



# ADDRESSING LANGUAGE DEPRIVATION USING DEAF COMMUNITY MODELS

## WHITE PAPER

Allen Sanderson, Kandice Hunt, Rylina Dey

*October 2023*

### ABSTRACT

This article draws out the use and positive impacts of Deaf community models to support language development for language deprived Deaf and Hard-of-Hearing children (DHH). The term "language deprivation" is used in different ways in different contexts when discussing educational approaches for DHH children. Given that this can lead to confusion for education providers, this paper purports to clarify language deprivation towards conversations to integrate Deaf community models for targeted language development. Furthermore, this paper synthesizes the information and reviews current practices in addressing language deprivation in public schools with a case example and discussion of educational placements. This includes clarification on the specific role of a Language Facilitator to address language deficits and how it differs from the role of an Educational Interpreter. Language rich interventions with cultural features can lead to more inclusive, Deaf community-centered approaches that provide systematic language access and belonging for DHH children with language deprivation. In addition, this paper reviews the research and points out evidence-based tools to support an inclusive model for natural language acquisition. The process of implementing a fluent Deaf Community model to target gaps in a DHH child's language is addressed along with preliminary data to support its effectiveness.

# What is Language Deprivation?

In discussions about using Deaf community models to educate Deaf and Hard-of-Hearing (DHH) children, the topic of language deprivation often arises. It is understood the multi-varied onset of language deprivation can have ambiguous or confusing meanings within these conversations. It is commonly used to refer to different issues related to DHH children's deficits in acquiring a foundational first language (L1). Other instances would include when a DHH child does not have full grasp of either L1 or L2 (e.g. semi-lingual or a-lingual).

Specifically, language deprivation is brought up to explain why many DHH children struggle to develop strong language skills. However, there are varied interpretations of what causes this deprivation and what it entails. For this paper, perceptions of language deprivation are addressed through this empirical definition from Wyatt Hall et al., (2017) "Language deprivation occurs due to a chronic lack of full access to a natural language during the critical period of language acquisition (when there is an elevated neurological sensitivity for language development), approximately the first five years of a child's life."

Clarifying the specific meaning of language deprivation is important so that it can be addressed appropriately when considering educational approaches for DHH children. Being clear about what is meant when discussing language deprivation will lead to more productive conversations about utilizing Deaf community models to promote healthy language development. It is particularly observed within mainstream schools and the Deaf Community, as well as with educators that have first-hand experience, the problem of language deprivation is well-known. Programs and specialists (e.g. Deaf Mental Health) that serve DHH people usually know some a-lingual or semi-lingual deaf people within their local communities. In 2014, Dr. Sanjay Gulati gave a lecture on this unfortunate but common reality of language deprivation in deaf people. As specified by Gulati in his lecture, language deprivation can happen with hearing people but does not happen as often as it does with deaf children. When one looks at Wikipedia and searches for language deprivation, the same five names are found. Meaning that language deprivation in hearing people has happened maybe, twice per century. That is five well-known cases in 300 years. In Gulati's clinic, however, he stated he might see five deaf people with language deprivation every day (Gulati, 2014).

In addition to the above definition and prevalence, there are current diagnostic dilemmas regarding language deprivation. If deficits in language are believed to be ongoing, how should one know the extent or quantity of deprivation in a DHH child? Unfortunately, this is not always straightforward. As researched by Glickman (n.d.), "There are few research validated tools, especially for measuring expressive sign language, and no agreed upon criteria for measuring language pathology associated with deprivation." In addition to that acknowledgment, Hall et al. (2017), cited that an agreed-upon diagnostic label continues to escape the field, deaf people and professionals frequently encounter the consequences associated with developmental experiences of language deprivation (Gulati, 2003).

