

Clinical Forum

Prologue

Developing Evidence-Based Practices and Research Collaborations in School Settings

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They always say that time changes things, but you actually have to change them yourself.

Andy Warhol, n.d.

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his clinical forum is both eclectic and unified. The eclecticism is most notable when the reader considers the topics covered. In the first article, Goldstein and Washington demonstrate a process for acquiring new information on the phonological skills of students who speak both Spanish and English. Next, Porter and Hodson provide a template for how phonological acquisition data in preschool and elementary school-age children might be gathered. The final two contributions pertain to spelling. Bourassa and Treiman, who are major researchers in spelling development, present an in-depth review of linguistic factors that govern spelling development and the implications of these linguistic factors for understanding spelling disabilities. Apel and Masterson apply the Bourassa and Treiman framework to the assessment and intervention case study of a 13-year-old student with spelling difficulties.

Although these contributions, at first glance, may appear somewhat disparate in an overall unifying theme, in fact, they represent some of the real changes that have occurred in the field of speech-language pathology and that continue to shape how speech-language pathologists do their jobs, particularly in school settings. The articles in this clinical forum represent, to paraphrase Mr. Warhol, how individuals are attempting to change "things."

Speech-language pathologists who have worked in the field for more than 5 years likely have experienced

significant changes. These include changes in work setting, clientele, areas of communication being addressed, clinical tools, service delivery models, and more. The concerns and questions that face speech-language pathologists today, for the most part, are quite different from those faced 20 years ago, or to some extent, even 10 years ago. Changes within the discipline have occurred because of a better and broader understanding of the human communication process, revised federal guidelines and regulations for special education and related services, and a strong desire to encourage scientific pursuit through researcher-clinician partnerships. The contributions in this forum represent a group of scholars and clinicians who are unified by their desire to change clinical practices based on these three trends.

A BROADENED UNDERSTANDING OF HUMAN COMMUNICATION

For more than 15 years, the field of speech-language pathology has called for clinical research that provides meaningful data for determining when a language impairment coexists with language differences and when it does not, for example, in speakers whose first or only language is other than English (e.g., American Speech-Language-Hearing Association [ASHA] Committee on the Status of Racial Minorities, 1983; ASHA Committee on the Status of Racial Minorities, 1985). The professional literature has emphasized repeatedly two interrelated needs. First, students who are acquiring English as a second language primarily in the school setting should have their abilities assessed using tools or measures that are sensitive to their

cultural and linguistic backgrounds (e.g., Cheng, 1999; Montgomery, 1999). Second, to understand patterns of English language learning, approaches to assessment also must reflect knowledge of the linguistic processes underlying a student's first language learning (Gutiérrez-Clellen, Restrepo, Bedore, Peña, & Anderson, 2000; Leonard, 1998). Additionally, federal guidelines and regulations, such as the recently revised Individuals with Disabilities Education Act (IDEA) of 1997 (P.L. 105-17), mandate that students from culturally or linguistically different (CLD) backgrounds should not have their abilities assessed using culturally or linguistically biased assessment tools (IDEA, Section 300.531). However, clinicians seeking "least biased" evaluation tools, or even information on the speech and language skills of typically developing children from CLD backgrounds, most often come up empty handed. The profession's ability to meet the need to evaluate and diagnose children from CLD backgrounds in a least biased manner has been slow to emerge because of the complexity involved in developing valid assessment tools for diverse populations (Leonard, 1998; Washington & Craig, 2001). In this forum, Goldstein and Washington provide a move forward, a change aimed at lessening this complexity.

In their study, Goldstein and Washington (2001) investigated the phonological skills of 12 4-year-old children with typically developing, bilingual (Spanish-English) language skills. The children's speech sound productions were evaluated in both English and Spanish. Their preliminary findings provide initial evidence of both similarities and differences between the phonological systems of bilingual speakers and monolingual speakers of either language. These results suggest that speech-language pathologists may need to alter their view of bilingual speakers and now expect that children who are bilingual in Spanish and English may demonstrate a different profile of phonological development in contrast to their monolingual peers, regardless of whether these peers are Spanish- or English-speaking only.

