accessories supportive of children's goals and dreams. No longer will individuals like Kristopher be ostracized, segregated, or excluded. But support is critical. For me, support from parents, educators, facility managers, and medical professionals was needed to ensure my son received the education and care he was entitled to.

I am Kristopher's biggest cheerleader, and I need him to know that I support him no matter where he is or where his journey will take him. Being his mother first but also part of his educational team has allowed me to view my child through different lenses. With our faith and a strong family and educational support system, we have been able to think positively about Kristopher's quality of life. My husband Cameron, Katalyn, and I are with him every step of the way, and we will advocate for him until he is old enough to advocate for himself. Our hopes remain high.

Left: Katalyn (age 12), Jessica, and Kristopher (age 9) during Take Your Child to the Library Day at the Conway Public Library (2024).





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Sara Burgan, MS, is a speech-language pathologist at the Laurent Clerc National Deaf Education Center's Model Secondary School for the Deaf on the Gallaudet University campus in Washington, D.C. She has a master's degree in speech-language pathology from Nova Southeastern University in Davie, Florida.

Amanda Connelly, AuD, is an audiologist at the Laurent Clerc National Deaf Education Center's Model Secondary School for the Deaf on the Gallaudet University campus in Washington, D.C. She has a doctoral degree in clinical audiology from Gallaudet University, with a focus on pediatric/educational audiology.

The authors welcome questions and comments about this article at sar.burgan@gmail.com and Amanda.Connelly@gallaudet.edu, respectively.

Reflections on Changing Education: What If Classroom Professionals Had an IEP?

By Sara Burgan and Amanda Connelly

As a speech-language pathologist (SLP) who knew few d/Deaf people and had little knowledge of the Deaf community, Sara Burgan, co-author of this article, reports experiencing firsthand ways in which the field of speech-language pathology has promulgated areas of weakness in the education of SLP professionals, too often resulting in a mismatch in the skills we teach, the education we nurture, and the tools we use. She notes that a few interactions with Deaf people and the Deaf community piqued her interest and led her to work in a school for the deaf where her beliefs and practices were established and shaped by the Deaf community. She is grateful for her Deaf coworkers and friends who empowered her by sharing their experiences working with SLPs, both negative and positive. She also notes that she is part of the currently shifting mindsets within the broad field of speech-language pathology. Notably, write Burgan and co-author Amanda Connelly, the American Speech-Language-Hearing Association (ASHA) that originally supported an oral approach to deaf education is undergoing a change in perspective, and deaf-friendly resources and tools are becoming more available.

Photos courtesy of Sara Burgan



Left: Students are sure to achieve their maximum potential when they have a Student Services Team that advocates for their exposure to fully accessible visible language as early as possible.

Flashback ... It is Fall 2014, and I am a student studying to become an SLP in a class focused on augmentative and alternative communication (AAC). “AAC” describes multiple means of expressing language in ways other than spoken, the professor noted, and might include picture boards, special devices, apps, and American Sign Language (ASL). This—ASL presented only as another device to clarify speech—was my professional introduction to sign language. For me and my fellow students, a language as fully developed as our own was portrayed simply in relationship to spoken English. With no knowledge of d/Deaf people or the Deaf community, we had no reason to question the presentation. It wasn’t until three years later that I began to realize how astray I and my colleagues in the field of speech-language pathology had become.

To try to remedy this situation—a disservice not only to SLP students but to deaf and hard of hearing students and the Deaf community—we are suggesting changes in the education of speech-language therapists. And what better way to change a program than through a device with which we are all familiar: the Individualized Education Program (IEP). The IEP is a personalized roadmap that outlines the specific instruction, support, and services a student needs to thrive in the school environment (Belsky, n.d.). We, educators of deaf

and hard of hearing students, create IEPs to help our students achieve their maximum potential and to ensure inclusivity and full accessibility. Here, we present an IEP for SLP students.

An IEP for an SLP

Just like for our deaf and hard of hearing students, our IEP for SLP candidates goes straight to the point.

Members of the IEP Team

- SLP candidate
- SLPs and supervisors
- Audiologists
- ASL specialists
- Deaf community members

Determination for Eligibility

The SLP candidate demonstrates an interest in deaf and hard of hearing students as individuals in their own right, with a right to visual language and participation in community. The SLP candidate’s goal for future employment is to promote a language-rich environment for all deaf and hard of hearing children and to be an advocate to end language deprivation for those children.



Background Information

The SLP candidate should be aware of statistics related to deaf and hard of hearing children:

- One percent of American students receiving special education services have “deaf and hard of hearing” as their only area of eligibility (U.S. Department of Education, 2022).

Right: Field trips, such as this one with a Project-Based Learning class to Union Station in Washington, D.C., allow students to practice learned communication techniques.

Left: Creating a bilingual ASL and English environment that is highly visual, fully accessible for communication, and incorporates cultural understanding ensures deaf and hard of hearing students feel welcome and supported.

