Falling Down the Wabbit Hole

Posted on December 27, 2018 by Kristin Banach, Senior Marketing Manager

Adapted from *Speech Sound Disorders: For Class and Clinic, Fourth Edition*

Ken Bleile

Perception training is part of most approaches to treatment sounds (Williams, McLeod, & McCauley, 2010). Discrimination training (helping a child hear the difference between sounds) is the traditional view of perception training. Established by clinical researchers in the 1930s, it remains the dominant perspective today. Another approach, promoting awareness, is on the horizon.

**Discrimination Training**

Discrimination training addresses the well-known phenomenon that some children do not appear to hear their own speech errors. Sometimes called “the rabbit kids,” these are children who pronounce *rabbit* as *wabbit*, but who, when asked if they say *rabbit* as *wabbit*, may reply, “No. I say wabbit as wabbit.” In addition to making a good story, the reply of “the rabbit kids” suggests they do not hear their speech error.
**Something Broken**

The presumed explanation for failure of children to hear their own errors is that their speech discrimination mechanism has sustained damage. The intervention is to repair the mechanism through discrimination training. The most typical training activity within this approach is identification. To illustrate, the clinician instructs, “I’m going to read a list of words. When you hear our treatment sound, I’d like you to raise your hand.” Of course, instead of a list, the activity could involve a story, pointing to objects, and so forth. After you establish discrimination (that is, once the child can discriminate the treatment sound from other sounds), treatment moves to production practice.

**Promoting Awareness**

**Promoting awareness** (promoting a child’s awareness of the difference between sounds) offers a more cognitively oriented perspective on perception training. Promoting awareness begins by noting that it is highly unlikely that “the rabbit kids” fall down the rabbit hole because they have a broken discrimination mechanism. Speech perception, in common with other sensory systems, develops and matures months before an infant’s first birthday (Kuhl, 2010; Pascalis, de Haan, & Nelson, 2002). Like all parts of the body, damage can affect speech perception. However, because it is a critical foundation for speech learning, the outcome would be catastrophic and not limited to one or several late acquired sounds.

**Something Normal**

If perception problems are not the result of an immature or broken speech perception system, what is the problem? And, equally importantly, what can we as clinicians do about it? The answer may be that when children speak their attention is on their intention, not the sounds tumbling out of their mouth.

**Fast-fading Memories:** This attention on intention is true for children with and without speech disorders, and for adults as well. In many ways, our perceptual system makes it difficult to monitor speech sounds. To illustrate, echoic memory lasts only milliseconds and then fades. Short-term memory lasts slightly longer, from 10 to 15 seconds up to a minute.

**Just Like Adults:** Adults—including highly trained speech-language pathologists—find it difficult to pay attention to small differences in their own speech. To illustrate, even an experienced clinician may not realize that their [r] in ride is voiced and their [r] in pride is voiceless, that [k] in key is made much more forward in the mouth than [k] in cool, and that [p] is aspirated in pie but is unaspirated in spy. In other words, a child with a speech sound disorder does whatever everyone does: not pay attention to the actual sounds coming out of their mouth. The difference between children with and without speech disorders is that we notice the child with the speech disorder because their intended production differs so markedly from their actual production.

**Treatment Goal**

Within this perspective, the goal of promoting awareness is to focus a student’s attention on their speech. Promoting awareness also helps to promote generalization of treatment sounds to persons and settings outside the clinic. Almost all children and students need this assistance and so almost all receive ongoing help promoting awareness integrated with speech production practice (Anthony et al., 2011).

**Awareness Activities**

A clinician has a wide range of clinical tools to turn into awareness activities. Table 1 lists 9 options.

<table>
<thead>
<tr>
<th>Table 1. Clinical Options to Promote Awareness</th>
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<tr>
<td>Metaphors</td>
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<td>Touch cues</td>
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<td>Descriptions</td>
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<td>Demonstrations</td>
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<td>Minimal Pairs</td>
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<td>Deletion</td>
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<td>Self-correction</td>
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<td>Old Way/New Way</td>
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<td>Similar Sound</td>
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These options are useful with any child whose development is sufficiently advanced to allow them to reflect on their speech, typically late preschoolers and older. The following brief annotated dialogue illustrates promoting awareness with a late preschooler receiving speech work on [s].

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Clinician: Do you remember what we call our treatment sound?

Child: The snake sound.

*The metaphor reminds the child that [s] is continuant.*

Clinician: Do you remember how you used to say [s]?

Child: I said ta.

Clinician: Now you’re a big kid and say [s]. I know. Can you say [s] the big kid way, the little kid way, and then the big kid way again.

Child: ta sa ta.

*Old way/new way focuses the child on the difference between [t] and [s] while building self-esteem through demonstration of progress.*

Clinician: And now can you say sa three times in a row, listening to yourself, without me saying anything?

Child: sa sa sa.

Clinician: How do you think you did?

*Self-correction promotes self-monitoring, which the child needs to do to generalize treatment success.*

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**Distraction Activities**

When a child leaves speech treatment, the world is full of distractions that may push his awareness of speech right out the window. You may find that including some distractions during speech tasks helps maintain hard won speech gains outside the treatment session. Children enjoy—and may find it challenging—to say words with treatment sounds while hopping on one foot, or rolling a ball in miniature bowling, or—for a student—practicing a class speech that contains the treatment sound.

