Cathy Rhoten, MA, is the director of Outreach and Academic Program Evaluation for the Western Pennsylvania School for the Deaf and The Scranton School for Deaf and Hard of Hearing Children. She has been an educator of children for 40 years, and has served either as an administrator or on the faculty of the Florida School for the Deaf and the Blind, the Pennsylvania School for the Deaf, Russell Junior High School in Colorado, and Ponte-Vedra Palm Valley Junior High School in Florida. Author of numerous articles and academic presentations relating to the education of deaf and hard of hearing children, Rhoten also serves on the board of directors for the Hearing Center Board of Children's Hospital, and Educational Resources for Children with Hearing Loss, and is past president and board member for the Council on Education of the Deaf and past board member for the American Society for Deaf Children. She can be reached at *crhoten@wpsd.org.*

evidence and evolution:

research and teachers' intuition lead to a bilingual program

By Cathy Rhoten

Truly successful decision-making relies on a balance between deliberate and instinctive thinking.
–Malcolm Gladwell

A visit to any classroom at the Western Pennsylvania School for the Deaf (WPSD) or The Scranton School for Deaf and Hard of Hearing Children reveals a host of amazing things—all at the same time. Visitors see dedicated and passionate teachers presenting engaging and relevant material. They see an all-inclusive communication environment, where American Sign Language (ASL) may be as prevalent as spoken English or sign-supported English. They see Smartboards, textbooks, document cameras, laptop computers, papers, pencils, and just about any other tool being used by content, comfortable, and smiling children eager to soak up the lessons of the day.

It is no accident that these classrooms include all of these things. They are in place to fulfill the goal of preparing each deaf and hard of hearing student for all aspects of life through a continuum of high-quality, individualized education and extracurricular programs. We develop our programs through a unique blend of common sense, experience, instinct, and an unwavering dedication to superior research.

Photos courtesy of the Western Pennsylvania School for the Deaf/The Scranton School

Right: Through classroom observations in the ASL/English project, it is clear that the children are enthusiastic and highly motivated when learning about their language.

Research is the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions. The challenge facing many institutions devoted to educating deaf and hard of hearing children is just exactly how to remain committed to research-based decision while continuing with the everyday duties of teaching and remaining in compliance with the seemingly endless amount of state and national mandates.

Yet as challenging as it may be, our experiences have clearly affirmed that research is an extremely vital tool and needs to be incorporated into the daily activities, approaches, and decision making used in any school for deaf and hard of hearing children.

Who We Are and How We Strive to Serve

WPSD is the largest comprehensive center for the education of deaf and hard of hearing students in Pennsylvania. We offer an all-inclusive language environment and a curriculum that incorporates state and national standards. The Scranton School has been part of WPSD since 2009. All programs are fundamentally committed to the practice of decision making through research. We believe that it is vital to utilize well-collected and appropriately analyzed research to make the best decisions regarding the education of deaf and hard of hearing children. Our school leadership understands that there are many factors to consider before deciding that a specific research approach matches a given situation, but the successes of our students over the years have vividly shown the value of data-driven, research-based decision making in our schools.

Behind every decision that is made within our schools is a very simple approach: *Is that decision in the best interests of the individual child, and will that student actually learn something?* That is what matters the most. Theory alone will not result in effective learning. Practice alone—even with superior teachers fully engaged in the process—will not result in success for the student. We have come to believe that the most effective learning stems from the practical application of theory in a classroom environment.

Above: WPSD has prioritized continued examination of students' emerging skills through the ASL/English project and looks forward to garnering even greater insight into successful teaching and learning methodologies for deaf and hard of hearing children.

Teaching ASL and English to Young Children

The ASL/English project is a comprehensive example of the benefits and challenges of committing to research-driven decision making at WPSD and The Scranton School. A little over 10 years ago, two dedicated teachers at the WPSD Children's Center began to consider the possibilities of direct teaching of ASL and the English language to one class of 4-year-old deaf children. Maintaining separate ASL and English teachers in the classroom had support in research (Andrews & Akamatsu, 1993). It was believed that deaf children who understood the relationships of ASL and English would experience greater ease in developing English skills (Schimmel, Edwards, & Prickett, 1999).

