

Combining manual signs and oral speech can promote language production of young children with disabilities

What does research tell us about the role simultaneous communication can play in the language development and speech production of children with disabilities?

Signs are pointing toward success—especially when they are accompanied by spoken words.

Researchers at the Center for Early Literacy Learning (CELL) analyzed 33 studies focusing on the relationship between adult use of *simultaneous communication*—oral language combined with some type of sign language—and the speech and language production of preschool-aged children with disabilities who had little or no oral language ability. Results showed that, regardless of the type of sign language used, adults' use of simultaneous communication facilitated the children's speech and oral language production.

The analysis of the studies, which included 216 young children with a variety of disabilities, showed that a number of variables, such as the type or extent of disability, did not alter the beneficial effects of simultaneous communication. While some parents or educators might be concerned that signing could impede a child's speech production, the analysis found that clearly was not the case. Adult use of simultaneous communication was found to increase both the children's spontaneous and their prompted speech and oral language production.

Contributing to the success of the simultaneous communication interventions were the use of reinforcers such as access to desired objects and activities, desired edibles, verbal or physical praise, and tokens had a positive effect. In the case of interventions involving groups of children, more intervention sessions and more



“Do you want to read a book?”

Simple manual signs can be combined with speech as part of a child's everyday activities and experiences, reinforcing many aspects of language development.

months of participation in the sessions were directly related to the children's increases in speech and language production. In interventions with individual children this was not the case, but that is because these tended to be more frequent and more intense interventions.

Simultaneous communication is recommended as an intervention practice for children with little or no communication skills and for whom other teaching methods have not been successful.

This *CELLnotes* summarizes findings reported in Dunst, C. J., Meter, D., & Hamby, D. W. (2011). Influences of sign and oral language interventions on the speech and oral language production of young children with disabilities, *CELLreviews* 4(4), 1-20.

Acting on the Evidence

Download free, two-page *CELL*practices guides in versions for parents or practitioners at www.earlyliteracylearning.org

Staff of CELL have created a number of practice guides especially for parents and early childhood practitioners to encourage putting this research evidence to use in home, community, and classroom settings. All of the two-page practice guides listed below are available for free download on the CELL project web site: www.earlyliteracylearning.org. At this web address you can also find interactive posters called *CELLpops* and multimedia practice guides such as videos that illustrate practices supported by this research.



Especially for PARENTS

- Infants:**
Give Me, Give Me
What's Your Sign
Infant Signing Dictionary
- Toddlers:**
Sign Me Up
- Preschoolers:**
Sign Song

Especially for PRACTITIONERS

- Infants:**
Infant Gestures
Infant Sign Language Dictionary
Sign Language Activities
Picture This
- Toddlers:**
Simple Signing
Speaking Without Words
- Preschoolers:**
Sing and Sign