References


I can’t begin to count the number of times I’ve heard some variation of this statement and question from CSD students during the many years I’ve taught communication neuroscience. But, I’ve realized that from the perspective of the student, it is a very important question to ask, one whose answer actually goes directly to the heart and central purpose of any textbook designed and written to educate students about the nature of the brain. Why do we need to study the fundamentals of neuroscience as a CSD student? I could spend hours trying to provide lofty explanations as to the virtues of neuroscience training in CSD, but I very often prefer to answer this type of question by highlighting one inescapable truth that genuinely surprises most CSD students when they hear it for the first time. The rationale for the importance of neuroscience training in the CSD curriculum boils down to one essential idea that none of us can run away from: whether you are treating a child for a misarticulated /s/ or /r/, a person who stutters, a patient whose had a stroke and can no longer use language, or someone who is hearing impaired, the essence of treatment and all clinical improvement is always about changing some aspect of the patient’s behavior, perception, or cognitive state. The moment you invoke the idea of behavioral, perceptual, and/or cognitive adaptations, one must fully realize that what we are really talking about are changes to the structure and operation of the nervous system itself. To put it simply and plainly, everything we do as clinical speech-language pathologists and audiologists WILL have a direct impact on the very nature, anatomy, and function of the client’s nervous system. I often encourage students to let this idea sink in for a bit and then fully appreciate the magnitude of responsibility that rehab specialists assume when they decide to treat an individual. We are actively changing the brains and nervous systems of our clients through our clinical efforts—period. With this realization in mind, how can students not want to study and understand the nervous system! As I tell students in my university courses, rehab specialists across the spectrum are, in effect, “practicing” clinical neuroscientists whether they realize it or not.

I often discuss with my students that neuroscience is actually one of the few topical areas in the CSD curriculum that literally cuts across and is applicable to virtually all CSD content areas. Neuroscience training is applicable to phonology, voice, stuttering, child and adult language, swallowing, cognitive rehab, motor speech disorders, auditory rehabilitation, hearing aid use, and the list goes on. Neuroscience cuts across these areas because of the fact that we are always talking about behavioral, perceptual, and/or cognitive adaptations when it comes to treatment practice and its impact on client performance and outcome measures. As I teach my course, I frequently emphasize that neuroscience training can help a student appreciate and understand why treatments do or do not work. I also emphasize that neuroscience training can help a student: (1) argue intelligently for the benefits of rehabilitation with other professionals or insurance companies, (2) understand scientific literature on the functioning of the brain during normal and disordered speech-language and hearing behaviors, (3) better understand brain-behavior relationships in order to make appropriate clinical assessments and treatment decisions, and lastly (4) become more creative as a rehab specialist by enhancing their own conception of neurorehabilitation and its potential for a given client (Andreatta, 2019).

As suggested by Barlow (1998), our traditional view of speech pathology will require a dramatic shift to embrace and incorporate different yet related scientific areas (Andreatta, 2008). Specifically speaking, the neurosciences are an area fully capable of contributing much to our profession’s conception of therapy practice. Behavioral therapy programs in general, either intentionally or unintentionally, take advantage of principles of experience-dependent neuroplasticity whereby patterns of behavior are remodeled and trained through graded and targeted activities taught by the intervening therapist. At their essence, clinical interventions function to organize the sensory and motor experiences of the patient by controlling the complexity, frequency, and form of various therapeutic tasks (Barlow, 1998).

From the point of view of someone directly involved in the training of students, it is evident that speech pathology needs to continue making up much ground to more deeply understand, embrace, and incorporate neuroscience principles. From simple articulation errors to the complex deficits associated with neurological or congenital disorders, all available evidence points to the conclusion that treatments provided by a therapist directly impact the individual’s nervous system. Principles of neuroscience and neuroplasticity form the means through which the therapist’s impact on a client’s nervous system will be realized (Andreatta, 2008, 2019).
Confessions of a Reformed Developmentalist

Posted on September 27, 2018 by Kristin Banach, Senior Marketing Manager

Adapted from Speech Sound Disorders: For Clinicians and Students

Ken Bleile

The Developmental Logic of Treatment

Knowledge of speech development is a foundation of speech treatment. To illustrate this relationship, suppose you determine that a child of 3 years has a speech sound disorder. Next, you might ask what I believe is the best question in our profession, “What am I going to do about it?” Consciously or unconsciously, your answer likely entails asking two, maybe three additional questions:

- At 3 years, what does a child without speech difficulties know about speech?
- How does a child of 3 years acquire speech?
- How can I make speech easier to learn for a child with speech challenges?

What and When?
The first question asks what and when a child learns about speech. For this illustration, suppose your understanding is that a child of 3 years should be 75% intelligible, have a large expressive vocabulary, and speak in short sentences; those might then become possible treatment goals for this potential 3-year-old client. Importantly, another clinician might consult her knowledge base on speech development and decide that elimination of certain phonological processes offers this child the best help. Your answers may differ, but both you and the other clinician looked for answers from your knowledge of speech development.

**How?**

The second question asks how a child of 3 years learns about speech. For the sake of illustration, suppose you decide that the child would benefit from decreasing the occurrence of a phonological process—fronting, for example. Next, you might consider—either consciously or not—how children typically learn to overcome phonological processes. If you believe in the central role of social relations in speech learning, you will focus your treatment on fostering child-caregiver relationships, and you will likely use treatment techniques that simplify speech input within meaningful social contexts. Alternatively, if you believe that children learn speech mainly through reinforcement, then you will build your treatment on those principles.

**Developmentalists**

Everything in the previous discussion is based on a developmental perspective. There are other perspectives, of course, and there are also important differences between developmental viewpoints. At some point in your career, I hope you have (or already had) the opportunity to sort out your own perspective.

