

## Speech Assessment and Intervention

### Best Practices Guidelines for Articulation Impairments

Fact	Practice
<b>Differences are frequently developmental.</b> (Smit, 1993a, 1993b)	Check the developmental age chart before recommending assessment.
<b>Lateral /s/ and /z/ are not developmental.</b> (Smit, 1993a, 1993b)	Intervene at any time.
<b>The speech normalization boundary is 8 years, 5 months.</b> (Shriberg et al, 1994)	Begin instruction no later than 7.5 years.
<b>The typical time to change a speech difference is 15-20 hours.</b> (Jacoby et al, 2002)	Consider offering initial services of 20 hours, allowing 3 hours for absences.
<b>The typical frequency rate is two times a week for 30 minutes.</b> (ASHA, 2004)	Offer block sessions of two times a week for 30 minutes for 20 weeks, or 20 hours a year.  Do not include pick-up or record-keeping time in the 30-minute total.
<b>Treating nonstimulable, later-developing sounds for children with phonological disorders yields more change throughout the child's sound system.</b> (Gierut, 2007)	Treat students who are nonstimulable for target sounds and monitor students (ages 7 and younger) who are stimulable for target sounds.
<b>Correct placement is essential to progress.</b> Bauman-Waengler (2004); Secord (2007)	Be skilled in a range of elicitation methods.
<b>Mass practice is essential to progress.</b> (Skelton, 2004)	Each student should produce a minimum of 150 correct productions a session.  Schedule no more than four students per group.  Trained adults (SLPs, SLPAs, parents, teachers) can guide the additional practice time.
<b>Home practice leads to significantly faster progress and generalization.</b> (ASHA, 2004)	Each student should practice a minimum of 5 minutes, five days a week.
<b>Cognitive monitoring of production is essential to progress.</b> (Ertmer & Ertmer, 1998)	Build cognitive monitoring from the first session.  Ask all students in group to monitor their own and each other's productions.  All students should be engaged in every moment of instruction.
<b>Conversational recasts facilitates progress and meaningful productions of sounds.</b> (Camarata, 1993)	The SLP, teacher and family should provide recasts (not corrections) to child as a model in a variety of contexts.
<b>High-frequency treatment words lead to greater generalization than low-frequency words.</b> (Morrisette & Gierut, 2002)	Teach the target sounds in real words. (Resource – <i>High Frequency Word List</i> )
<b>There is no research evidence that oral motor exercises improve speech production.</b> (Lof, 2006)	Differentiate between general oral motor exercises and placement methods that promote positioning of the articulators for specific sound production.
<b>There is research evidence that single sound errors often impact students socially and emotionally.</b> (Crowe-Hall, 1994)	Provide high-quality services that address these issues they relate to speech production.
<b>There is no research evidence that articulation disorders impact academic achievement.</b> (Schuele, 2004)	Provide careful documentation showing the effects on educational progress.

## References

- American Speech-Language Hearing Association (n.d.) *National Outcome Measurement System*. Retrieved August 1, 2004, from [http://www.asha.org/members/research/NOMS/noms\\_data.htm](http://www.asha.org/members/research/NOMS/noms_data.htm)
- Bauman-Waengler, J. (2004). *Articulatory and phonological impairments: A clinical focus*. Needham Heights, MA: Allyn & Bacon.
- Camarata, S. (1993). The application of naturalistic conversation training to speech production in children with speech disabilities. *Journal of Applied Behavior Analysis* 26 (2):173–182.
- Crowe-Hall, B. (1991). Attitudes of fourth and sixth graders toward peers with mild articulation disorders. *Language, Speech, and Hearing Services in Schools*, 22, 334-340.
- Ertmer, D. J. & Ertmer, P. A. (1998). Constructivist strategies in phonological intervention: Facilitating self-regulation for carryover. *Language, Speech, and Hearing Services in Schools*, 29, 67-75.
- Gierut, J.A. (2007). Phonological complexity and language learnability. *American Journal of Speech-Language Pathology*, 16, 6 – 17.
- Jacoby, G., Lee, L., Kummer, A.W., Levin, L., Creaghead, N. (2002). The number of individual treatment units necessary to facilitate functional communication improvements in the speech and language of young children. *American Journal of Speech-Language Pathology*, 370-380.
- Lof, G. (2006). *Logic, Theory and Evidence Against the Use of Oral Motor Exercises to Change Speech Sound Productions*. Paper presented at the American Speech-Language Hearing Association Convention, Miami, FL.
- Morrisette, M. L., & Gierut, J. A. (2002). Lexical organization and phonological change in treatment. *Journal of Speech, Language and Hearing Research*, 45, 143-159.
- Schuele, C.M. (2004). The impact of developmental speech and language impairments on the acquisition of literacy skills. *Mental Retardation and Developmental Disabilities Research Reviews*, 10 (3), 176 – 183.
- Secord, W. (2007). *Eliciting Sounds*. Florence, KY: Thomson Delmar Learning.
- Shriberg, L. D., Gruber, F. A., & Kwiatkowski, J. (1994). Developmental phonological disorders III: Long-term speech-sound normalization. *Journal of Speech and Hearing Research*, 37, 1151–1177.
- Skelton, S. (2004). Motor-skill learning approach to the treatment of speech-sound disorders. *CSHA Magazine*, Summer, 8-9.
- Skelton, S. (2004). Concurrent task sequencing in single-phoneme phonologic treatment and generalization. *Journal of Communication Disorders*, 37, 131 – 155.
- Smit, A. (1993a). Phonologic error distributions in the Iowa-Nebraska articulation norms project: consonant singletons. *Journal of Speech and Hearing Research*, 36 (3), 533 – 547.
- Smit, A. (1993b). Phonologic error distributions in the Iowa-Nebraska articulation norms project: word-initial consonant clusters. *Journal of Speech and Hearing Research*, 36 (5), 931 - 947.