- Eighty percent of deaf and hard of hearing students attend mainstream schools (U.S. Department of Education, 2018).
- Ninety to 95 percent of deaf children are born to hearing parents (Mitchell & Karchmer, 2004). For most of these parents, their child is the first deaf person they meet, and they have no previous exposure to ASL (DesGeorges, 2016).
- Less than 10 percent of deaf children learn ASL (Watts, 2023).
- Ninety-eight percent of babies are screened for hearing loss before they leave the hospital. The Joint Commission on Infant Hearing (2019) recommends the following schedule: screening by 1 month of age, identification by 3 months of age, and early intervention by 6 months of age.
- In 1990, the Federal Drug Administration (FDA) approved use of cochlear implants in children. In 2020, the FDA lowered the age of implantation to 9 months (Cochlear, 2020).
- The medical community considers cochlear implantation the “standard of care” for deaf children (Tamati et al., 2022).



Impact Statement

The SLP candidate requires knowledge of how to set up and exploit a bilingual ASL and English environment that is highly visual, fully accessible for communication, incorporates cultural understanding, and includes culturally Deaf children and adult role models. The SLP candidate requires culturally appropriate training and resources to ensure optimal learning and a language-rich environment for deaf and hard of hearing learners.

Postsecondary Transition

The SLP candidate requires a course of study that supports the postsecondary goal of working in the field of deaf education.

Features of SLP and audiology education in the U.S. are:

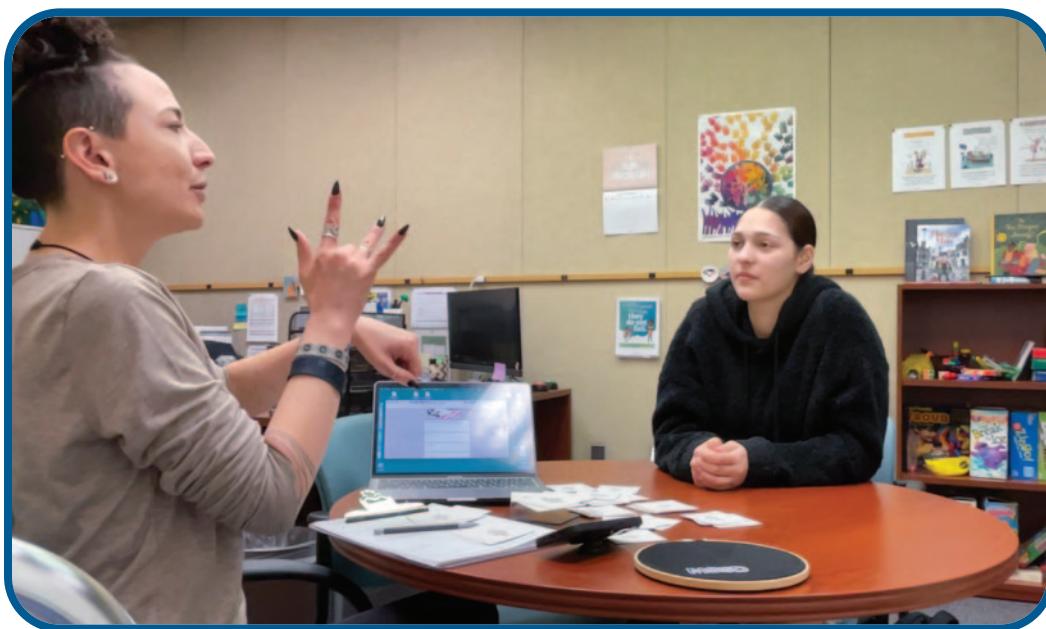
- Approximately 163,000 licensed SLPs work in the United States (U.S. Bureau of Labor Statistics, 2023).
- Speech-language pathology and audiology cover a wide range of issues. SLPs work with adults and children on issues such as stuttering, speech production, spoken and written language, executive function, voice quality, feeding and swallowing, and listening skills (ASHA, 2016); culturally Deaf consumers are a small percentage of the consumers with whom these clinicians work (ASHA, 2022b).
- To be licensed in speech-language pathology, a clinician must complete a master's level training program and a nine-month clinical fellowship.
- Two hundred and eighty-four accredited master's degree programs in speech-language pathology exist in the United States (Council on Academic Accreditation, 2024); a handful offer coursework related to deaf consumers (Language First, 2024). These are:
 - Gallaudet University, Washington, D.C.
 - Iona University, New Rochelle, N.Y.
 - Nazareth College, Pittsford, N.Y.
 - Emerson College, Boston, Mass.
 - Worcester State University, Worcester, Mass.

Postsecondary Transition Services

The SLP candidate will become affiliated with ASHA (www.asha.org), the national professional, scientific, and credentialing association for 234,000 members, certificate holders, and affiliates who are audiologists; SLPs; speech, language, and hearing scientists; audiology and SLP assistants; and students.

ASHA is undergoing a change in perspective, and deaf-friendly resources and tools are becoming more available and continue to be developed from a wide variety of sources. To date, ASHA has expressed a range of viewpoints and actions:

- Maintaining a practice portal to share evidence-based recommendations on a variety of topics, including the importance of providing a language-rich environment (ASHA, n.d.b.).



CREDIT: MATTHEW VITA

Above: A top priority for Burgan when working with students is ensuring their right to visual language.

