ODYSSEY

2014 EXTRA



Amy Szarkowski,

PhD, is a psychologist in the Deaf and Hard of Hearing Program at Boston Children's Hospital in Massachusetts. She is part of an interdisciplinary team that performs comprehensive assessments for children of all ages, and she holds an academic appointment in the Department of Psychiatry at Harvard Medical School. Szarkowski also teaches as an adjunct instructor at Tufts University and Gallaudet University.

Copyright © 2014 by Gallaudet University Laurent Clerc National Deaf Education Center.

For more articles, visit www.gallaudet.edu/clerc_center/odyssey.html.

High and Appropriate Expectations for Deaf and Hard of Hearing Children: The Role of Assessment

By Amy Szarkowski and Denise Fournier Eng

High expectations mean more than simply uttering "feel good" intentions and "You can do it!" mantras. They must be supported by appropriate challenges and ongoing assessment.

The expectations of parents and professionals influence how children perceive their own abilities, achieve academically, and form relationships later in life (Powers, 2011; Davis-Kean, 2005; Doren, Gau, & Lindstrom, 2012; Wagner, Newman, Camento, Levine, & Marder, 2007). In addition to parental involvement, parental expectations regarding their children's education have been shown to be one of the most significant predictors of success in deaf and hard of hearing children and adolescents (Doran et al., 2012). When parents have high expectations, children are more likely to achieve more, to have higher levels of self-esteem, and to thrive. (For examples, see the 2014 issue of *Odyssey* magazine.)

Setting expectations begins in infancy—a critical time for all children but especially for those who are deaf or hard of hearing; the early years lay the groundwork for future growth and success. From the time of their birth, deaf and hard of hearing children require the use of specific strategies, supports, therapies, and services to achieve their personal best. Tracking each child's progress on a regular basis through observation and formal assessment enables parents and professionals to ensure that children are on track.

Photos courtesy of Amy Szarkowski and Denise Fournier Eng









There is evidence that when hearing loss is diagnosed early in life and appropriate supports are put in place to provide deaf and hard of hearing children with access to language, whether signed or spoken, they can and do achieve on par with infants and toddlers with typical hearing (Pimperton & Kennedy, 2012; Thagard, Hilsmier, & Easterbrooks, 2011; Yoshinaga-Itano, Baca, & Sedey, 2010).

The nation's Centers for Disease Control and Prevention (CDC) promotes communication from birth for all children (Yoshinaga-Itano, Sedey, Coulter, & Mehl, 1998; Goberis et al., 2012). The CDC plan suggests that every child have a newborn hearing screening before 1 month of age. When hearing loss is suspected, the child should be referred for a follow-up evaluation prior to 3 months of age, and when hearing loss is confirmed, intervention services should commence before the child is 6 months of age. These assessments—occurring at ages 1 month, 3

months, and 6 months—are why the plan is colloquially known as the "1-3-6 plan."

Parents with appropriately high expectations understand that with appropriate evaluation and support, most children who are deaf or hard of hearing can be expected to achieve many developmental milestones at the same age as their hearing peers.

Looking at Every Domain

To establish appropriate expectations for a child, it is important to consider how the child is doing in every aspect of his or her life across multiple developmental domains. These domains include cognitive, linguistic, social, emotional/behavioral, and motoric, and they are interrelated (Wagner et al., 2007). For example, the domains of language and motor development overlap; a child's ability to develop language can be negatively impacted by delays in his or her motor development (Iverson, 2010). Further, cognitive ability is influenced by a child's ability to develop language and use



Denise Fournier
Eng, MA, CCC-SLP, is a speech-language clinician in the Deaf and Hard of Hearing Program at Boston Children's Hospital. She has worked in private school programs for deaf and hard of hearing children, in public school settings, and in early intervention.

The authors welcome questions and comments about this article at Amy. Szarkowski@childrens. harvard.edu and Denise. Eng@childrens. harvard.edu.



language as a tool of reason; children with early and consistent access to language tend to show stronger problem-solving and reasoning skills (Akamatsu, Mayer, & Hardy-Braz, 2008).

Additionally, severely reduced access to language early in life can lead to a reduced ability to use language as the child grows and has been linked to increased behavioral problems in children and social-emotional difficulties in adolescents and young adults (Gulati, Clark, Johnston, Kammerer, & Licameli, 2014).

Given the differences among children and the interconnectedness of the domains, data about each child should be gathered across a variety of measures. Especially considering the complexities of assessments with deaf and hard of hearing children, professionals and parents should not rely solely on the results obtained by a single evaluation but rather assess skills using diverse measures in order to obtain a more comprehensive understanding of the child.