Speech-language pathologists also have broadened their understanding of human communication by recognizing that language is more than the spoken word. In recent years, the profession has begun to highlight and emphasize the speech-language pathologist's role in written language as well. ASHA (2001) recently adopted a set of guidelines for the roles and responsibilities of speech-language pathologists in children's written language skills. According to this and other official ASHA documents (see ASHA, 1996), speech-language pathologists may serve as preventionists, collaborators, and interventionists as they help students with reading, written composition, or spelling difficulties. Two articles within this forum address this last written language skill. Both represent significant changes in how spelling has been viewed and how professionals have assessed and facilitated spelling development.

Bourassa and Treiman (2001) discuss an evolving view of spelling development as a dynamic linguistic process. These authors first review the influence of phonological knowledge, including phonetic and letter name knowledge, on early spelling development, as well as the central roles of orthographic and morphological knowledge in attaining

conventional spelling skill. Pointing out that the evidence supports a developmental progression from dependence on phonological to orthographic and morphological information in learning to spell, Bourassa and Treiman also caution that a stage-based view of spelling does not fully explain the process. Instead, they focus on the kinds of linguistic information and strategies the emergent speller must employ for different spelling tasks. They also highlight research that demonstrates how the skills typically associated with each phase of development are evidenced to some extent across all phases of development. The implications of this rich body of research then are applied to spelling disabilities. The authors suggest that detailed linguistic analyses of spelling skills may help to provide a clearer picture of spelling development and lead to better interventions for children with spelling difficulties.

Apel and Masterson (2001) incorporate this dynamic view of spelling development in a model that demonstrates how theory and research can guide decision-making in their assessment and intervention of a student's spelling skills. Using the student's spelling errors as an example, Apel and Masterson provide a hypothesis formation procedure that results in intervention goals based on suspected deficits in one or more linguistic factors known to affect spelling development. They then detail the intervention procedures they implemented, based on suggestions in the literature and the specific deficits identified in their spelling evaluation.

Although speech-language pathologists have expanded their understanding of language and communication into the literacy realm over the past few years, the means for how children are assessed and the manner in which intervention is provided have lagged somewhat behind. The articles in this forum signify changes in how speech-language pathologists provide clinical services to the students they serve. At the same time, these same contributions characterize changes that have occurred due to recent federal guidelines and regulations.

FEDERAL GUIDELINES AND REGULATIONS

IDEA was amended in 1997 (P.L. 105-17). As part of this amendment, the final Part B regulations stipulated several key goals and considerations that have had significant and service-altering impacts on the ways speech-language pathologists assess and intervene in the lives of their students. All of the articles in this forum emphasize changes mandated by IDEA.

IDEA directs professionals to assess students' skills and abilities using relevant and valid tools when determining whether a student presents with a disability. An assessment tool that is based on a population of students that differs from the student to be evaluated could not be seen as a valid measurement. For some time, scholars have suggested that one key way to avoid this situation is to establish local normative information that is specific to the population in question. In this clinical forum, Porter and Hodson (2001) describe such an attempt.

Because of a need to establish district-level descriptions of the phonological skills of typically developing children, Porter and Hodson and their colleagues set out to collect information on the phonological systems of more than 500 children between 2½ and 8 years of age. Their article describes how this process occurred, from making the contact between school-based professionals and the university professor, to establishing procedures, to data analysis. Although the data they obtained may not be relevant to other school districts, their article serves as a model for others who wish to change the manner in which children are considered eligible for speech-language services in the schools.

