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Right: The Clerc Center's Deaf Students with Disabilities Network provides parents and professionals with the opportunity to share information and resources.

ONLINE WITH THE CLERC CENTER:

Bringing Resources to Families and Professionals

By Mary Henry Lightfoot and Betsy Meynardie

What does a dad do when he has questions about getting an interpreter for his daughter's high school soccer team?

What do teachers do when they learn that a deaf student has been assigned to their classes?

What does a mom do when she wants more information about her son's newly scheduled hearing test?

What do teachers of deaf students do when they want to share information with parents and general education teachers?

If they are like most people, chances are they will go online.

In today's world, the Internet is a global library, classroom, and town hall—and it is so much more. This is especially true for families and professionals involved with deaf and hard of hearing students. When two to three out of every 1,000 children are deaf or hard of hearing (National Institutes of Health, 2014), and these children are educated in a wide variety of educational settings throughout our large country (GAO, 2011), on-line support becomes critical.

Illustrations courtesy of Mary Henry Lightfoot and Betsy Meynardie

The Laurent Clerc National Deaf Education Center, responding to public input from families and professionals around the country, has implemented the Clerc Center Strategic Plan 2020 (CCSP 2020) which will guide this work. With an expanding on-line presence, the Clerc Center enables individuals, both experienced and new to deaf education, throughout the country to receive information and resources. With a click, scroll, swipe, or tap, parents, teachers, and deaf and hard of hearing students can access information through the use of a desktop computer, laptop, tablet, or smartphone. This ease and freedom benefits busy professionals and families alike. Professionals can pull up information moments before the start of back-to-back meetings; parents can pull up information while waiting in the grocery line.

Today 7.1 million people are learning online (Allen & Seaman, 2014). Further, 38 percent of training is achieved online (Association for Talent Development, 2014). The advantages of on-line learning are multifold (Koller, Harvey, & Magnotta, 2008; Dobrovolny, 2006; Smith, 2014). On-line technology allows learners to:

- progress at their convenience and with flexible scheduling

- experience information in multiple formats in response to individual learning needs

- learn at their own pace

- review content multiple times, in whole or in part

On-line learning has a further advantage in that it allows assessment information to be collected easily (Swan, 2012). This not

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of auditory tissue.

Left: All Clerc Center webinars, including Dr. Laura-Ann Petitto's "What the Eyes Reveal About the Brain: Advances in Human Language Acquisition," are archived, free, and available for convenient playback.

only potentially informs the learner about his or her progress but allows course and content developers to use the information to inform practice and increase program effectiveness.

The hallmark of on-line learning is that it typically focuses on the learners' needs more than the instructors' content (Smith, 2014). Instead of having a pre-planned lesson where people must physically come together at a specific time and in a specific place to participate in an activity designed with the instructor at its center, on-line learning allows participants to decide when and where they learn and how much content they want to attend to at a given time. The on-line environment allows the learner to be proactive and seek out understanding rather than passively receive information through an instructor. It is designed to respect the adult's desire to be self-directed and to respond to his or her learning needs (Abdullah, 2001; Morrison, Ross, & Kemp, 2007).

The Clerc Center is harnessing technology to provide different forms of on-line learning for all those involved in the lives of deaf and hard of hearing children. These include:

- **webcasts,** in which subject matter experts—teachers or skilled facilitators—present information

- **learning communities**, in which parents, professionals, and interested individuals can go online, meet each other, and interact

- **training modules**, in which participating individuals can pursue more in-depth learning at their own pace and in their own time

- **books and materials**, through which individuals can procure information with a click that before would have taken weeks to write for and receive

Webcasts—Learning for All

The Clerc Center sponsors webcasts specially selected, designed, and presented to meet the needs of those who work with deaf and hard of hearing students. For example, the webcast "How Early Intervention Can Make a Difference: Research and Trends," by educator Beth Benedict, focused on the

importance of immersing infants in language from the moment they are born—especially those who are deaf or hard of hearing. The webcast "What the Eyes Reveal About the Brain: Advances in Human Language Acquisition," by researcher Laura-Ann Petitto, addressed the science behind language development.

Webcasts provide a form of synchronous learning, in which participants and experts come together in real time for a heightened experience. Once archived, webcasts also permit an opportunity for learning at a convenient time (or asynchronous learning), meeting individual needs and allowing individuals to move at their own pace and view the webcasts when their individual schedules allow.