- Increasing support for ASL; ASHA (2019) released a position paper affirming that ASL should no longer be treated as an AAC as it is a complex language distinct from English.
- Prioritizing the family's right to decide which language they feel is most appropriate (ASHA, n.d.a.) over the Language Equality and Acquisition for Deaf Kids (LEAD-K) mandates, which call for state-level legislative changes to prevent language deprivation in deaf and hard of hearing children (LEAD-K, 2016).
- Providing a profile of multilingual service providers;



Above: Burgan supports students in the classroom as they complete a project to ensure the carryover of skills learned in therapy sessions.

currently only 830 of their 217,886 members—SLPs and audiologists—report that they are fluent in ASL (ASHA, 2022a).

Goals

1. The SLP candidate will learn to advocate for deaf and hard of hearing children's exposure to fully accessible visible language as early as possible.
2. The SLP candidate will be proficient in ASL.
3. The SLP candidate will develop a "language first" approach and emphasize access to language before access to speech (Hall et al., 2019).
4. The SLP candidate will learn and recognize the importance of learning from Deaf people (CDC, 2022).

Specially Designed Services

The SLP candidate will be encouraged to explore the following:

The SLP candidate requires culturally appropriate training and resources to ensure optimal learning and a language-rich environment for deaf and hard of hearing learners.

- **Laurent Clerc National Deaf Education Center's portal** (<https://clerccenter.gallaudet.edu/ndec>) is filled with a wealth of resources for families and professionals working in deaf education.
- **Language First** (<https://language1st.org>) is a source of information for parents of deaf and hard of hearing children and for the professionals and schools that serve them. They also maintain a list of pro-ASL SLPs and other professionals.
- **Gallaudet University's Hearing and Speech Center** (<https://gallaudet.edu/hearing-speech-center/>) staff and alumni maintain a list (www.deaffriendlyaudiology.com) of signing audiologists and SLPs.
- **Most states have a state-run residential school for the deaf**, many of which offer statewide outreach services. Check out your individual state's school for the deaf online for more information.

Transportation to Related Services

Transportation will be provided to the SLP candidate to visit the local school for the deaf as well as for seminars, events, and conferences for continued education.

Extracurricular Activities

The SLP candidate will be encouraged to attend gatherings and events hosted by Deaf community members.

General Factors

The SLP candidate is eligible for Extended School Year services due to emerging skills and breakthrough opportunities.

Accommodations

Accommodations to be used by the SLP candidate with deaf and hard of hearing students to ensure an optimal learning environment include, but are

not limited to:

- Sign language interpretation—English/ASL interpreters and Certified Deaf Interpreters
- Captioning on all media
- Visual aids

Signatures

____ SLP candidate
____ SLPs and supervisors
____ Audiologists
____ ASL specialists
____ Deaf community members

References

American Speech-Language-Hearing Association. (n.d.a.). *White paper: Kindergarten readiness for children who are deaf or hard of hearing*. <https://www.asha.org/siteassets/uploadedFiles/LEAD-K-White-Paper.pdf>

American Speech-Language-Hearing Association. (n.d.b.). *Language and communication of deaf and hard of hearing children* [Practice Portal]. Retrieved from <https://www.asha.org/practice-portal/professional-issues/language-communication-deaf-hard-of-hearing-children/>

American Speech-Language-Hearing Association. (2016). *Scope of practice in speech-language pathology*. <https://www.asha.org/policy/sp2016-00343/#Domains>

American Speech-Language-Hearing Association. (2019). *American Sign Language (ASL)* [position statement]. <https://www.asha.org/policy/PS2019-00354/>

American Speech-Language-Hearing Association. (2022a). *Profile of ASHA multilingual service providers, year-end 2022*. <https://www.asha.org/siteassets/surveys/2022-profile-of-multilingual-service-providers.pdf>

American Speech-Language-Hearing Association. (2022b). *2022 schools survey: SLP caseload and workload characteristics*. www.asha.org/Research/memberdata/Schools-Survey/

Belsky, G. (n.d.). *What is an IEP?* Retrieved from <https://www.understood.org/en/articles/what-is-an-iep>

Centers for Disease Control and Prevention. (2022). *Embracing cultural humility and community engagement*. CDC Global Health Equity. <https://www.cdc.gov>

Cochlear. (2020, March 18). *Cochlear receives FDA approval to lower the age of pediatric cochlear implantation to 9 months*. <https://www.cochlear.com/us/en/corporate/media-center/media-releases/2020/fda-ped-9-months>

Council on Academic Accreditation. (2024). *Programs*. <https://caa.asha.org/programs/>

DesGeorges, J. (2016). Avoiding assumptions: Communication decisions made by hearing parents of deaf children. *AMA Journal of Ethics*, 18(4), 442-446. <https://doi.org/10.1001/journalofethics.2016.18.4.sect1-1604>

Hall, M. L., Hall, W. C., & Caselli, N. K. (2019). Deaf children need language, not (just) speech. *First Language*, 39(4), 367-395.