One of the most prominent changes in federal guidelines in recent years is the need to ensure that a student's disability does not impede access to the general education curriculum. With the broadened understanding of language and communication just cited, speech-language pathologists will likely expand the areas of language they identify as impacting on educational performance. For example, speech-language pathologists may be called on to determine whether a child's written language skills are interfering with academic performance (ASHA, 2001). When a student demonstrates a disability in any area of written communication, the impact on academic and social performance may be severely affected (e.g., Scott, 1999; Silliman, Jimerson, & Wilkinson, 2000; Wallach & Butler, 1994). With their focus on spelling, the final two articles in this forum (Apel & Masterson; Bourassa & Treiman) provide theoretical and clinical information in this critical area of written language. Speech-language pathologists should be able to apply this information as they respond to IDEA's call to facilitate students' access to the general education curriculum.

Finally, IDEA also mandates that students be evaluated with tools that are culturally and linguistically appropriate. As mentioned earlier, Goldstein and Washington provide provisional information on Spanish and English phonological development that, ultimately, when additional data are gathered, should provide speech-language pathologists with the information necessary to conduct appropriate evaluations in this domain. Taken as a whole, then, the articles in this forum depict changes in services that address guidelines and regulations that school-based professionals must address. In the process of doing so, they also represent changes in the way research traditionally has been conducted in the discipline.

RESEARCHER-CLINICIAN PARTNERSHIPS

Two of the forum articles (Goldstein & Washington; Porter & Hodson) represent collaborations between university-based and school-based professionals. A research partnership between a researcher and a clinician can be a valuable avenue for furthering the scientific basis of the discipline (Butler, 1998). These partnerships may be initiated by one or the other partner, but necessarily occur because of mutual interests between the partners (Ingram, 1998). In one case, Brian Goldstein, a university-based researcher, approached Patricia Washington, a school-based clinician, to conduct a study based

on their shared interest in children with bilingual (Spanish) language skills (Goldstein & Washington). Judith Porter and her school-based colleagues approached Barbara Hodson, a university-based researcher, to guide them in conducting research pertinent to their needs and work site (Porter & Hodson). These collaborations provide models of successful researcher-clinician partnerships while simultaneously adding to the information base of the discipline.

Both of these studies represent more "traditional" research methods. For example, the research teams identified exclusionary and inclusionary criteria for their child participants, specific stimuli, and methods that would maximize reliability and validity. However, as Fey and Johnson (1998) pointed out, traditional research methods require the use of stringent guidelines that may not always be possible to follow in everyday clinical situations. Fey and Johnson suggested that the case study format may be a valuable alternative when formal research procedures do not align with the goals of assessment and intervention practices. For example, researchers and clinicians can delineate ways that current research and theory can be used to guide assessment and intervention practices.

The companion pieces of Bourassa and Treiman and Apel and Masterson are examples of this approach. Bourassa and Treiman provide the in-depth analysis of current theory and research in the spelling literature and offer suggestions for how some of that information might be translated into practice. Apel and Masterson then use the case study as the means for translating concepts and evidence into practical action. They supply a detailed description of how information on the linguistic factors regulating spelling development framed their hypothesis-forming analysis procedure and related intervention practices in the case study.

Finally, this clinical forum represents a slight change in how clinical forums are edited. For this forum, two editors supervised the peer review process. Although Michael Casby is not listed as the guest coeditor of this clinical forum, he is commended for his editorial work on the two articles contributed by Bourassa and Treiman and Apel and Masterson.

Robert F. Kennedy once said, "Few will have the greatness to bend history, but each of us can work to change a small portion of events. And in the total of all those acts will be written the history of a generation" (n.d.). This collection of articles represents researchers and practitioners who are invested in advancing practices and in sharing the outcomes with readers of *Language, Speech, and Hearing Services in Schools*. Each article represents a small portion of the events or situations in which speech-language pathologists participate. The contributions to this forum may not rewrite history, but in answering the call to address change, they are contributing to events that, ultimately, transform concepts of professional roles and responsibilities.

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