**Strict Developmentalists**

If you are a strict developmentalist, what (what is learned?), when (at what age is it learned?), and how (how does a child learn it?) are the only foundations needed for speech treatment. Like many clinicians of my generation, my training was to undertake treatment as a strict developmentalist.

**Less Strict Developmentalists**

Many clinicians today, myself included, have become less strict developmentalists over time, incorporating ideas and concepts into our clinical work. This “reformist” perspective often came about because a strict developmentalist approach can amount to replicating an environment that had proven unsuccessful for a child with a speech sound disorder. That is, when a child came from a home environment sufficient for speech learning, a strict developmental approach only continues an environment already shown to be insufficient for the child.

**Another Type of How?**

The third question (“How can I make speech easier to learn for a child with speech challenges?”) recognizes that you may wish to include nondevelopmental ideas in your treatment—perhaps hoping to “tweak” an environment to make it an easier place from which to learn. For example, you might decide that our 3-year-old child needs intensive speech production practice, far greater than found in a typical home environment, so you modify the naturalistic family-centered treatment to include more speech production activities.

**From Development to Developmental Speech Goals**

Speech development offers you—literally—hundreds of options to turn into developmental speech goals. As a shortcut, you can also turn to a published treatment approach, most of which contain one to many developmental speech goals. Baker and McLeod (2011a, 2011b) contains a wonderfully long list of 134 studies representing 46 different approaches. You can also find an excellent collection of treatment approaches with developmental speech goals in Williams, McLeod, and McCauley (2010).

**References**


Phonological Treatment of Speech Sound Disorders in Children: A Practical Guide

Jackie Bauman-Waengler, Ph.D., CCC-SLP and Diane Garcia, MS, CCC-SLP

Why should I buy this book? What is unique about it?

The first unique feature of this workbook is that it is intended for practicing clinicians who work with children with speech sound disorders. From this workbook’s inception, the goal was to make something user-friendly that clinicians could use in various ways with a limited investment of time. Another distinguishing feature is its summary of several of the most frequently used approaches for treating phonological disorders in children. While there are other textbooks that give a broad-based understanding of treatment of phonological disorders, this workbook offers a more in-depth discussion of eight different approaches. It describes the type of children this therapy would be optimally suited for, the diagnostic information needed, how to select targets for treatment, how to structure therapy, how to monitor progress, examples of intervention goals, and group therapy ideas. And, for every therapy concept, it provides examples of research which support evidence-based practice with this treatment protocol.

What are the strengths of this book?

This workbook has several areas of strength. First, its structure is a strength. Every therapy chapter offers a brief overview of the method, examples of supporting research, target selection procedures, sample goals, data collection strategies, treatment guidelines, and group therapy ideas. This structure provides the clinician with an easy to follow process from beginning implementation to monitoring therapy progress. Second, many worksheets are offered which can be tailored to meet the needs of individual children. This saves the clinician time during the assessment and intervention process. Third, case studies are offered in each of the chapters to demonstrate the concepts. There is also a separate chapter at the end of the book which is devoted to four children of different ages with varying degrees of severity. Assessment data for each child are given as well as a brief glimpse of a portion of therapy. Fourth, group therapy ideas are included in many of the chapters. To account for increased caseloads, many clinicians must often structure therapy within a group. These ideas offer group application possibilities for children with speech sound disorders and possibly language impairments.

How will this book help me practically in my job setting?

Many clinicians in a variety of settings are working with children with phonological disorders. With caseloads increasing, we often do not have a large amount of time to become experts in the various treatment options available, nor to decide which treatment protocol might be the most effective for an individual child. This workbook gives clinicians a streamlined version which is easy to use while offering specific data collection forms and protocols which assist and guide the therapist throughout the entire process. It also offers a large quantity of practical information that can be immediately used in therapy. Clinicians will find the progression through each of the treatment options easy to follow and practical to implement. In addition, every chapter contains two case studies that demonstrate the application of assessment information to structuring therapy. These case studies will give clinicians further support in developing appropriate intervention plans for their own clients.

What phonological intervention approaches are addressed in this workbook and how were they chosen?

The eight approaches in this book are: Minimal Pair Therapy; Multiple Oppositions; Maximal Oppositions; Complexity Approaches; Phonotactic Therapy; Core Vocabulary Intervention; Cycles Approach; and Phonological/Phonemic Awareness. These eight were selected based upon several factors: research demonstrating positive evidence-based practice, frequent use of the method, ease of implementation, and availability of resources to support application. Some of the approaches included represent comprehensive therapeutic protocols, while others primarily describe a specific target selection strategy. All are designed to remediate phonological
difficulties, yet do not necessarily exclude the principles which govern a traditional sound-by-sound approach.

**What are the characteristics of children who would most benefit from phonological intervention?**

As the name implies, phonological intervention approaches are designed for children with phonological disorders. That said, all children who demonstrate a speech sound disorder, regardless of etiology, may potentially benefit from the principles of phonological therapy. Appropriate recipients typically demonstrate more than one or two speech sound errors. They may demonstrate pervasive sound error patterns and exhibit highly unintelligible speech. With specific methods it is important that the child demonstrates a collapse of phonemic contrasts. In other words, one phoneme replaces many other phonemes. For example, the child uses “t” for “s”, “z”, and both the voiceless and voiced “th” sounds. With other therapy protocols the child fits best if a very restricted phonemic inventory is noted. Specific characteristics of children who would benefit from each therapy approach, such as age, severity, and types of errors, are provided in this workbook. This information gives clinicians concrete and verifiable guidelines for selection of appropriate intervention methods for individual children.