Joint Commission on Infant Hearing. (2019). *Year 2019 position statement: Principles and guidelines for early hearing detection and intervention programs*. <https://digitalcommons.usu.edu/jehdi/vol4/iss2/1/>

Language Equality and Acquisition for Deaf Kids. (2016, August). *LEAD-K FAQ*. <https://www.lead-k.org/wpcontent/uploads/2016/08/LEAD-K-Website-At-A-Glance-FAQ.pdf>

Language First. (2024). *Deaf-friendly SLP graduate programs*. https://docs.google.com/spreadsheets/d/1uMysUffjunUaUd3sJaW_8DGzVIYzeUtrQU03aMislGKk/edit#gid=0

Tamati, T. N., Pisoni, D. B., & Moberly, A. C. (2022). Speech and language outcomes in adults and children with cochlear implants. *Annual Review of Linguistics*, 8(1), 299-319. <https://doi.org/10.1146/annurev-linguistics-031220-011554>

U. S. Bureau of Labor Statistics. (2023, April 25). *Speech-language pathologists*. [https://www.bls.gov/oes/current/oes291127.htm#\(1\)](https://www.bls.gov/oes/current/oes291127.htm#(1))

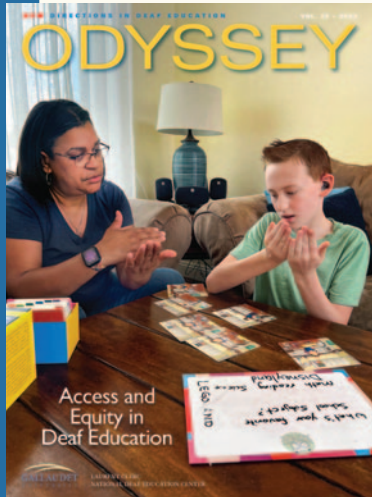
U.S. Department of Education. (2018). *Digest of education statistics, 2018*. National Center for Education Statistics (NCES). https://nces.ed.gov/programs/digest/d18/tables/dt18_204.60.asp

U. S. Department of Education (2022). *2022 annual report to Congress on the Individuals with Disabilities Education Act (IDEA)*. <https://sites.ed.gov/idea/2022-individuals-with-disabilities-education-act-annual-report-to-congress/>

Watts, P. (2023, June 17). *Why advocates say early sign language learning for deaf children is crucial*. <https://www.pbs.org/newshour/show/why-advocates-say-early-sign-language-learning-for-deaf-children-is-crucial>

Seeking Submissions for the 2025 Issue of Odyssey

THEME: Deaf and Hard of Hearing Students with Disabilities



This issue of *Odyssey* will focus on how deaf and hard of hearing students with disabilities—physical, sensory, cognitive, intellectual, social-emotional, and/or developmental—are provided with equitable access to education. Articles will explore how parents and caregivers, teachers, audiologists, administrators, and others ensure these students have the resources, supports, and services necessary to fully participate and succeed in both school and the community from birth to adulthood.

Thirty to 40 percent of deaf and hard of hearing children have some form of disability. These disabilities range from mild to severe. These children, sometimes referred to as “deafdisabled,” “deaf with disability,” or Deaf plus,” have the same rights to education as their nondisabled peers—and they have the same needs as all children. Historically, children with disabilities were too often thought of only in terms of their disability. Today, many practitioners manage the disability, and its accommodation, as they keep focus on student learning and the child’s social-emotional development. No longer are students with disabilities seen simply as students that need “fixing.” Instead, attention is on the dysfunction in the environment that prevents students from accessing the free and appropriate education to which they are entitled.

We would like to learn about your experiences. Please tell us about:

- **Supports and services:** What types of supports (e.g., resources, parent groups, online communities, workshops) are empowering you, as parents and caregivers, to advocate for your children so they receive the appropriate accommodations and services they need to thrive at home and at school?
- **Workshops and training:** What types of workshops and training have you experienced that shifted your attitude, or the attitudes of those around you, and allowed you or others to create initiatives and spur actions that cultivated a sense of belonging, achievement, or increased learning for these students?
- **Technology:** Has a new technology or the new implementation of an older technology been helpful to you and your students? What was it, how was it implemented, and how did the students respond?
- **Programming:** What kinds of programming, activities, tools, and strategies proved especially useful for students? Did you find a change in programming to be necessary? What was successful with these students in your program, school, or camp to promote maximum opportunities for learning and interaction?
- **Emotional validation:** How are you, as educators or other professionals, ensuring these students are validated as members of the learning community, that their experiences and perspectives are welcome, and that they feel like they belong?
- **Home supports:** What has been your experience with accommodating and supporting deaf and hard of hearing children with disabilities within the home? Are there accommodations that have ensured a more secure situation? How was communication effectively handled? What skills did family members need to learn?
- **Advocacy:** How have you, as a teacher or parent/caregiver, advocated for your deaf or hard of hearing child with disabilities? How did the school or program respond? What were the results of this advocacy? How were you able to make changes in the child’s environment?