All Clerc Center webcasts are accessible through ASL, spoken English, and captions. All are archived to allow teachers, parents, and other interested parties to access them at their leisure. They can be watched alone or in groups from home or work settings. In addition, taking advantage of the ease with which technology allows

assessment, all webcasts are evaluated. The Clerc Center monitors those who participate and gages their reactions. For example, most of those who watched the Benedict presentation were professionals, 91 percent reported that the webcast met their needs, and 98 percent reported that they planned to pass on the information to other interested individuals. The Petitto workshop, one of the most popular, has experienced 5,409 additional viewings since it was archived.

Learning Communities—The Virtual Clubhouse

The Clerc Center has facilitated the establishment of an on-line learning community as seen in the Deaf Students with Disabilities Network, where professionals and parents of deaf and hard of hearing children with disabilities can share information and resources and find support. Important segments of our audience live in rural areas, where knowledge resources and support are difficult to locate. This on-line communication vehicle allows individuals to connect, share, and learn together as they support these unique students.

This site, as well as the National Outreach Resources network established by the Clerc Center for outreach professionals in deaf education, allows peer-to-peer communication and sharing of perspectives and experience. This, in turn, supports learning and allows knowledge to be translated into everyday problem solving and ongoing practice (Lewis & Allan, 2005). Would you like to join the Clerc Center on-line communities? They provide an opportunity for you to express ideas, questions, and practice; help you develop understanding from a novice level to one that is knowledgeable; and introduce you to others who have the same needs and interests (Gilbert & Silvers, 2014). We invite you to explore the Clerc Center learning communities!

Training Modules—The Self-Paced Classroom

The Clerc Center has developed modular on-line training that puts the learner in the driver's seat. The modules are self-paced, allowing learners to proceed at their own pace and time. Modular training is segmented into micro lessons that have four key on-line learning qualities: chunk-ability, repeatability, pause-ability, and understandability (Smith, 2014). *Setting Language in Motion: Family Supports and Early Intervention for Babies Who are Deaf or*

> **Viewers are able to skip sections that they either already know or do not need to know. Thus learners can self-select information that is pertinent to their individual needs and that fits into their time constraints.**

Hard of Hearing is an on-line training chunked into seven video modules. These modules are searchable and vary in length between three and 17 minutes. Professionals and families can view the modules from beginning to end or by topic as the need arises. The short module length and searchability features are in line with the attention span of adults, generally measured at 20 minutes or less (Islam, 2013).

Understandability is created with an American Sign Language version, which has captions, and a spoken English version, which also has captions.

Educating Students Who are Deaf or Hard of Hearing: A Guide for Professionals in General Education Settings is a three-module, on-line training with a multimedia approach to learning. Interest is maintained through a series of interactive screens that can be paused, clicked, or acted upon as needed by the learner. With a tap, learners can stop the training to consider what they have already learned or advance within the training to incorporate still more information. Viewers are able to skip sections that they either already know or do not need to know. Thus learners can self-select information that is pertinent to their individual needs and that fits into their time constraints. Further, they can reflect on what is learned through periodic knowledge checks, self-correcting any erroneous understanding by reviewing the learning experience and going back to key sections to solidify understanding.

The Clerc Center training modules also follow the design specified by Dobrovolny (2006), who showed the need for learners to be able to exercise a high degree of control and freedom within the on-line training, including the ability to return to sections as needed even after completing the training. Dobrovolny supports the need for participants to "manipulate and personalize" learning, customizing it to "their prior experiences, their current responsibilities, and the expectations of further responsibilities." By incorporating these recommended features for on-line learning, the Clerc Center's on-line modules provide the best in technology and pedagogy for each individual user.

Info to Go: Print Goes Virtual

The Clerc Center's Info to Go has a wealth of information and resources on the educational, linguistic, social, and emotional needs of deaf and hard of

hearing children. In addition, Info to Go accepts questions from families, educators, and the general public related to deaf and hard of hearing children from birth through age 21.

Next Steps

The Clerc Center continues to bring training, research, and research-based practice to urban, suburban, and rural areas, supplying information, training, and community to professionals and families of deaf and hard of hearing children. At the same time, we recognize that access to technology is not universal and remain committed to delivering technology-based resources to those who need them.