Despite this, there are strong language level indicators of language deprivation that can demonstrate the need for more explicit support for language acquisition, such as the proposal of this paper to establish a wider prevalence of Deaf community models for systematic language access and acquisition. According to a recorded presentation provided by Glickman, (n.d.) the following indicators of deprivation can apply (*not all these need to be present for language deprivation to be evident*):

- **Poverty of flow of speech or thought (answering in brief replies and unable to elaborate with more information).**
- **Acting out of feelings**
- **Reduced 'fund of information'**
- **Struggles in relationship building and connecting with people**
- **Difficulty with emotion regulation (coping). Minimal use of words or difficulty identifying the emotion being felt.**
- **Difficulty learning**
- **Have difficulty establishing who did what to whom and when**
- **Have difficulty seeing patterns (verbal reasoning)**
- **Struggles with abstract thinking (inferential)**
- **Struggles with empathy and Theory of Mind**
- **Struggles with concept of time and linear organization**
- **Common language deficits**
- **Poor language development means poor cognitive development**
- **Time and tense: telling a linear story**
- **Cause and effect: especially how my behavior affects others**
  - **If this, then that (consideration of possibility)**
  - **This relates to that...**
  - **This means that...**
  - **Problem solving: identifying problems - the pros and cons**



As cited by Glickman, when early childhood sign language exposure is discouraged or not offered, it amounts to a high-risk strategy. In the event when implantation fails, the child may have neither a signed nor spoken language foundation (Gulati, 2019; Szarkowski, 2019). Thus, opportunities for deaf children to develop native sign language abilities dwindle, resulting in more deaf people without native language skills in any language (Glickman, n.d.). Furthermore, whether the team is addressing language access, language proficiency, or developmental outcomes, one will find that the causes of language deficits are highly interrelated. From the practices and preliminary information presented, the authors believe comprehensible language exposure, access, inclusion, and belonging from a Deaf community model is one of the most wholesome and supportive approaches for the language delayed DHH population. The prevailing hope is that conversations centering on language deprivation can be more impactful with discernible specifics to help drive appropriate practices towards inclusive and explicit language support for the DHH person.

## **A Review of Current Practices in Addressing Language Deprivation in Public Schools**

Imagine a Deaf student who has just moved to a school district from a foreign country. The student is in upper elementary school and communicates with gestures and behaviors. The district has an itinerant

Teacher of the Deaf and there are self-contained classes for students with intellectual disabilities. Typically, the Teacher of the Deaf works with students once or twice per week and if ASL is needed for communication, an interpreter is assigned. In this hypothetical case, residential schools and self-contained programs are not an option due to distance from home. With no linguistic foundation, how will

this child develop language? How will the student make friends or communicate with teachers? Without a language, how does the team even begin to integrate academic content?

Current practices and placements to address language deprivation vary in public schools given that placements range across the Least Restrictive Environment continuum. While the National Association of State Directors in Special Education (NASDSE, 2018) encourages districts to consider the Least Restrictive Environment to be a Language Rich Environment for DHH students, the availability and use of such placements is not consistently applied. Students in rural areas might have an itinerant Teacher of the Deaf and an interpreter who may or may not be licensed or qualified. Students in larger districts may have access to a classroom with other deaf and hard of hearing students through resource or self-contained services, while other students attend state and charter schools for the deaf where communication access is variable. Further impacting the level of access, state requirements are not uniform for teachers of the deaf, which leads to some who can directly communicate with their students who sign, and others who must use an interpreter (Luft et al, 2022). In fact, Luft et al (2022) found that only 10 states require ASL communication proficiency to be a certified Teacher of the Deaf. To compound issues with language deprivation and access, another current factor affecting current provision of services is staffing shortages of certified or qualified Deaf Educators, Interpreters, and Pediatric Audiologists to provide required IEP services (Luft et al, 2022).

To address language development, there are a variety of research and evidence-based tools such as the Visual Communication Sign Language Checklist (VCSL) researched and published by Gallaudet University (Simms et al, 2013), the Auditory Learning Guide (ALG) developed by Beth Walker Wooten (2016), the Bloom and Lahey Model: Normal Developmental Sequence of Expressive Language chart adapted by

Vernelson (2009), and the Cottage Acquisition Scales for Listening, Language, and Speech (CASLLS) developed by the Sunshine Cottage. The number of teachers and therapists trained to use such tools with fidelity is inconsistent across districts, schools, and states. The authors have observed disparity in quality in training across districts and states.

While there are research and evidence-based language development charts, there is no set curriculum for developing language in students who are language deprived. However, the amount of literacy programs and curricula specific to DHH students available for teachers has increased over the last ten years. Programs, generally, use curricula such as Fairview Learning, Bedrock Literacy, Bilingual Grammar Curriculum, Foundations for Literacy, and Fingerspelling our Way to Reading. All of which require some foundational language to begin.