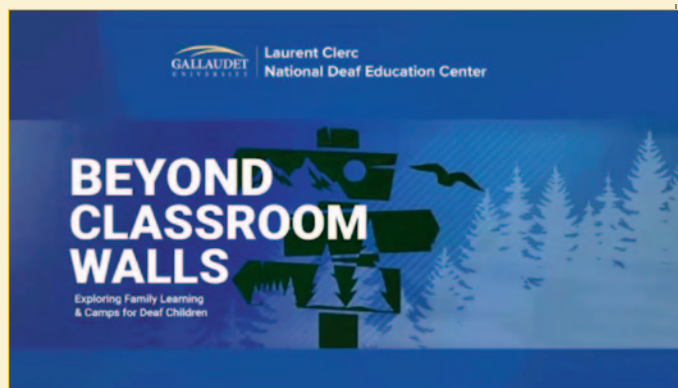


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Please email your ideas to Odyssey@gallaudet.edu. We will begin accepting submissions on **September 1, 2024**, and continue until **December 31, 2024**, or until the magazine reaches capacity. Contact us at any time with questions or to discuss your ideas.

NPO Virtual Events Showcase Deaf Camps and IEP Resources



By Stacy Abrams

The Clerc Center's National Programs and Outreach (NPO) recently hosted two free virtual events that were open to all.

Beyond Classroom Walls: Exploring Family Learning and Camps for Deaf Children

held on February 28, 2024, was primarily aimed at families. This event provided insights into legal rights and advocacy for after-school program accessibility as well as highlighted the importance of deaf-specific camps for building lifelong experiences and friendships. The panel discussion included three parents—Bart Goldbar, Dr. Beth Hamilton, and Claudia Hernandez—who shared their experiences and emphasized the value of immersion programs, where families can learn to support their deaf or hard of hearing children and connect with other families. The Clerc Center now offers an interactive camp listing (www.clerccenter.gallaudet.edu/deafcamps) by state, including options for deaf and hard of

hearing children, their hearing siblings, and children of deaf adults (CODAs).

Fitting the IEP Pieces Together: Parents, Teachers, Related Service Providers, and IEP

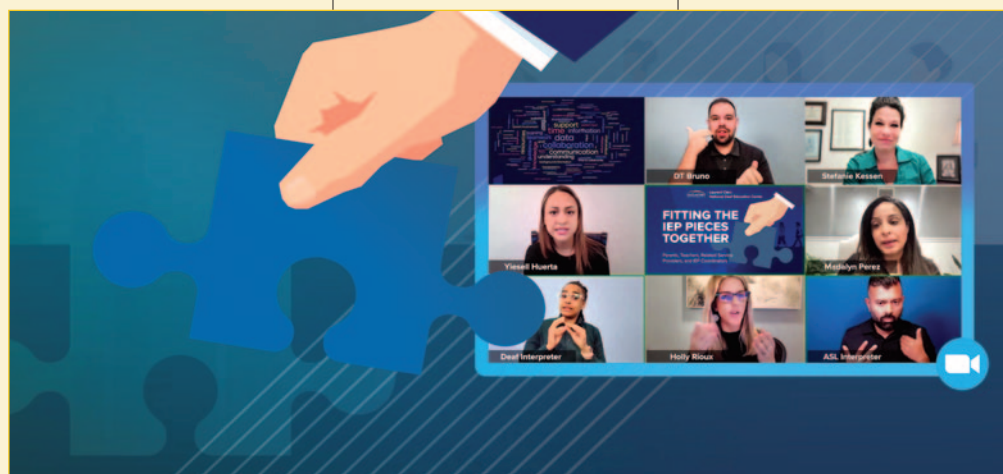
Coordinators was held on May 15, 2024. Moderated by DT Bruno, the panel featured Yiesell Huerta, a mother of a deaf child; Stefanie Kessen, an educator and founder of the Online Itinerant for professionals and families of deaf and hard of hearing students; Madalyn Perez, a learning disabilities teacher consultant; and Holly Rioux, a deaf social worker

specializing in mental health. The discussion focused on navigating Individualized Education Program (IEP) meetings and effective advocacy strategies. The NPO team also introduced the updated Parent Advocacy website (www.clerccenter.gallaudet.edu/parentadvocacy), which provides resources on IEP and 504 meetings, preparation checklists, and more.

A third virtual event, **Addressing Alcohol Use of Deaf and Hard of Hearing Youth: A Workshop for Family Members and Professionals**, is planned for

later this year. Dr. Christine Gannon, a professor in Gallaudet University's Public Health Program, and Dr. James Huang, director of Gallaudet's Student Health Services, will discuss how key experiences of deaf and hard of hearing youth, including isolation and language barriers, impact their alcohol use.

If you missed these virtual events, you can still watch them in the Clerc Center Online Community portal (www.clerccenter.gallaudet.edu/onlinecommunity). Register for future events here as well.



Clerc Center Hosts First Summer Immersion Experience for Administrators



By Lia Bengtson

The Clerc Center's National Programs and Outreach (NPO) unit held its first Administrators Summer Immersion Experience (ASIE) from June 24-28, 2024, as part of the Clerc Center's new Pre-K-12 State and School Partnerships initiative.

Eleven state- and school-level administrators from eight schools and districts from around the United States attended this weeklong experience, held at Kendall Demonstration Elementary School on the campus of Gallaudet University. The purpose of ASIE was to engage hearing leaders of deaf programs from around the country in American Sign Language (ASL) immersion, allowing them to build on their ASL skills and to gain a better understanding of Deaf culture and the unique

learning needs of deaf and hard of hearing students and teachers. ASIE gave these administrators an opportunity to connect and build relationships with colleagues within the field of deaf education, to gain insight into what other schools around the nation are doing, and to learn from Deaf content experts about best practices and new resources.

