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Speech and sound
are absolutely necessary
to become a successful reader.



Brain and Language Laboratory for Neuroimaging

A resource hub of the NSF Science of Learning Center
for Visual Language and Visual Learning

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- ▶ Studies of hearing children have found that they use multiple pathways to successful reading. BL2 and VL2 studies of skilled deaf readers have found that they also develop multiple pathways to successful reading, including the use of visual sign phonological segmentation and patterning, visual patterning in print, and other cues, to decode English print.
- ▶ Like a hearing child who builds a sound phonology from the bits of sound segments and the patterning around them (sound-phonetic and sound-syllabic units), the deaf emergent reader builds an identical abstract level of language organization from the bits of visual signed language segments and the patterning around them (sign-phonetic and sign-syllabic units in Visual Sign Phonology). This critical information enables them to segment and decode text on the printed page en route to meaning.
- ▶ Moreover, deaf children who are taught these building blocks of sign-phonetic and sign-syllabic organization (inclusive of fingerspelling) receive powerful reading benefits in English, even those with cochlear implants or hearing aids and who receive intensive speech training.

Implications: Speech and sound are not necessary for successful reading. Recognizing that VSP can support, even enhance, development of English reading skills can have a revolutionary impact. Sign-phonemic awareness and fingerspelling segmentation can be incorporated into classroom strategies to catapult reading success.