Technology-based on-line learning reaches a wide range of users, from professionals who may be working with deaf or hard of hearing students for the first time to experienced teachers who need to access information during a busy day. From parents and families who are facing many questions regarding their recently diagnosed deaf child, to parents who are working with school professionals to make the best decisions for their child, technology creates paths for disseminating research-based information to professionals and families across the country. It connects professionals and families by allowing them to share ideas and receive information from subject matter experts and each other.

With the CCSP 2020 as our guide,

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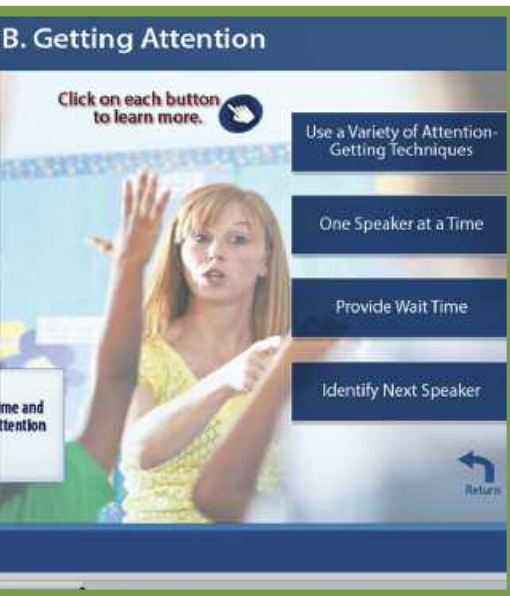
B. Getting Attention

Click on each button
to learn more.

Use a Variety of Attention-
Getting Techniques

One Speaker at a Time

Provide Wait Time

Identify Next Speaker

Return

the Clerc Center will continue to explore technology to give professionals and families an opportunity to build knowledge and apply resources to everyday problem solving. Evolving technology allows greater reach through virtual instruction, peer-to-peer interaction, and formal and informal learning. As technology continues to advance in perhaps unimaginable ways, the "magic" will always be in the learning. This is at the heart of our resources for professionals and families of deaf and hard of hearing children, and it is made increasingly promising through technology and on-line initiatives.

Experience the magic of learning by using the Clerc Center's technology-based resources. These resources will support you, taking into account your role and level of experience. They will address your specific responsibilities or needs. We look forward to meeting you online at *http://clerccenter.gallaudet.edu*!

Coming Up in Odyssey's 2016 Issue

THEME: The Importance and Value of Building State-Level Collaborations to Support the Transition of Deaf and Hard of Hearing Students from Secondary Education to Postsecondary Options

The transition from high school to postsecondary education and employment has the potential to alter the future for deaf and hard of hearing students. It is a complex process that begins well before students leave secondary education and benefits from a team approach that includes educators, high school and postsecondary transition professionals, family members, and—most importantly—the student. While each deaf or hard of hearing student's transition plan is specifically created for that student based on his or her Individualized Education Program, the systems within which teams must operate are often rooted at the state and district level. Developing meaningful connections and collaborations at these levels is essential to the effective development and implementation of these large-scale processes.

Recognizing the importance of state-level collaborations, pepnet 2, a federally funded project with the goal "to improve postsecondary outcomes for individuals who are deaf or hard of hearing, including those with co-occurring disabilities," has hosted a Summit Series entitled "Building State Capacity to Address Critical Issues in Deaf Education: Transition from Secondary Education to Postsecondary Options." The goal of this national effort is to provide a framework that enables each state to develop a plan to enhance successful postsecondary education and employment transition outcomes for students leaving high school. As noted on the pepnet 2 Summit Series website, "Young adults who are deaf or hard of hearing face barriers that inhibit these successful outcomes; one way to mitigate these barriers is by effecting positive change in the way current services are provided to deaf and hard of hearing students."

The 2016 issue of *Odyssey* will be a joint publication of the Laurent Clerc National Deaf Education Center and pepnet 2. It will share the work that has occurred through the Summit Series, focusing on the development, implementation, and maintenance of state-level collaborations; the planning processes undertaken by the state teams, including the successes and challenges they experienced; and the outcomes that were achieved.