The theme of this year's ASIE was "Expanding Your Deaf Lens." Sessions focused on broadening the participants' lens from which they see and understand the deaf and hard of hearing students they serve while connecting with others in similar roles, to learning from one another as well as learning from the Clerc Center's own team of experts. Participants were able to immerse themselves in a variety of ASL-rich language

environments and to train for cultural competency in Deaf-led scenarios and gain a better insight and appreciation of ASL as a language, Deaf-centered narratives, and the Deaf experience.

ASIE Highlights

Highlights of the immersion week included having an opportunity to sit down and chat with Gallaudet

"Going to work on Monday and I have so much [information]! Going to have discussions with the district, and I feel better equipped. Before, I felt like I was scrounging around for justification, but now I feel everything is clearly laid out."

~ ASIE participant



University president Roberta J. Cordano, who shared some inspiring words with participants regarding the importance of their role for the success of deaf education in our country; viewing presentations on various topics, including language deprivation and the importance of connecting with the Deaf community; playing interactive ASL games; touring the campus of Gallaudet University and the Clerc Center's demonstration schools; and participating in cohort discussions.

There were also numerous presentations covering a variety of topics. Model Secondary School for the Deaf educational audiologist Amanda Connelly and Kendall Demonstration Elementary School speech-language pathologist (SLP) Amelia McCall discussed the importance of having Deaf-affirming SLPs and educational audiologists working with deaf and hard of hearing students. Their presentation highlighted appropriate terminology to use, a breakdown of classroom acoustics, how to best support each student by honoring their chosen language, advocating for appropriate resources, and the need for deaf and hard of hearing students to have access to culturally Deaf role models. Stacy Abrams, a project manager for early intervention in NPO, gave a presentation on her own experience as a deaf individual born into a

hearing family. Abrams has a passion for supporting hearing families with deaf and hard of hearing children, just like her own. She talked with the school administrators about the importance of families having access to other families similar to their own, to Deaf Mentors, and to professionals who will share unbiased information and let families explore their options.

ASIE participants also had the honor of having Theodore Miller, director of national operations at Mozzarella, Inc., come discuss the importance of vocational rehabilitation and job training. Mozzarella is a Deaf-owned and operated Neapolitan pizzeria, and its mission is to create career opportunities and celebrate talents in the Deaf community. They strive to support and give back to the community and have started a new teaching kitchen initiative here in



D.C., which has a 15-week culinary and hospitality course that provides direct instruction in

ASL and hands-on training. Miller gave administrators some “food for thought”: *How can they better prepare their students to be independent and ready for future employment and success?*



the BEST! For myself, staff, and students!” Overall, participants reported that, by the end of ASIE, they felt ready to approach their programs with a different mindset and a more Deaf-

The learning and connections made during ASIE will continue for this cohort. Participants were invited to join an online discussion group that provides opportunities for them to stay in touch and continue learning with and from each other. Their learning is also supported through resources and support from our State and School Partnerships team throughout the year.

ASIE Benefits

Participants enjoyed learning and connecting with other administrators in the field of deaf education. One administrator shared, “I’ve attended thousands of PDs [professional development sessions], and THIS is one of

centered lens. They felt that this program helped them better prepare to interact with a variety of stakeholders; gave them opportunities to utilize, practice, and improve their ASL skills, and that they were walking away with fresh ideas on how to create a more inclusive, Deaf-centered space for their students within their school systems. Another administrator summed up the experience at the week’s end, commenting, “Going to work on Monday, and I have so much [information]! Going to have discussions with the district, and I feel better equipped. Before, I felt like I was scrounging around for justification, but now I feel everything is clearly laid out.”

If you’re interested in joining us at ASIE next year, please contact clerccenter.partnerships@gallaudet.edu for more information!

MSSD Shines in National and International Competitions



By Tyrone Giordano

The Model Secondary School for the Deaf (MSSD) has been making appearances on the national and international competition scene!

Regionals. These teams, representative of a range of students from state schools for the deaf to deaf programs at mainstream schools, all competed to qualify for one of 16 slots at the Nationals,

hopeful for a three-peat. They fought their way through the regional and national tournaments with an 18-1 record all the way to the top, facing a championship rematch with the California School for the Deaf, Fremont (CSDF), whom they defeated last year. However, CSDF came out on top this year, with them pulling ahead in an early lead from which MSSD couldn't recover. W.T. Woodson High School and the Indiana School for the Deaf placed third and fourth in the championship, respectively. Congratulations to CSDF on their outstanding win!

MSSD's Academic Bowl team, having won championships two years in a row in 2022 and 2023, was

Mayadunne, Tristan "Pax" Holcomb, Levi Wood, Jessica Demme (coach), and Priscilla Biskupiak (coach).

To learn more about the Academic Bowl and for more information on team and individual awards from the 2024 Nationals, visit <https://gallaudet.edu/youth-programs/academic-bowl/>.