**What are the advantages of using a phonological intervention approach, as opposed to a traditional motor approach?**

There are many advantages! Phonological intervention targets often include patterns or groups of phonemes, rather than individual sounds. This results in broader change across a child’s entire phonological system. Phonological approaches have successfully demonstrated generalization to other sounds or patterns through careful selection of targets according to specific guidelines (Gierut, 2007). On the other hand, the traditional motor approach focuses on correct remediation of the physical production of individual sounds in a sound-by-sound manner. The traditional approach can take a much longer therapy time and generalization to other sounds does not seem to occur (e.g., Bowen, 2011; Dinnsen, Chin, & Elbert, 1992). In addition, phonological therapy targets the linguistic function of sounds, that is, the use of phonemes to create meaningful words. This shift in focus allows clinicians to facilitate functional communication in natural contexts, thus improving children’s ability to communicate during daily interactions.

**I have just been using the traditional-motor approach. Is that wrong?**

The traditional motor approach, sometimes called the phonetic approach, is not intended for every child with a speech sound disorder. Decades of research have documented that some children make faster, and more broad-based progress with some of the phonological treatment options (Gierut, Elbert, & Dinnsen, 1987; Gierut, Morrissette, Hughes, & Rowland, 1996; Tyler & Figurski, 1994). If you have children on your caseload with multiple errors, then the traditional approach, going sound-by-sound through the child’s errors, can take an enormous amount of time. This is time they are spending in speech therapy and not within the classroom. The goal is to get these children out of therapy as soon as possible. Phonological treatment methods are one very successful way to do this.


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Individuals with cleft and craniofacial anomalies represent a complex heterogeneous population. Like their medical presentations, their communication impairments can be diverse in nature and severity, the result of various causative factors. Although some individuals with cleft palate may have normal sounding speech others will not. Some will present with obligatory errors that occur as a direct result of velopharyngeal dysfunction (VPD) (e.g., hypernasality, audible nasal air emission, nasalized plosives). Others will present with learned maladaptive articulations that occur as compensation for VPD (e.g., glottal stops, pharyngeal stops, fricatives, and affricates). Individuals with cleft palate may also present with obligatory errors as a direct consequence of oral structural anomalies (i.e., frontal distortions). Even still, there are those patients with and without cleft palate who produce unusual articulations such as nasal fricatives (i.e., phoneme-specific nasal emission) (Vallino, Ruscello, & Zajac, in press; Zajac & Vallino, 2017). Any one or more of these errors as well as those errors unrelated to the cleft palate can co-occur. Given the complexity of speech problems in this population, the student of speech-language pathology might find this all quite confusing. Misidentification of errors can lead to misdiagnosis and inappropriate treatment recommendations. The challenge to any instructor is how to effectively teach cleft palate, a complex disorder, to students; and create a successful transfer of evidence-based knowledge and skill to real-life clinical practice that will result in optimal care for the clients they will come to serve.

Traditional Teaching of Cleft Palate

A most pressing issue in the area of cleft palate is that clients with this disorder constitute a low incidence population, and many clinicians have limited academic exposure and/or clinical training in this area (Vallino, Lass, Bunnell, & Pannbacker, 2008). The typical, and most dominant, approach to teaching a course in cleft palate speech is pedagogical. The instructor disseminates (didactic) information about the features of the various speech disorders (i.e., resonance, nasal air emission, articulation, phonation) associated with cleft palate and students are passive recipients of this knowledge. Instructors may supplement the material presented with a textbook on cleft palate that...
Problem-Based Learning

Problem-based learning (PBL) is a student-centered approach to teaching that uses problem scenarios to promote concept learning and problem-solving abilities (Barrows, 1996; Hmelo-Silver & Eberbach, 2012; Savery, 2006). Its application has been promoted in the fields of medicine and health disciplines, including speech-language pathology (Burda & Hageman, 2015; Whitehill, Bridges, & Chan, 2014). In contrast to didactic teaching in which the knowledge is provided to the student, PBL turns to the student to apply his or her knowledge.

Creating a hybrid of traditional classroom learning, problem-based learning and experiential learning translates to a student who becomes a confident, competent, resourceful, and effective speech-language pathologist. It’s about creating a student-centered approach to learning. The goal is to provide the student with the necessary tools and resources to apply the skills learned to real-life practice.

Box 1. Problem scenario (case history)

This is a 6-year-old male with paired bilateral cleft lip and palate. The lip was repaired at 3 months and the palate at 10 months of age. He has a history of otitis media with effusion treated with myringotomies and pressure-equilibration tubes. Current audiologic examination showed normal hearing sensitivity, bilaterally. This child has a history of speech therapy beginning with Early Intervention. His speech is characterized by mild hypernasality, pharyngeal fricatives and stops as well as an /r/ distortion. During the perceptual assessment, it was a challenge for him to repeat sentences and he had to be redirected to task several times. The family is concerned about this child’s hypernasality and expressed that his teachers do not easily understand him.

After reading the patient’s history, the students begin by identifying the knowledge they have about the condition. They need to ask themselves, what facts do I already have and what else do I need to understand in order to resolve this problem? The students have to research the areas where they have identified gaps in their knowledge and the uncertainties they must resolve before finding the solution to the problem and making treatment recommendations. During this process, they have to sort through relevant evidence using a variety of resources.

The advantages of this type of learning include developing the student’s ability to make decisions and effectively solve problems, becoming analytical, working as a team, raising awareness of the complexity of issues, developing an ability to extend learning beyond a presented problem, and integrating theory and practice (Gentry, 2000, p. 13).

Experiential Learning

Experiential learning presented problem, and integrating theory and practice (Gentry, 2000, p. 13).

