DIFFERENTIATED INSTRUCTIONAL STRATEGIES

Language Arts

Deaf and Hard of Hearing

Team members working with students who are deaf or hard of hearing need to carefully consider each student's unique needs and learning style, as well as the demands of the task. Strategies are offered to provide a starting point for thinking about possible adaptations. It is important to remember that all team members should have input into decisions regarding instructional strategies.

Possible effects of hearing loss on skill development in English

The task of learning to read is more difficult for children who can't hear. According to Traxler's research in 2000, less than half of the 18-year old deaf students leaving high school had reached a fifth grade level in reading and writing skills. Ironically, reading and writing are more critical for people who are deaf than for hearing people, because they rely on e-mails, telecommunication devices for the telephone, and other written means to communicate.

 It has been hypothesized that the relatively poor reading skills of deaf individuals result from problems with phonological processing. Most hearing readers encode print by sounding words out phonetically and some deaf children, even with amplification, are not able to hear many of the speech sounds. This encoding is important, because it allows a person to hold chunks of text in their short-term memory long enough for higher level processors to assign meaning to it for overall comprehension.

Secondly, 90 - 95% of children who are deaf or hard of hearing have parents who are hearing, and most often, are not fluent at signing. This makes it more difficult for children who are deaf or hard of hearing to acquire language from their environment incidentally (from overhearing/seeing conversations of others in their environment, from TV, from the radio). Without this incidental learning, a child who is deaf may have limited knowledge of the vocabulary and grammar that print represents, and even a limited general knowledge of their world. Therefore, it is more difficult for them to predict or infer meaning. Multiple meaning words and idioms may present particular challenges.

American Sign Language has its own grammatical rules, and does not follow the syntax or the word order of English. Children who are deaf and who do not hear the rules of English over and over during their daily routines may not acquire them naturally as hearing children do.   They may learn English grammar by memorizing the rules, a lofty task. Some people think that if a person who is deaf could just read a lot, they would start to assimilate the English syntax through repeated exposure. The problem is, if a child doesn't hear English, and cannot assimilate the rules of the language naturally, then reading English sentences is very difficult. If one is not able to sound out the vocabulary phonetically and if sentence structure is confusing, reading becomes a chore.

Ways to help students who are deaf or hard of hearing succeed in English

The following strategies are designed to promote access to English content based on the Standards of Learning for students who are deaf or hard of hearing. It is important to remember that each child has unique needs and that decisions regarding instructional strategies should be based upon current and accurate information about the child's sensory functioning and on team input.

For those children who are deaf or hard of hearing and whose sensory devices enable them to access and process speech as hearing children do, teaching strategies should follow best practices used with hearing children. Sensory devices (hearing aids, cochlear implants) and assistive listening devices (FM systems, sound field systems) should be utilized according to the recommendations of the audiologist and the IEP team to optimize auditory reception of speech sounds.

Those children who are not receiving speech sounds adequately auditorily may need to learn to read using other strategies.

Educational programs that have a bilingual-bicultural philosophy use American Sign Language (ASL) to teach and introduce English as a second language through print. Proponents of this philosophy acknowledge the importance of general world knowledge in the development of reading and writing. They view ASL as the natural language for deaf children, and therefore, a critical tool that allows children to build and process knowledge of the world around them. They then promote a metalinguistic awareness in the children of the differences between ASL and printed English. As with most theories of literacy, parent involvement is an essential aspect for bilingual education. If parents are unable to sign fluently in ASL with their children to read stories, deaf mentors may be brought in as models.

It is important to remember that language precedes literacy. It is not rational to expect a person to READ or WRITE words or about concepts that they don't have knowledge of or can't comprehend or express orally or with sign language.

Instructional and Environmental Strategies

For students using the bilingual/bicultural method:

- Let child see book, your face and signs simultaneously
- Don't be limited by the print – expand on pictures
- Be dramatic – use props, exaggerate, use facial expression, eye gaze, body shift to show different characters
- Vary location of signing – on book, on child, etc
- Read a story several times if a child asks
- Act out the story together after reading it
- Utilize the whole language philosophy

- Use signed English, Cued Speech, and more fingerspelling to clarify differences between ASL and printed English
- Encourage students to translate between sign language and English, and to make connections between all modes presented.