When DHH students enter school with language deprivation and/or with semi-lingualism, common practice is to place students in classrooms with interpreters or teachers of the deaf with the assumption that language exposure and bombardment is enough to build a language foundation. However, researchers concur that direct, explicit instruction in a developmental sequence using natural language acquisition as the model is best practice for language development. The use of Educational Interpreters alone to combat language deprivation is addressed by Caselli et al. (2020) who indicates that this intervention prolongs and perpetuates language deprivation. Rather, Deaf students need appropriate research and evidence-based practices for the development of their first language. In the case of ASL development, having a solid L1 (ASL) is crucial in developing an L2 (English) (Monikowski, 2004). Caselli et al. (2020) proposes that evidence does not exist to support the use of Educational Interpreters to single handedly meet the needs of students with language deprivation.

The research further indicates across multiple sources that interpretation does not replace direct communication for language acquisition. Cerney (n.d.) iterates that language has building blocks and that there are rules on how those blocks are put together. Before a student can access an interpreted education, basic language fluency is needed, and that is best addressed through native language users (Cerney, n.d.). The National Association of Interpreters in Education (NAIE) further points out that Educational Interpreters may act as language models for students developing language and that this process must be guided by educational professionals (NAIE, 2019).

It is well-known that language acquisition occurs through communication with a variety of models including adults and peers. Additionally, the authors have observed that targeted language instruction that occurs through direct communication in the child's preferred mode of communication achieves catch-up language growth, typically of more than one year in one year's time, regardless of the type of communication. This is what the Language Facilitator Model strives to achieve.

## **A Novel Method for Addressing Language Deprivation in Public Schools**

Remember that example student who moved from a foreign country to a school district in the United States? This scenario is a prime example to demonstrate the implementation of the Language Facilitator Model. Using this model, instead of placing an interpreter with this student, the district implements the services of a Language Facilitator in the general education setting with direct and indirect support from a Teacher of the Deaf. Ideally, the Language Facilitator is a Deaf adult who holds a minimum of a bachelor's degree, is fluent in ASL and has strong written English skills. Competencies and credentials may include an ASL Proficiency Interview

4+, Certified Deaf Interpreter, and/or passing the Educational Interpreter Performance Assessment Written Test.

## **What is a Language Facilitator?**

It must be clarified that the term, "Language Facilitator," is often used interchangeably with an Educational Interpreter to circumvent licensure and qualification requirements. This paper refers to a Language Facilitator as an individual who works with a DHH student with language deprivation in the school environment, in partnership with a Teacher of the Deaf (or other professional with expertise in language development for DHH students) to facilitate language development directly and explicitly across the school environment, using natural language acquisition as the model. Due to the daily interactions and language intensity, the Language Facilitator tethers in developmental language targets, executive functioning development, pragmatics, self-concept, self-advocacy, and academics across the curriculum (Hunt et al, 2023).

The role of the Language Facilitator includes, but is not limited to:

- 1.Targeting Language Development
- 2.Documenting language progress including samples and data. Data includes quantitative and qualitative information.
- 3.Incorporating whole child development and making connections in the areas of pragmatics, Theory of Mind, Social/Emotional Skills, Self-Concept, and Self-Advocacy

Language development is addressed through the student's primary mode of communication. It is important to note that communication for Deaf/Hard of Hearing students is on a spectrum and is not binary. Figure 1 indicates the continuum of communication, indicating that most Deaf/Hard of Hearing students are multi-modal in communication (Hunt et al, 2023).

Figure 1.

Key: A = Auditory, O = Oral, S = Sign

Receptive language continuum:

**A                      As                      AS                      Sa                      S**

Expressive language continuum:

**O                      Os                      OS                      So                      S**

Figure 1. Demonstrates the language continuum for DHH individuals. Adapted from Nussbaum et al, 2012.

**Who Receives the services of a Language Facilitator?**

To determine the need for Language Facilitator services, it is best to start with a comprehensive evaluation that includes non-verbal cognition, academic or pre-academic achievement, language and communication, and functional skills. Generally, students with discrepancies between their cognitive ability and language abilities of at least a 3-year gap are candidates for this service. The demonstration of average or above average intelligence scores indicates that the student has the potential for language catch-up growth. This needs to be optimized by explicit, direct, developmental, and targeted language instruction that leads to generalization of skills (Hunt et al, 2023).