The advantages of this type of learning include developing the student’s ability to make decisions and effectively solve problems, associated with cleft palate that might not be otherwise covered in any other course, and the instructors have maximum control over the material presented. The disadvantage of this type of teaching is that it is essentially unstimulating, and that information presented this way tends to be forgotten rather quickly. As Jaebi (n.d.) pointed out, the didactic approach lacks student focused learning, emphasis on critical thinking, and process-oriented learning. Importantly, it lacks interactivity. Students too have different learning styles and preferences, and if the goal in teaching is to make all students successful learners then this predominant one-way approach is not always a good learning fit for all.

The students who sit in our classrooms in 2018 are millennials. They have grown up with and interact constantly with technology, and this is affecting how they want to be taught. For this reason, it only makes sense that technology be used to bring to the student an interactive approach to their learning about speech problems associated with cleft palate. Classrooms are equipped with this technology (i.e., Smart Boards, data projectors and projection screens or LCD/TV monitors, DVD players, audio systems, and capabilities for video conferencing), which can easily provide access to real-life examples. Students learn well and retain information well when they are engaged, when they are active participants in the learning process.

Cleft palate is a specialty in speech-language pathology that particularly lends itself to learning both in the classroom and experientially, through problems and problem solving. The very nature of this “visible” disorder, the complex case histories, and the multiple disciplines involved can present genuine challenges for the student. However, these challenges can be used to actively involve the student in real-life situations.

Creating a hybrid of traditional classroom learning, problem-based learning and experiential learning translates to a student who becomes a confident, competent, resourceful, and effective speech-language pathologist. It’s about creating a student-centered approach to learning.
Anchored to PBL, is experiential learning (EL). PBL uses realistic problems to set up the learning leading to a diagnosis and recommendation. EL is a continuous process whereby knowledge is created through an authentic experience (Kolb, 1984). As in PBL, the instructor directs and facilitates. EL is a participatory event and, in effect, a holistic approach to learning in which the student progresses through a cycle of four integrated processes: concrete experience, reflective observation, abstract conceptualization, and active experimentation. (Kolb, 1984). These features are summarized in Table 1. Central to both EL and PBL is encouraging critical and independent thinking in the student.

Table 1. Summary of key features of experiential learning (adapted from Kolb, 1984)

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<th>Stages</th>
<th>Feature</th>
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<tr>
<td>Concrete experience</td>
<td>Actively experiencing an activity</td>
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<tr>
<td>Reflective observation of the new experience</td>
<td>Active reflection on experiences based on personal experience or what is known</td>
</tr>
<tr>
<td>Abstract conceptualization</td>
<td>New ideas about the problem are formed or modifications of previous conceptions</td>
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<tr>
<td>Active experimentation</td>
<td>Apply ideas to practical experience</td>
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Both PBL and EL are indispensable to learning through problem solving and although they would be particularly meaningful in a specialty as complex as cleft palate, they have been insufficiently explored in this specialty. The strength of learning comes from an integration of these two approaches. PBL provides an opportunity to apply a student’s knowledge to a relevant problem. EL provides the experience through avenues such as audio and/or video recordings which bring the problem to life. It draws the connection between the history and the actual presentation of the problem, and further supports ongoing problem comprehension. Moreover, in contrast to didactic teaching, the instructor’s role in PBL and EL is transformed from one that disseminates all the information and answers to one of guidance and facilitation. Gentry (2000, p. 11) noted that instructors in this role often experience revitalization about teaching and a renewed interest in the topic being presented.

Integrating PBL and EL in the Classroom for Cleft Palate

The experience of audio and/or videotape recordings can be effective when in teaching a course in cleft palate where it is important to integrate coursework and an experience, while also addressing the learning preferences of the student. The recordings are more than just a speech sample, and when presented alone, are ineffective in learning about cleft palate. The true value of these recordings along with case histories and other supplemental information is the added “real-life” dimension to teaching that is unavailable in textbooks even with their short speech samples. They help explain concepts and act as a trigger for discussion. Because the recordings can be played over and over again or stopped at various points, students have an opportunity to hear those aspects of speech that they may have missed or did not understand the first time and to also engage in further discussion about the problem.

A true experiential learning in cleft palate involves audio and video recordings and all of the steps and processes from PBL and EL. Figure 1 illustrates this type of learning within the classroom.

The first step involves a concrete experience in which an audio and/or video recording of the case is presented. The second step involves making observations and reflecting on what was heard and seen in the experience, facilitated by the instructor, and engagement with peers. Using a white board, a systematic approach to problem-solving can be illustrated. Here, the facilitator or instructor can be helpful in offering guiding questions that lead to further understanding of the problem. Third, the remarks and discussions lead to abstract conceptualization (analysis) and conclusions about the problem and recommendations. During this time misinformation and confusion about the client and speech can be clarified. The fourth step is to test this new-found knowledge during independent practices using real-
world problems and/or clinical placements. This process is a valuable guide in understanding any case regardless of complexity.

In summary, a hybrid of didactic, problem-based learning, and experiential learning will enhance the training experience of the student studying cleft palate. Audio and video recordings can be effective in this process where integration of theory and actual practice are so vital. The role of these recordings is to provide concrete experience along with other steps in the learning process. Given that there have been so few opportunities like this in the past, we have written our new textbook, *Cleft Palate Speech and Resonance: An Audio and Video Resource*, to facilitate problem based and experiential learning in the classroom (Vallino et al., in press).

