Hearing loss is a barrier that limits access to ongoing communication in the environment. For students who are hard of hearing this means that they do not perceive 90% or more of speech, especially if it occurs beyond the 3-6 foot range. Decreased speech perception translates into decreased comprehension, especially of novel words and new information. For students who are deaf and visual communicators, most only receive communication from their classroom interpreter with little meaningful conversation or information exchange directly with peers. Progress through the curriculum at the same rate as class peers with typical hearing assumes that the student has received the same information as those peers. It’s all about access!

We need to not only strive to close language and learning gaps, we need to simultaneously support our students in keeping up with the day-to-day learning in the classroom. We MUST monitor progress to know if full access is truly occurring and to ensure that our students are keeping pace with classroom expectations. Without appropriate support, the trajectory of educational performance shown above is all too likely. Students who are deaf or hard of hearing with no other learning issues – with full access to school communication – CAN progress at the expected rate IF they are receiving the appropriate intensity of focused support.

Monitor and Compare – Progress from Year-to-Year

Review your student files semi-annually for young children and annually for school-age students. Specifically, look at norm-referenced test results, like the high-stakes tests or language evaluations. Have the student’s percentile scores stayed constant? With your focused intervention and appropriate supports, has the student’s percentile scores improved? Or, like the figure above depicts, has the student experienced inappropriate access issues and insufficient supports causing a decrease in performance over time.

For example, consider a student who scored in overall reading in grade 2 at the 48th percentile, at the 38th percentile in grade 3, and at the 30th percentile in grade 5. The student still continues to fall within 1 standard deviation from the mean, or within the ‘average’ range. However, a drop of 18 percentile points over 3 years certainly raises the question about adequate yearly progress and if the access accommodations and services have truly ‘leveled the playing field’ for the student with hearing loss. The school team may not be concerned because the student still scores ‘average’ but to a professional with a background in the impact of hearing loss on learning, this trend should demand that more focused and appropriate supports/access accommodations be provided.

Infants and Toddlers

An integral part of early intervention services includes monitoring the growth in skill development for young children with hearing loss. If a child was identified at birth and received amplification/intervention within a couple of months, then the goal is one month of development per one month of age. If the hearing loss was identified and amplification/intervention not provided until 3 months or later, then the goal is more than one month of growth per one month of age. If a child with a delay only gains 6 months of development in a 6-month period then he or she will never catch up to age peers by school entry.

The following are resources that can be used by interventionists/parents to track skill growth over time.

- **Communication Development Monitoring** - checklists for parents of children ages 8-36 months to complete every 6 months to track expressive vocabulary growth as compared to typically developing peers. Checklists can hang on refrigerator as a reminder to families about words appropriate for them to include in daily conversations. It will also be
handy to mark when a word has been learned. Graphs for boys and girls show growth via percentile ranks. Scoring examples are also posted to assist in identifying the growth in months for every 6-month period.

**Auditory Skills Checklist 1  Auditory Skills Checklist 2** - Approximately 85% of children with hearing loss have hearing loss of 70 dB or better. Of the approximately 15% who have 71-110+ dB hearing loss, about half receive cochlear implants. Finally, based on one state's 2013 data (NC), of the families who chose a communication option, 92% chose spoken language for their children. Only 2% chose ASL and 6% chose simultaneous communication. Fewer than 1% chose Cued Speech. Based on this, it is clear that for the vast majority of children, growth in auditory skill development is very, very important to their future success and should be diligently tracked from infancy.

- **ASL Development** for those families and children who use sign language, skill development should also be monitored. Information on this webpage includes an extensive developmental checklist for ASL skills. Once a child is in kindergarten the ASL Content Standards below should be used as a guide to development.

- **Pragmatics Checklist** - as children transition from early intervention it is critical to determine language performance in all areas. Pragmatics is often overlooked. Pragmatics, or social communication, will not develop at a typical rate, or in the same way for children with hearing loss unless addressed. It is typical for a 7-year-old with hearing loss to have the pragmatics skills of a 3-year-old!