**Who addresses Language Deprivation in the School Setting?**

When a DHH child is identified to be language deprived, the decision of the best person to support that child’s overall success in the classroom will determine the rate of their language development. In educational settings, often there is an Educational American Sign Language (ASL) Interpreter that is placed with the DHH child to provide support to receive the content. However, if the DHH child is language deprived and has no established L1, how is that child receiving the content to the extent of their peers?

“The purpose of an Educational Interpreter is to accurately convey messages between two different languages” (NAD, n.d.). The Language Facilitator, however, scaffolds the content and integrates



language targets within the child's zone of proximal development. Implementing a Deaf community model can address the language deprivation the child is experiencing in various ways, not only conveying the meaning of the message shared, but encompassing the culture and community that Deaf members share. "Perhaps the most important skill that interpreters, who did not grow up in Deaf culture, can learn is how to value and learn from the experiences of Deaf individuals, and see them as credible sources of information about their own lives and language, as the Deaf experts they are. For example, CDIs use culturally appropriate features such as pausing, eye gaze, and head nods more frequently than hearing interpreters" (Ressler, 1999).

Many interpreters have not been immersed into Deaf culture to be able to share the skills that Deaf mentors can provide along with CODAs (Child of Deaf Adult) and even SODAs (Sibling/Spouse of Deaf Adult) for the child. People are not born with culture; rather, they are born into a culture where strategies of survival are introduced to members of the community as they grow older. Ultimately, culture provides community members with access to historically created time-tested solutions for effective living that have been transmitted over generations (Holcomb, 2013). The Deaf adult can use challenging situations to incorporate language targets and developmentally appropriate Theory of Mind, Executive Functioning, and Self-Advocacy skills to engage the student in this problem-solving process. Finally, having Deaf Language Facilitators also allows the student to have a native linguistic model (Hunt et al, 2023).

Implementation of a Deaf community model, CODA or SODA can target the gaps that the child expresses through natural communication and with support from the Teacher of the Deaf and the data shown in testing to prove their cognitive ability, is goal oriented to address their language deprivation. Through

implementing a Language Facilitator – primarily Deaf or a CODA – preliminary evidence shows that language deprivation can be adequately addressed, and language acquisition can be accurately targeted with direction given from the Teacher of the Deaf. The goal of Language Facilitators is to escort/mentor/guide/tether students to natural language acquisition pathways so they can communicate, connect with others, learn the academic content being taught and be engaged in their own learning and classroom (Hunt et al, 2023).

## **The Process of Implementation**

The process for Language Facilitation is systematic and includes evaluation, language sampling, developmental targets, guides for the facilitator, research and evidence-based facilitation strategies, and data collection. The team begins with a comprehensive evaluation including cognition, academic achievement, and language assessments. Then, a student is charted on one or more developmental language charts such as the VCSL, ALG, or CASLLS as mentioned above, which allows the Teacher of the Deaf to identify the developmental gaps that need to be addressed. Additional developmental areas such as self-concept, self-advocacy, and pragmatics may also be addressed through charts and probes. Identified targets are prioritized in developmental order and narrowed down to the first objectives for integration. Typically, the Language Facilitator focuses on three to five objectives at a time, depending on the student's rate of progress (Hunt et al., 2023).

Objectives are laid out on a learning guide and discussed with the Language Facilitator to include strategies, integrative activities, and data collection methods. As the Language Facilitator implements the targets, qualitative and quantitative data are collected and reviewed. The Teacher of the Deaf and Language Facilitator collaboratively adjust methods





# Conclusion

Language deprivation in public schools that serve Deaf and Hard-of-Hearing is a complex issue with various research and a paucity of evidence-based tools. The case study therein illustrates current public-school consideration of placement and important decisions that need to be made for language access and development. Educational Interpreting alone does not replace direct communication, nor is it sufficient to address language deficits. As a solution to this problem, the paper outlines a novel method using Deaf community models as a Language Facilitator. In closing, the process of systematic implementation directly impacts language access for the DHH child; furthermore, the preliminary data reinforces the model's effectiveness for steady language acquisition and growth when applied appropriately with fidelity and with competent, qualified, and certified team members.