References


From Multiculturalism to Critical Consciousness: Updated Concepts for Providing Culturally Responsive Practices at Home and Abroad

Posted on January 31, 2018 by Kristin Banach, Senior Marketing Manager
In the 1990s a new generation of faculty members in Communication Sciences and Disorders (CSD) emerged, ready to infuse courses or to develop and teach courses focused on “multicultural content,” which was the term at the time. There were a limited number of comprehensive texts on how to employ culturally relevant practices as a speech-language pathologist. Many of the SLP faculty who were teaching courses about “multiculturalism,” or “cultural competence,” often utilized texts from other fields, such as education, nursing, or communication and rhetoric, and relied heavily on published articles in disciplines including anthropology, political science, nursing, and social work. It was not until mid-1990s that one of the more complete books on multiculturalism in communication sciences and disorders (CSD) was published (e.g., Battle, 1993, 2012). Nevertheless, as the world has become more complex and smaller as a result of global processes, new concepts and comprehensive practices that consider causal relations are required.

Multiculturalism is a contested concept, but typically refers to including people from diverse cultural backgrounds (Malik, 2015) in program development or service delivery for example. Multiculturalism as a concept falls short, primarily because it suggests that inclusion (or assimilation) is the principle issue. Although health care providers and educators offer and provide services to all people regardless of their cultural (or racialized class, ethnic, gender, national, or linguistic) backgrounds (e.g., inclusion), services can remain inadequate or irrelevant if we also do not consider how services might be reconceptualized or changed to meet the cultural premises of those receiving services.

Cultural competence, a concept that emerged in the 1980s (e.g., Cross, Bazron, Dennis, & Isaacs, 1989), is more useful than multiculturalism but is weighed down by preconceived notions of competence. The perception is that “competence” refers to skills or knowledge that one acquires, and that those skills can be completed or mastered (checked off), are static, and independent of context or history (Hyter & Salas-Provance, 2019; Willbergh, 2015). This perception of competence has caused many disciplines in the health professions to move away from it in favor of other terms.

Cultural responsiveness, a term coined by Ladson-Billings (1995), seems to be more accessible than multiculturalism and cultural competence. It refers to engaging in practices that are consistent with or relevant to the cultural values, beliefs, and assumptions of a person or group with whom a solution (or clinical outcome) is co-created. In this manner, responsiveness is inherently dynamic, dependent on context and shared historical memories. Hyter (2014) has conceptualized culturally responsive practices as those that take place beyond the micro level (individual), but also at the meso (community and family) and macro levels (social structures such as economics, politics, culture, cultural institutions, and state sanctioned violence [Hyter & Salas-Provance, 2019, p. 171]). Culturally responsive practices require knowledge that is not always a part of the CSD curriculum such as critical consciousness—the ability to deconstruct one’s own social, cultural, historical, economic, and political situation and co-construct solutions to problems (Freire, 1974); dialectical thinking—the ability to synthesize conflicting perspectives; cultural humility – believing that cultural practices and perspectives different from one’s own are as valuable as one’s own (Ortega & Faller 2011; Tervalon & Murray-Garcia, 1998); and cultural reciprocity—understanding and using the client’s cultural beliefs to co-construct (with the client) services provided (Kalyanpur & Harry, 2012). Culturally responsive practices also require an elevation of concepts that are already inherent in CSD clinical practice such as critical thinking, critical self-awareness, and reflection. To truly work at the level of cultural responsiveness or relevancy in the United States or abroad, as a profession, speech-language pathologists and audiologist need to adapt new vocabulary and new theoretical frameworks that will help us question the dominant premises, change the terms of public and professional debate, and address the shared problems of structurally excluded groups with interventions that acknowledge and incorporate their world view.

References


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**Can the SLP Help Make RtI Part of the Educational DNA? Y-E-S**

Posted on **December 29, 2017** by Kristin Banach, Senior Marketing Manager

By Wayne A. Foster, PhD, CCC-SLP/A

*Author of The Role of the Speech-Language Pathologist in RtI: Implementing Multiple Tiers of Student Support*

Is there a role for a speech and language pathologist (SLP) in Response-to-Instruction/Intervention (RtI) beyond the application of special education services (Tier III in a three-tiered model)? Some will say that an SLP can play a (limited) role in the application of pre-referral interventions. I wrote this book to argue that there is a very special but previously poorly defined role for the SLP. In fact, in the absence of support for the RtI process by those who understand the principles of child development, it is likely that RtI will fail to thrive.

Response-to-Instruction or Intervention (RtI) makes great sense as a system to support struggling students in America’s K–12 educational system. In short, RtI refers to the application of academic and/or behavioral support that is linked to the student’s functional level within a given domain and is provided at an appropriate intensity and frequency. This support is monitored for effectiveness and modified as needed. The ultimate goal is to close the gap between a student’s functional level and the level needed to progress in the
While RtI makes sense it is relatively rarely implemented with the fidelity necessary to generate the type of success needed to help it become part of the DNA of the educational process. In many schools RtI never takes root and where it has been implemented it is constantly under threat of being dismantled in favor of more traditional educational processes. Today it seems no easier to implement and sustain a multi-tiered system of student support (such as RtI) than it was two decades ago. Why is it so difficult to make a multi-tiered system of student support work?

One answer became clear to me at a 2008 workshop on literacy I presented to the kindergarten through fifth grade teachers in a moderate-sized school district. At this training session the developmental progression of literacy skills was outlined via a series of slides. The initial slides associated the development of language to the development of early phonological awareness. With each slide the teachers could see how literacy skills transitioned and ultimately led to the ability to comprehend lengthy, complex, and abstract text. They were fascinated and most admitted that this was the first time they had ever learned about the development of literacy over time (and grades). The teachers in the room clearly understood the standards of their grade level curriculum but were not aware of normal patterns of development for literacy. In fact, far too many educators have not been trained in the patterns of child development for language, literacy, mathematics, or behavior (including socio-emotional development).