Expecting One Month's Growth in One Month's Time

The Individuals with Disabilities Education Act (IDEA) makes the distinction between *evaluation*, which qualifies a child for services, and *assessment*, which is an ongoing process of determining the strengths and needs of a particular child and his or her family (2011). Professionals who work with deaf and hard of hearing children should systematically assess each child and use these assessments to document the children's development.

Ideally, assessments involve formal measures, e.g., test scores and the incorporation of clinical impressions by professionals from various disciplines. Caregivers should also be involved in

assessments by identifying and describing their perspectives on the child's strengths and needs as well as the strengths and needs of the family as a whole (IDEA, 2011). While school-based evaluations to determine continuing eligibility for services typically occur every three years, ongoing assessment—occurring every three, six, nine, or 12 months or longer

It is important that
assessments be
socially and
culturally appropriate
while showing
respect for the way a
child communicates;
assessments should
be conducted in the
communication mode
or language preferred
by the child.

depending on the needs of the child—is certainly of benefit. One of the purposes of regular, comprehensive assessment is to consider the child's programming and services and to change these if appropriate. In this way, assessment supports high expectations and the child's continued achievement.

Most standardized assessment instruments, such as those that measure cognitive abilities, motor functioning, or speech-language skills, are not designed for children who are deaf or hard of hearing. When norms for deaf and hard of hearing children are available and valid, then incorporation of the comparison of how a

particular child is doing relative to his or her deaf and hard of hearing peers should be considered—but only as one piece of the child's assessment. Given the individuality of deaf and hearing hearing students, this assessment should not be considered by itself but rather as part of a process that includes a variety of assessments.

It is important that assessments be socially and culturally appropriate while showing respect for the way a child communicates: assessments should be conducted in the communication mode or language preferred by the child. Whether the child prefers the language of American Sign Language, English, or Farsi, or a communication system that supports a spoken language with signs, the child's preference should be respected (Joint Committee on Infant Hearing, 2013; Szarkowski & Hutchinson, 2015). It may be necessary to adjust the administration of the testing so that relevant material is accessible; however, skilled clinicians should not necessarily shy away from administering tests that were not designed for deaf and hard of hearing students.

When appropriate supports are in place, i.e., when access to language and information is consistent whether through a signed

language or auditory amplification of speech, then deaf and hard of hearing children need not experience language delay and can expect to meet the general standards of their hearing peers. If the expectation is that deaf or hard of hearing children achieve on par with hearing peers, then assessment with standardized measures demonstrates their progress. Among deaf and hard of hearing children who have received

appropriate supports and who do not have any limiting factors (such as reduced cognitive ability), an appropriate goal can be to maintain a child's rate of development at a level on par with his or her same-age peers; this suggests that it might be expected that they make six months' growth in six months' time (Hafer & Stredler-Brown, 2003).

A child's language and communication abilities are particularly important, and comprehensive assessment of language should receive special attention. Comprehensive language assessment includes:

- administration and interpretation of standardized measures by professionals with expertise in working with deaf or hard of hearing children
- input from parents via interviews or questionnaires
- input from professionals working with the child on a regular basis
- observation of the child in natural contexts when possible

Language and communication assessment should address increasingly abstract and complex aspects with the goal of documenting progress in the area of linguistic competence (Nussbaum & Benedict, 2011). Rather than focusing on building vocabulary or labeling objects, children should be expected to work toward developing the ability to use language to facilitate communication, think critically, solve problems, read, and write.

Assessment of skills that relate to everyday life is also important. For young children, such skills might concern self-care tasks, such as toileting and bathing. For older children, such skills might concern finding their way home, identifying the president or prime minister of their country, being able to ask for help from strangers when needed, and knowing the meaning of certain holidays. These measures of real world knowledge can be assessed formally as well as through guided observations and interviews with the child and family.

Monitoring for Change

Regular assessment, imperative for maintaining high expectations, can show dynamic changes in development of particular skills and allow for monitoring maturational progression (Heilbronner et al., 2010). Regular assessment can also help to document the efficacy of particular treatments or interventions and inform decisions about discontinuation of particular supports when they become irrelevant or there has been a lack of expected progress. When appropriate progression is not occurring, changes in programming may be needed. If assessments are conducted too infrequently, the need for changes in interventions and supports might not be recognized. In such cases, valuable time can be lost.

Progress monitoring, i.e., monitoring not just the child's performance but his or her progress, establishes a mechanism

for professionals and caregivers that allows them to consider the effectiveness of the strategies being used for developing particular skills; it allows modification of the interventions and supports to further the child's growth in particular areas (Joint Committee on Infant Hearing, 2013; Szarkowski & Hutchinson, 2015). On a broader scale, monitoring of programs—as opposed to individual students—can inform administrators, professionals, and parents about what works, what strategies and supports are effective. Monitoring a child's progress, yields information that can inform specific programs about the efficacy of specific interventions.