For any child who is deaf or hard of hearing:

- Base instructional strategies on the individual's receptive and expressive communication strengths
- Provide an enriched language environment that promotes a wide range of meaningful experiences with opportunities for receptive and expressive through-the-air and written language
- Be sure that there is someone for students to interact with in the learning environment who can effectively provide not only the vocabulary to label objects but also a language model for expressing concepts and ideas, using the child's primary mode of communication.
- Despite the communication method used, print should become an important part of everyday routines, and the value of reading and writing should be emphasized in varied, meaningful activities throughout the day.
- Partner with parents. Maintain ongoing communication between the home and teachers so that vocabulary and language concepts are reflected and reinforced in as many different situations as possible. Make families aware of the limitless opportunities in the home for language enrichment during daily routines, and make sure that the parents are able to communicate effectively in the child's chosen mode. This may mean assisting parents in continuing their learning of sign language, cuing, and methods of communicating effectively with their children.
- Pre-teach vocabulary for coming stories/lessons. Remember, many children who are deaf or hard of hearing do not learn words incidentally. Collaboration with the speech/language pathologist in this effort can be beneficial.
- Vocabulary instruction should be systematic, with most effective approaches emphasizing numerous techniques such as use of semantic maps, semantic feature analyses, word maps, and classroom discussion of words. Overexposure through repetition and varied formats is often essential.
- Depending on the communication skills of the child's family, some children may lack the language related to everyday experiences. Prior to reading a selection, emphasize class discussions so that students may benefit from other's personal connections to the text, building students' background knowledge of concepts and vocabulary.
- For students who sign, ensure that all involved are consistent in the signs being used. Use conceptually-based signs and avoid inventing new signs for new vocabulary. Be sure that students learn the conceptually accurate signs for phrases and multiple meaning words and use them while reading. Fingerspelling a word often indicates that the student does not know the meaning.

- Guide students to formulate questions first, then answer them by reading. This may help to improve their word recognition skills, comprehension, analytical skills, and ability to draw inferences.
- Phonemic awareness can be reinforced through visuals (demonstrations, pictures, and software programs) that show placement of articulators.
- Even children with the most significant hearing losses may benefit from phonemic awareness enhanced with visual phonics or cued speech. Educational interpreters, HI teachers, parents, and others on the IEP team should discuss how phonemes will be introduced in a consistent manner.
- Always incorporate speaking (signing), listening (receiving communication), writing, and reading activities. Literacy involves all four.
- Students who use sign language should be taught to deliver oral presentations using more formal registers as appropriate in sign. The interpreter and student should be allowed time together prior to the presentation to ensure that the interpreter is familiar with the material and is rendering an accurate representation of the student's work.
- Remember that language precedes literacy. A child will not understand language expressed in print until he or she understands that language presented orally or through the air.
- No instructional strategy, however differentiated, will be effective if the student does not comprehend your communication attempts.

Resources

Cornerstones Building Blocks of Literacy, U.S. Department of Education and the National Center for Accessible Media at WGBH. A technology-focused and research-based approach to literacy for children who are deaf or hard of hearing. Accessible at http://pbskids/org/lions/cornerstones

French, M. *Starting with Assessment: A Developmental Approach to Deaf Children's Literacy*. Provides in-depth discussion of research-based principles for assessing skills and areas of need, literacy instruction, and planning for teachers of children who are deaf; includes checklists and assessment tools in reading, writing, conversational language competence, student self-assessment, and parental input. Available through Laurent Clerc National Deaf Education Center, Gallaudet University. Accessible at http://clerccenter.gallaudet.edu

Language Arts Curriculum: Clarke Curriculum Series. Clarke School for the Deaf. Provides developmentally sequenced objectives for extended discourse skills, syntactic forms and vocabulary to assist students who are deaf or hard of hearing in developing English language skills

Schleper, D. *PreReading Strategies*. Presents strategies such as anticipation guides, webs and semantic maps that help students make use of their prior knowledge of a subject in preparation for reading; written for teachers of students who are deaf or hard of hearing. Available through Laurent Clerc National Deaf Education Center, Gallaudet University. Accessible at http://clerccenter.gallaudet.edu

Schleper, D. Read It Again and Again. A video and manual set that describes and demonstrates a technique for reading and re-reading the same book over several days; written for those working with children from preschool through third grade who are deaf or hard of hearing. Available through Laurent Clerc National Deaf Education Center, Gallaudet University. Accessible at http://clerccenter.gallaudet.edu

Schleper, D. Reading to Deaf Children; Learning from Deaf Adults. A video and manual set that presents 15 principles to guide parents and teachers in promoting literacy development in children who are deaf or hard of hearing. Available through Laurent Clerc National Deaf Education Center, Gallaudet University. Accessible at http://clerccenter.gallaudet.edu