Implementation of RtI demands knowledge of development. How is one to address the needs of a student who is functioning in one or more domains well below a grade-level curriculum? One answer is that you must meet the student at their functional level with an intervention that helps close their developmental gap. This requires a rather detailed knowledge of development. In workshop after workshop I realized that general educators across America had not been adequately trained in the language of development. I came to the conclusion that there exist two major educational languages spoken in America’s public schools—the language of curriculum and the language of child development. Unfortunately few educators are fluent in both.

In most tiered systems (such as RtI) the initial application of support is provided through differentiation of instruction within the general classroom. Many educators understand this differentiation to mean appreciation of different learning styles (e.g., visual versus auditory versus tactile/kinesthetic) and how to modify instruction to allow students to access the curriculum via the learning style that maximizes their learning potential. This is a correct view but differentiation also means assisting a student who may be delayed in development of skills. Differentiation can mean breaking down instruction into smaller steps and providing meaningful feedback. If differentiation is not successful then individual or small group interventions are applied and monitored for progress (Tier I in the RtI model). If this level of support is not sufficient, then a more intense, frequent, and individualized intervention may be necessary (Tier II in the RtI model). Think about what this requires on the part of the professional. First, they must identify where in the developmental progression the student is functioning. Second, they must select an appropriate treatment (i.e., intervention) that moves the student forward. Third, they must monitor progress and know when the appropriate skill level for the child’s age is attained. This is a developmental perspective, clearly more of a developmental perspective than a curricular one.

If RtI is to work in a school those professionals who understand child development must support those charged with implementing the early Tier I and Tier II level interventions. RtI will flounder as an educational paradigm if there is poor integration of the two languages and poor coordination between the professionals who are fluent in those languages. Unfortunately, that has been the case in many of the schools I have visited over the past decade.

School-based SLPs are highly trained in the realm of child development and are well positioned to provide support of the RtI–multi-tiered system of student support. The major reason for writing The Role of the Speech-Language Pathologist in RtI: Implementing Multiple Tiers of Student Support was to provide a description of the differences between curricular and developmental perspectives and explicate the role of the SLP in making RtI successful without dramatically increasing the workload of the school-based clinician. Further, there did not seem to be a resource available that could help an SLP better understand their own educational approach (development) much less come to a strong appreciation of the general educator approach (curriculum).

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**Meet the Author Sessions at ASHA 2017 Convention**

**MEET THE AUTHORS AT ASHA!**

**SCHEDULE:**

*Thursday, November 9*

11:00 – 12:00 pm: Celeste Roseberry-McKibbin and Priya James, co-authors of Comprehensive Intervention for Children With Developmental Delays and Disorders (10 book set)

1:00 – 2:00 pm: Wendy Papir-Bernstein, author of The Practitioner’s Path in Speech-Language Pathology: The Art of School-Based
Within our profession—whether student, professor, researcher or practitioner—we connect with people from a diversity of fields. Have you noticed how some seem happier than others? They excel at their work and communicate a sense of enthusiasm, passion and professional fulfillment. It shows on their faces and use of body language, their social interactions, and of course through their work. Researchers from the field of positive psychology tell us that happiness, whether personal or professional, is driven by the same themes: we want to make a difference, we want to be useful, we want to connect with something greater than ourselves, we want balance in our lives, and we want community (Haidt, 2006). It all seems pretty basic and yet it can be our greatest challenge.

One reason may be that we sometimes think of ourselves as consummate caregivers, and this culture of self-sacrifice is naturally carried over into our work setting. I remember the moment many years ago when I first thought this idea. I was on a plane, traveling out of the country. The flight attendants spoke about safety regulations, demonstrated oxygen masks, and I thought I knew the drill well. This time, however, I really heard it for the first time. When they explained how important it was for you to put on your own oxygen facemask first—before helping anyone else with their own—I understood and took it to heart. After returning to work, I made some immediate changes with priorities and strategies for my own self-care.

Bottom line—our work reflects our personal attitudes about our own wellbeing, as much as it does about the wellbeing of our patients, clients, and students. In fact, these attitudes are an integral component of clinical expertise, and will drive the success of our practice. The significance of “personal attitudes and qualities” has recently been expanded in both ASHA’s 2014 clinical competency standards as...
interaction and personal qualities, and in the 2015 revision of standards for accreditation of graduate programs as professional practice competencies (ASHA, 2014; 2015). Attitudes provide the framework and the context for what happens within the clinical and educational processes, and are thus the most critical “tool” in the profession. As it has been discussed within the medical profession, the most valuable part of the stethoscope is the part that rests between the ears. And so, prescriptions for our own self-care and wellbeing must be at least as important as care for the people who receive our services (Traux & Mitchell, 1971).

What do we mean by professional wellbeing? While wellbeing is difficult to define and measure, we do know that it involves maintenance of equilibrium easily offset by life’s challenges. It is sometimes linked to Aristotle’s idea of “eudaimonia”, the belief that the overarching goal of all human actions is to flourish (Bradburn, 1969). Martin Seligman, another leader in the positive psychology movement, developed a theory about the building blocks for a life that flourishes, which he coined PERMA: positive emotion, engagement, relationships, meaning and accomplishment (2011). All of this contributes to a feeling of success. Wellbeing has been compared to quality of life, which is defined by The World Health Organization (WHO) as “an individual’s perception of their position in life in the context of the culture and value systems in which they live in relation to their goals, expectations, standards and concerns” (WHO, 1997).

