EARLY LANGUAGE ACQUISITION

REAL

Giving Deaf and Hard of Hearing Babies A Real Start with Language

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Research across developmental psychology, linguistics, neuroscience, and deaf education demonstrates that early, consistent access to a fully accessible language is critical for healthy cognitive, social, and academic development. Restricting access to ASL places deaf and hard of hearing children at risk for language deprivation, while strong ASL proficiency and early bilingual exposure support literacy, language processing, and cognitive flexibility. Collectively, these research studies underscore the need for early and measurable language access for deaf and hard of hearing children from the start.

Brooks, R., & Meltzoff, A. N. (2015). Connecting the dots from infancy to childhood: A longitudinal study connecting gaze following, language, and explicit theory of mind. Journal of Experimental Child Psychology, 130, 67–78. https://doi.org/10.1016/j.jecp.2014.09.010

Significance: Early gaze-following behaviors in infancy predict stronger later language development and theory of mind abilities highlighting how early social attention supports linguistic and cognitive growth and emphasizes the importance of accessible visual communication environments in early childhood.

Hall, M. L. (2020). The input matters: Assessing cumulative language access in deaf and hard of hearing individuals and populations. Frontiers in Psychology, 11, Article 1407. https://doi.org/10.3389/fpsyg.2020.01407

Significance: Early accessible language exposure, including both the quantity and quality of input, strongly predicts later linguistic and cognitive development, underscoring the role of ASL as a foundational language that supports long-term development.

Hall, M. L., & De Anda, S. (2022). The Estimating early language input in deaf and hard of hearing children with the Language Access Profile Tool. American Journal of Speech-Language Pathology, 31(5), 2132–2144. https://doi.org/10.1044/2022_AJSLP-21-00336

Significance: The Language Access Profile Tool (LAPT) provides a framework for systematically documenting and quantifying early language input, both auditory and signed, in deaf and hard of hearing children, providing guidelines for ensuring deaf and hard of hearing children receive consistent, accessible language exposure to prevent language deprivation.

Hall, W. C. (2017). What you don't know can hurt you: The risk of language deprivation by impairing sign language development in deaf children. Maternal and Child Health Journal, 21(5), 961–965. https://doi.org/10.1007/s10995-017-2287-y

Significance: Restricting access to sign language places deaf children at risk for language deprivation, which can lead to long-term cognitive, academic, and psychosocial consequences. This framing of language deprivation as a preventable risk factor supports policies that ensure early access to accessible language, including sign language.

Holcomb, L., Golos, D., Moses, A., & Broadrick, A. (2021). Enriching deaf children's American Sign Language phonological awareness: A quasi-experimental study. Journal of Deaf Studies and Deaf Education, 27(1), 26–36. https://doi.org/10.1093/deafed/enab028

Significance: Explicit ASL phonological awareness instruction strengthens linguistic awareness in deaf children and supports broader language and literacy-related skills demonstrating how developing ASL phonological awareness can contribute to stronger reading and spelling outcomes.

Novogrodsky, R., Fish, S., & Hoffmeister, R. (2021). Deaf children's ASL vocabulary and ASL syntax knowledge supports English knowledge. Journal of Deaf Studies and Deaf Education, 27(1), 37–47. https://doi.org/10.1093/deafed/enab029

Significance: Stronger ASL vocabulary and syntactic knowledge are positively associated with English reading comprehension and literacy outcomes, providing empirical support for bilingual education models and reinforcing ASL proficiency as a foundation for English literacy development in deaf education.

Petitto, L. A., Berens, M. S., Kovelman, I., Dubins, M. H., Jasinska, K., & Shalinsky, M. (2012). The "Perceptual Wedge Hypothesis" as the basis for bilingual babies' phonetic processing advantage: New insights from fNIRS brain imaging. Brain and Language, 121(2), 130–143. https://doi.org/10.1016/j.bandl.2011.05.003

Significance: Early bilingual language exposure enhances infants' phonetic discrimination and cognitive flexibility, supporting advantages in how they perceive and process language. Experiencing language bilingually, including both signed and spoken/printed forms, can strengthen learning by promoting more flexible and efficient language processing early in development.

Petitto, L. A., Holowka, S., Sergio, L. E., & Ostry, D. J. (2016). The Perceptual Wedge Hypothesis: Implications for language acquisition and cognitive development in deaf and hearing infants. Frontiers in Psychology, 7, Article 1757. https://doi.org/10.3389/fpsyg.2016.01757

Significance: Early exposure to bilingual language modalities, including both signed and spoken/print, enhances perceptual and linguistic processing, an advantage described as the "perceptual wedge." This suggests that early bilingualism supports neural and cognitive organization in ways that create richer pathways for language learning.