Robotics

MSSD's Robotics team, Eagles 1, had a phenomenal season this year! At the 6th National Technical Institute for the Deaf Regional STEM Center (NRSC) VEX Robotics Competition for the Deaf and Hard of Hearing, held in February 2024 at the Kansas School for the Deaf in Olathe, the MSSD team became the tournament champions, alongside the Texas School for the Deaf's Ace Tigers, and they also received the Excellence Award. This is the only national high school robotics competition that features



Academic Bowl

This year marked the 28th annual National Academic Bowl competition hosted by Gallaudet University, with 63 teams competing in the

held in April 2024, for a shot at the championship.

MSSD's Academic Bowl team, having won championships two years in a row in 2022 and 2023, was





students and teams who are all deaf or hard of hearing. Congratulations to both team champions—as well as to all the students from schools across the United States who participated and those teams that received awards—on a job well done!

MSSD's Robotics team also participated in a local high school VEX competition within D.C. before wrapping up an extraordinary season at the 2024 VEX Robotics World Championship, hosted by the Northrop Grumman Foundation and the Robotics Education & Competition (REC) Foundation. More than 20,000 students from all 50 states and more than 60 countries brought their custom-built robots to compete in high-energy, timed matches. The MSSD team placed 41st in the Opportunity division, one of

the toughest groups which produced the VEX Robotics World Champion.

MSSD's VEX Robotics team included Dalton D'Angelo, Christopher Godoy Lorenzana, Qilong Yu, Fiona Keegan, Holden Ewan, Yumeng Li (coach), and John Van Wey (coach).

To learn more about the

VEX Robotics World Championship, visit <https://recf.org/vex-robotics-world-championship/>. For more about 2024 NRSC VEX Robotics Competition team awards, visit www.robot-events.com/robot-competitions/vex-robotics-competition/RE-VRC-23-1558.html#awards.

Congratulations to All Teams

We couldn't be prouder of our MSSD students' achievements this year. We are also extremely proud of the many students from deaf schools across the nation participating in these tournaments and showing the world what deaf and hard of hearing individuals can do. We offer our heartiest congratulations to all the individual participants, teams, and coaches who participated in these exciting events!





Roberta “Bobbi” J. Cordano is the 11th president of Gallaudet University, the only university in the world where students live and learn in American Sign Language and English. Cordano is a fierce advocate for deaf leadership and sign language equity throughout all facets of life, including education, economic opportunity, and innovation. Previously, she held leadership roles in healthcare, served as a Minnesota assistant attorney general, and founded two bilingual charter schools for deaf and hard of hearing children. A proud Beloit College alumna, Cordano also earned a Juris Doctor degree from the University of Wisconsin. She serves on several boards and is a 2023 USA Today Women of the Year honoree.

Creating a National Imperative So All Deaf and Hard of Hearing Learners Can Thrive

By Roberta J. Cordano

Science has proven that the human brain prioritizes sign language no differently than it does spoken language. Why, then, do most of our classrooms?

Language, the ability to communicate with family, friends, and loved ones, is fundamental to human life. Signed or spoken, language impacts everything: our brain development, social and interpersonal skills, sense of belonging, critical thinking skills, reading and comprehension, educational attainment, career opportunities, and even civic engagement. Whether inside or outside of the classroom, the consequences of denying any child access to language and socially rich environments can be severe and lifelong.

Currently, interpretations of IDEA’s least restrictive environment (LRE) usually require deaf or hard of hearing students to demonstrate insufficient academic progress for a year or longer before they are put in bilingual visual language environments, causing them to be irreparably behind academically and socially. The costs of this “academic failure model,” steeped in the age-old “speak, then sign” binary language trap, are too high. This practice denies exposure to rich visual

language, learning, and social environments that deaf and hard of hearing children need at the outset. The impact of this practice is evident in significant education and employment gaps. For example, according to *Deaf Youth: What Does the Data Tell Us?*, published by the National Deaf Center on Postsecondary Outcomes (2023, <https://nationaldeafcenter.org>), fewer deaf than hearing youth have completed their education (high school, some college, or a bachelor’s degree); deaf BIPOC, deafdisabled, and deafblind students face additional barriers in education systems; and deaf youth are nearly twice as “disconnected” (not enrolled in school or employed) as their hearing peers. Further, according to the Deaf Postsecondary Data from the American Community Survey data visualization tool (2024, www.nationaldeafcenter.org/dashboard), nearly half of deaf people aren’t in the labor force. Our nation is in clear need of a new 21st century standard for inclusive education for deaf and hard of hearing children. We can deliver it by doing the following.

Whether inside or outside of the classroom, the consequences of denying any child access to language and socially rich environments can be severe and lifelong.

Make bilingual learning—access to education in both American Sign Language (ASL) and English—the minimum requirement for LRE practices. Deaf and

hard of hearing students must FIRST be placed in rich bilingual, visual learning environments. If bilingual learning environments are not available in the child's area, sign language (e.g., ASL) courses should be offered as a world language for the whole school. This will create a visually vibrant sign language environment for deaf and hard of hearing children with their peers, providing an equitable linguistic environment. Teachers in these programs, who will often be deaf or hard of hearing, can be mentors and role models, reducing the isolation for the deaf or hard of hearing students. The tremendous lifelong benefits of brain development through the use of sign language are a win-win for education.