Paths, roads or ways are metaphors for the possibility that there is a connection between all we are and do. Our chosen path is the practitioner’s path, where our work becomes about who we are as well as about what we do. As we think about building, supporting, traveling and ultimately manifesting our path—we create a sense of passage within phases of our professional life that fosters balance, self-care, and reflective practices. As we approach the inevitable forks on our professional paths, let’s reflect upon the values we live by, the qualities and attitudes we embody, and the examples we model for others. Nothing becomes more valuable than establishing our own set point for wellbeing, and building strategies for maintaining that sacred balance between our personal and professional self.

References


Posted in Plural Community Newsletters, Speech Language Pathology, Speech-Language Pathology | Tagged ASHA, well-being | 2 Replies

One of the best things you can do for your clients with right hemisphere brain damage

Posted on July 31, 2017 by Kristin Banach, Senior Marketing Manager
It can be difficult to know what to do with clients who have right hemisphere brain damage (RHD): how to assess them, what to treat, how to treat, etc. It’s not surprising, because (a) there is less collective knowledge within the field and (b) there are limited opportunities to acquire the knowledge that does exist. As for the amount of knowledge, aphasia was “discovered” and named the 1860s. In contrast, the impact of RHD specifically on communication and language has only been recognized since the 1960s, so we are behind by a century! As for the opportunities to acquire the knowledge, the problem starts in graduate school. While a majority of graduate programs have stand-alone courses on aphasia, RHD is typically covered as one of several topics/etiologies in a cognitive disorders course. I would venture that a majority of graduate programs have an expert in aphasia on faculty, while only a minority of programs have anyone interested in RHD. It is equally difficult to find continuing education about RHD after graduate school. In the past three years at the ASHA Convention there have been only between 6 to 9 presentations on RHD each year. In contrast, the number of presentations about aphasia has ranged from 177 to 269.

There is not enough room here to provide tips and advice for how to tackle all of the disorders associated with RHD, so I’ll just mention the one that I think is the most critical: talk to families. While SLPs likely talk to families of all of their patients/clients, it is especially important when working with someone with RHD. The purpose is two-fold: first to get information about how the patient has changed following the stroke, and second to provide information and resources to the families.

Getting information from the families about how (and if) the patient is different is essential. When it comes to pragmatics, there is no clear cut-off between being “normal” and being “a bit odd” as a result of brain damage. Add to that cultural differences in how people communicate (both verbally and non-verbally), and it may be nearly impossible in some cases to determine if someone has a pragmatic deficit or not. For example, just the other day I was assessing a man with RHD for a research project. In the small talk at the beginning of the session, I found out that he was originally from Wisconsin, so I asked him what brought him to Texas. He replied, “a 1972 Chevy truck”. If the exchange ended there, and I had no information about his personality from his family, I could have thought, “Aha! Typical RHD, he’s overly literal in his interpretations” and decide that I might want to target pragmatics in therapy. But the exchange did not end, and he followed up that response with an appropriate explanation of a change in jobs. Additional information from his family regarding whether or not that kind of response was a typical pre-stroke behavior would allow me to make a more appropriate decision about therapy goals.

The second part of talking with families is to provide education. They need education about the variety of problems that may occur and who they can contact for help. While families may get information about unilateral neglect from neurologists, SLPs are the ones who can educate families about pragmatics and communication. SLPs are the ones who can explain how RHD can affect theory of mind, cause a person to no longer accurately interpret another person’s intended meaning, understand their point of view, or become more egocentric and self-focused. SLPs are the ones who can explain that changes in theory of mind and emotional processing may result in changes in empathy. SLPs are the ones who can explain that appreciation and use of humor might change after RHD. SLPs are the ones who can explain that deficits in problem-solving and reasoning can affect communication, such that a person may not be able to notice or fix a communication breakdown, or figure out that the breakdown was mostly their fault. SLPs are the ones who can explain how prosody, facial expression, and body language are critical to communication, and that all can be affected after RHD. And most importantly, SLPs are the ones who can explain that they can treat these deficits.

Educating families about RHD is especially important because some deficits may not become apparent until the patient goes home. For example, an egocentric perspective and limited empathy for others might be considered normal for anyone in the hospital after a life-changing event such as a stroke, so it may not be identified as a deficit until the patient goes home and his spouse observes a lack of empathy in everyday situations. A patient also may seem to have a blunted sense of humor that in acute care may not seem unusual given the situation, but it may become really obvious when she goes home and her husband can’t joke with her like he used to, or conversations just aren’t “normal”.

By Margaret Lehman Blake, PhD, CCC-SLP
Author of The Right Hemisphere and Disorders of Cognition and Communication: Theory and Clinical Practice
When these kinds of changes become apparent, most families won’t think, “I should ask for a referral to a speech therapist”, because the person’s speech generally is fine. SLPs need to provide that link for them when they have the chance, so that when the deficits become apparent, the families will know where to go for help.

Despite the limited number of evidence-based treatments, I believe that SLPs can provide effective treatments to adults with RHD. Our knowledge about pragmatics and cognition can go a long way in addressing the deficits that limit participation in activities important to our clients. We just might increase interest in RHD, which would lead to more research, more experts in the field and more opportunities to learn about the problems, which in turn would spark more interest, lead to more research, and on and on.

Posted in Plural Community Newsletters, Speech Language Pathology, Speech-Language Pathology | Tagged brain damage, cognition, pragmatics, right hemisphere brain damage, stroke | Leave a reply