## References

- Caselli, N., Wyatte, H., & Henner, J. (2020). *American Sign Language Interpreters in Public Schools: An Illusion of Inclusion that Perpetuates Language Deprivation*. *Maternal and Child Health Journal*, Volume 24. <https://doi.org/10.1007/s10995-020-02975-7>. 1323-1329.
- Cerney, B. (n.d.) *Language Acquisition, Language Teaching, and the Interpreter as a Model for Language Input*. Retrieved from: <http://handandmind.org/LgAcquisition.pdf>
- Glickman, N. (n.d.). *Language Deprivation Syndrome*. Language First Learning Library. <https://courses.language1st.org/courses/language-deprivation-syndrome>
- Gulati, S. (2014). *Language Deprivation Syndrome Lecture* [YouTube Video]. In YouTube. [https://www.youtube.com/watch?v=8yy\\_K6VtHJw](https://www.youtube.com/watch?v=8yy_K6VtHJw)
- 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>
- Hunt, K., Sanderson, A., Thibodeau, R., Spainhour, S. (2023). *A Meta-View on Language Facilitation: Language Acquisition through Developmental Connections*. [Unpublished Manuscript].
- Luft, P., Fischgrund, J.E., Eardley, A., Tanner, C., & Reusser, J. (2022). *Identifying Well-Prepared Teachers of Deaf and Hard of Hearing Students: Federal Legislation Versus Inconsistent State Requirements*. *American Annals of the Deaf* 167(2), 101-122. [doi:10.1353/aad.2022.0024](https://doi.org/10.1353/aad.2022.0024).
- Monikowski, C. (2009). *Language myths in interpreted education*. *Educational Interpreting*, 48-60. <https://doi.org/10.2307/j.ctv2rr3fvx.5>

Nussbaum, D., Waddy-Smith, B., Doyle, J. (2012). *Students Who are Deaf and Hard of Hearing and Use Sign Language: Considerations and Strategies for Developing Spoken Language and Literacy Skills*. Seminars in Speech and Language/Volume 33, Number 4. Retrieved from: <https://clerccenter.gallaudet.edu/national-resources/documents/clerc/s-0032-1326912-Nussbaum.pdf>

National Association for Interpreters in Education. (2019, January). *Professional Guidelines for Interpreting in Education*. NAIE Retrieved from: <https://naiedu.org/wp-content/uploads/2023/01/NAIE-Professional-Standards-and-Guidelines-4.19.pdf>

National Association of State Directors of Special Education, Inc. (2018, September). *Optimizing Outcomes for Students who are Deaf or Hard of Hearing, Third Edition*. NASDSE. <http://www.nasdse.org/docs/nasdse-3rd-ed-7-11-2019-final.pdf>

Ressler, C. (1999). *A comparative analysis of a direct interpretation and an intermediary interpretation in American Sign Language*. Journal of Interpretation, 71-102. Retrieved from: <http://ojs.library.ubc.ca/index.php/criticaled/article/view/186129>

Simms, L., Baker, S., & Clark, M.D. (2013). *The Standardized Visual Communication and Sign Language Checklist for Signing Children*. Sign Language Studies 14(1), 101-124. [doi:10.1353/sls.2013.0029](https://doi.org/10.1353/sls.2013.0029).

Vernelson, S. (2009). *Bloom and Lahey Model: Normal Developmental Sequence of Expressive Language*. Retrieved from: <https://www.studocu.com/en-us/document/nova-southeastern-university/communicationdisorders-infancy-preschool/bloom-and-laheys-model-exp-lang-chart/8336024>

Wooten, B.W. (2016). *Auditory Learning Guide*. Hearing First. Retrieved from: <https://www.hearingfirst.org/m/resources/82>

## Author Affiliations

### Writers:

- Kandice Hunt, M.Ed
- Allen Sanderson, M.Ed
- Rylina Dey, EIPA 3.7

### Reviewers:

- Mariann Carter, M.S., M.Ed., EIPA 3.9, NBCT-Retired – Owner and Lead Consultant, Certified Administrator, Teacher of the Deaf at Carter Hears!