Strengthen the nation's pipeline of deaf/hard of hearing and/or sign language-fluent teachers. Today, the

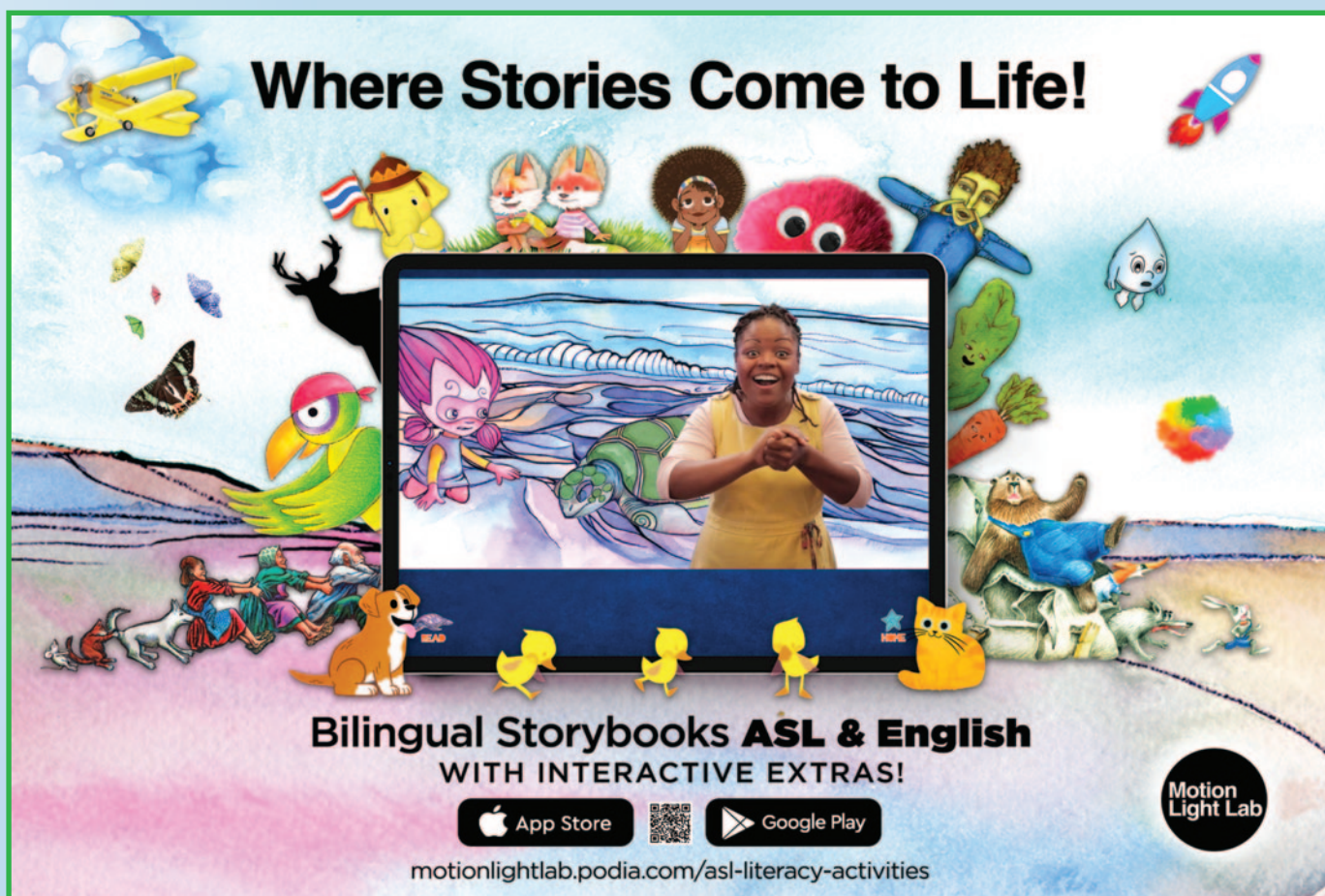
number of deaf/hard of hearing and/or signing teachers is less than 12 percent compared to about 42 percent in the mid-1900s. We must incentivize more signing students to enter the profession through full scholarship funding. Teacher screening and certification processes must be updated to ensure a stronger bilingual educational workforce.

Create a national imperative to expand bilingual learning programs. Gallaudet's Laurent Clerc National Deaf Education Center is a global leader in bilingual learning models. It is rapidly increasing its partnerships with schools, school districts, and state departments of education to expand the quality of education for all deaf and hard of hearing children. The Clerc Center's work and its Clerc Center Online Community (www.clerccenter.gallaudet.edu/onlinecommunity) draw from

many successful bilingual learning programs that demonstrate that academic excellence can, in fact, be achieved through environments delivering both ASL and English.

These types of actions set the foundation for this national imperative and create a path to ensuring inclusive classrooms for deaf and hard of hearing learners.

All deaf and hard of hearing children deserve to thrive. It's time to build on what we know works. At Gallaudet University and the Clerc Center, our students, employees, and alumni demonstrate the success of our bilingual way of being. Every deaf and hard of hearing child deserves to experience the success that we see in our community's leaders, changemakers, and innovators every day.



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