- **Hearing aid use and independence** is a concern, even for our youngest children with hearing loss. Families need to develop confidence in monitoring hearing devices and supporting full time use. Strategies for Keeping Hearing Aids On and Achieving Effective Hearing Aid Use in Early Childhood are resources to assist in these goals.

**School Age**

**NEW! ASL Content Standards – K – 12.** Developed by Gallaudet, these comprehensive standards are truly impressive! They were developed to ensure that deaf and hard of hearing children acquire and learn ASL in much the same way that hearing children in the US acquire and learn English. Whichever communication modality is used by a student, he or she must have the requisite skills to adequately communicate both receptively and expressively. Most families at this point prefer that their child learn to listen and speak. This preference does not always result in a child who has school entry skills. Whether the family has chosen to use sign from birth, or it is the modality deemed to be most effective for learning by a school team due to child’s lack of progress learning to listen and speak – a student must progress through learning ASL in a developmental sequence to prepare them to make academic gains at least at the rate of their class peers. The ASL Content Standards for K-12 grade students is a huge step forward in determining instruction needed and progress monitoring of ASL knowledge and use.

**CURRICULUM BASED MEASURES:** There is a need for functional assessments to monitor students’ academic performance. **Curriculum based measures** provide a specific approach to measuring student learning that includes repeated measurement (weekly, monthly) across extended periods of time using general outcome indicators that are sensitive in the rate of change demonstrated in the performance of a task of the same difficulty. While curriculum-based measures (CBM) have been commonly used in public education, it is appropriate to consider CBM use for students who are deaf/hard of hearing specifically. Developed as part of a grant from the U.S. Office of Special Education Programs, the University of Minnesota has developed extensive progress CBM materials designed specifically for teachers of the deaf/hard of hearing to monitor students who have hearing loss and/or language differences.
Go to the Education Resources for Teachers of Deaf/Hard of Hearing Students resource page for extensive training resources for teachers and specific means to monitor student progress. This truly is an amazing resource and would be great for professional learning collaboratives or self-study. The measures take only a few minutes each week!

**MAZE ASSESSMENT:** Monitoring performance via the MAZE assessment is a common form of curriculum-based measurement. Maze presents sentences or short stories with every 7th word missing. The student must select which of 3 words best fits the missing word in the sentence. Clearly, as can be seen in the bar graph, even our students with hearing loss who do not have IEP services and supports are not performing like their age peers. Learn more about creating MAZE reading passages [here](#).

**Monitoring Progress of Expanded Core Skills**

Expanded core curriculum refers to those skills that students with hearing loss need to learn to be able to access the general education curriculum and fully participate. Even if a student is provided access to effective communication as required by Title II of the ADA, he or she still needs to learn the skills to independently, and confidently, navigate as a person with hearing loss in a mainstream setting. These areas will not be taught specifically and yet they must be learned if full participation in the classroom is expected.

Per the Iowa **Expanded Core Curriculum guidance**, hearing loss adds a dimension to learning that requires explicit teaching, such as information gained through incidental learning. It has been estimated that for persons without hearing loss, 80% of information learned is acquired incidentally. No effort is required. Any type of hearing loss interrupts this automatic path to gain information. This incidental information must be delivered directly to students who are deaf or hard of hearing. Most teachers without specialized training related to hearing loss do not have the expertise to address the unique needs of students who are deaf or hard of hearing. Therefore, IFSP & IEP team collaboration with educational audiologists and teachers of students who are deaf or hard of hearing is necessary in addressing academic and social instruction and the assessment of these areas. In order to close this information gap, the Expanded Core Curriculum for Students who are Deaf or Hard of Hearing (ECC-DHH) was developed. [Texas has developed a Livebinder with extensive information about ECC](#) and resources to support