Continued assessment can inform professionals and parents of the types of programming and services that are needed, document the effectiveness of programming that is in place, and recognize the skills the child has already attained. Assessment allows greater understanding of a child's abilities and needs, and it can be essential in setting expectations that are high and appropriate. Regular, objective assessment, supported by input and observations from parents, teachers, and other professionals, can contribute to understanding a child's potential and progress—and help the child work toward achieving his or her personal best.



References

Akamatsu, C. T., Mayer, C., & Hardy-Braz, S. (2008). Why considerations of verbal aptitude are important in educating deaf and hard-of-hearing students. In M. Marschark & P. C. Hauser (Eds.), *Deaf cognition: Foundations and outcomes.* New York: Oxford University Press.

Davis-Kean, P. E. (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, 19(2), 294-304.

Doren, B., Gau, J. M., & Lindstrom, L. E. (2012). The relationship between parent expectations and postschool outcomes for adolescents with disabilities. *Exceptional Children*, 79(1), 7-23.

Goberis, D., Beams, D., Dalpes, M., Abrisch, A., Baca, R., & Yoshinaga-Itano, C. (2012). The missing link in language development of deaf and hard of hearing children: Pragmatic language development. *Seminars in Speech and Language*, 33(4), 297-309.

Gulati, S., Clark, T., Johnston, J., Kammerer, B., & Licameli, G. (2014, June). *Differential diagnosis and long-term effects of language deprivation*. Paper presented at the 2nd International Conference on Family-Centered Early Intervention for Children Who are Deaf or Hard of Hearing, Bad Ischl, Austria.

Hafer, J. C., & Stredler-Brown, A. (2003). Family-centered developmental assessment. In B. Bodner-Johnson & M. Sass-Lehrer (Eds.), *The young deaf or hard of hearing child: A family-centered approach to early education* (pp. 127-149). Baltimore: Paul H. Brookes Publishing Company.

Heilbronner, R. L., Sweet, J. J., Attix, D. K., Krull, K. R., Henry, G. K., & Hart, R. P. (2010). Official position of the American Academy of Clinical Neuropsychology on serial neuropsychological assessments: The utility and challenges of repeat test administrations in clinical and forensic contexts. *The Clinical Neuropsychologist*, 24, 1267-1278.

Individuals with Disabilities Education Act. (2011). Early Intervention Program for Infants and Toddlers with Disabilities. Regulatory 34 C.F.R. pt. 303.

Iverson, J. M. (2010). Developing language in a developing body: The relationship between motor development and language development. *Journal of Child Language*, 37(2), 229-261.

Joint Committee on Infant Hearing. (2007). Year 2007 position statement: Principles and guidelines for early hearing detection and intervention programs. *Pediatrics*, 120, 898-921.

Joint Committee on Infant Hearing. (2013). Supplement to the JCIH 2007 position statement: Principles and guidelines for early intervention after confirmation that a child is deaf or hard of hearing. *Pediatrics*, *131*, 1324-1349.

Laurent Clerc National Deaf Education Center. (2014). High expectations for all: Their importance and influence. *Odyssey*, 15. Retrieved July 7, 2014, from http://clerccenter.gallaudet.edu

Nussbaum, D., & Benedict, B. (2011, February). *Identifying effective practices to support early linguistic competence*. Paper presented at the Early Hearing Detection and Intervention Conference, Atlanta, GA.

Pimperton, H., & Kennedy, C. R. (2012). The impact of early identification of permanent childhood hearing impairment on speech and language outcomes. *Archives of Disease in Childhood*, 97, 648-653.

Powers, S. (2011). Learning from success: High achieving deaf students. *Deafness & Education International*, 13(3), 92-109.

Szarkowski, A., & Hutchinson, N. (2015, forthcoming). Developmental assessment. In M. Sass-Lehrer (Ed.). Early Intervention for Deaf and Hard-of-Hearing Infants, Toddlers and their Families: Interdisciplinary Perspectives. New York: Oxford University Press.

Thagard, E. K., Hilsmier, A. S., & Easterbrooks, S. R. (2011). Pragmatic language in deaf and hard of hearing students: Correlations with success in general education. *American Annals of the Deaf, 155*(5), 526-534.

Wagner, M., Newman, L., Camento, R., Levine, P., & Marder, C. (2007). Perceptions and expectations of youth with disabilities: A special topic report of findings from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2007-3006). Menlo Park, CA: SRI International.

Yoshinaga-Itano, C., Baca, R., & Sedey, A. L. (2010). Describing the trajectory of language development in the presence of severe to profound hearing loss: A closer look at children with cochlear implants versus hearing aids. *Otology and Neurotology*, 31, 1268-1274.

Yoshinaga-Itano, C., Sedey, A. L., Coulter, D. K., & Mehl, A. L. (1998). Language of early- and later-identified children with hearing loss. *Pediatrics*, 102, 1161-1171.