The model developed at WPSD is similar to that of a bilingual home where one parent speaks one language while another speaks a different language. In much of the research regarding bilingual development, this approach is shown to be highly advantageous to the learning of two languages. The two languages do not only coexist within the household, but each is consistently and separately used by different family members. The focus of the ASL/English project is to provide this sequential exposure to ASL and English.

In the first year, the teachers worked together to present the two languages using varying content as a vehicle for language comparisons. For example, initially teachers used children's literature as the vehicle for demonstrating differences in the two languages. By the end of that first year, the teachers determined that the content for language expression needed to be information well known to the child. Books and stories contained too much information. Teachers found that students could not grasp the meaning of the story and also think about differentiating between the languages.

Decision making driven by research is paramount to creating and sustaining a culture of educational excellence in our schools.

In the second year, teachers used classroom experiences or known information as the vehicle for teaching the language differences (Hammond, 1998). Again, success, as defined by students' differentiated use of the two languages, seemed best when students were most familiar with the content.

Formal ASL/English lessons were scheduled twice each week for approximately 30 to 45 minutes each. The supportive vocabulary—such as that gleaned from the experience of making a snowman—would be taught prior to the ASL/English lesson and within the context of the experience. Also, the speech therapist would use the vocabulary in lessons or embed it in the weekly spelling list.

Approximately three years into the project, a very specific format for ASL/English lessons was developed. Teachers conducted ASL/English lessons by assigning specific roles to each of the two teachers in the room and maintaining those roles throughout the year.

In the early stages of the project, Dr. Marc Marschark, professor at the National Technical Institute for the Deaf and the School of Psychology at the University of Aberdeen, Scotland, began meeting and consulting with teachers involved in the ASL/English project. We discussed many issues, from selection of teaching content (e.g., which linguistic structures are appropriate to teach to 4- and 5-year-old deaf children) to methods for effectively evaluating success (Marschark, Lang, & Albertini, 2002). Marschark spent many hours observing in classrooms, meeting with teachers, and consulting on methodologies.

It was during this time that students made good progress in distinguishing the characteristics and grammar of each language. Some were able to generate messages either in ASL or spoken English in a linguistically controlled format about known events in accordance with a teacher's directions. This was apparent in the classroom with many of the children, but what remained untested was how well the students could use those skills outside of the classroom within a new context. The next phase of the project was directed towards asking children to do exactly that.

Students were asked to view a cartoon and then videotaped as they described the events that transpired in the cartoon using ASL or English. The videotapes—empirical evidence—revealed that nearly all of the children made a noticeable shift in language on demand, and the children showed emerging understanding of the language differences.

A milestone in the ASL/English project came when efforts were directed towards more formally defining the curriculum. Marschark provided some strong reference material and articles that provided new summaries of ASL linguistics. More information about bilingual education and strategies and outcomes of using various strategies with hearing children learning two spoken languages were read and discussed.

Through classroom observations in the ASL/English project, it is clear that children are enthusiastic and highly motivated about learning. It has also been exciting to see teachers engaging in conversations about the acquisition of language skills and the interrelationships of ASL and English.

Often Challenging, Always Worthwhile

This wide-ranging project illustrates how educators of deaf and hard of hearing children can and should be motivated to explore the latest research and to confer realistic applications of theory in the classroom. The use of research to make decisions about the programs and policies affecting the individual student attending WPSD and The Scranton School has become the centerpiece of our commitment to constantly improving our methods of educating deaf and hard of hearing children. Participation and feedback from school leaders, teachers, parents, and students is the norm as we strive to identify areas where we need to do better.

Decision making driven by research is paramount to creating and sustaining a culture of educational excellence in our schools. Instincts, anecdotes, and experience also play a pivotal role in decision making, but empirical data garnered through research is essential when important educational decisions are being made. The challenges of research-driven decision making may often be great, but when the best interests of the child need to be met, we at WPSD and The Scranton School know that it is always worthwhile.

References

Andrews, J., & Akamatsu, T. (1993). Building blocks for literacy: Getting the signs right. *Perspectives in Education and Deafness, 11*(3), 5-9.

Hammond, W. D. (1998, October). *Effective & power techniques for bringing up the bottom quarter of readers*. Mississippi Association for Supervision and Curriculum Development, Fall Workshop.

Marschark, M., Lang, H., & Albertini, J. (2002). *Educating deaf students from research to practice*. New York: Oxford University Press.

Schimmel, C., Edwards, S., & Prickett, T. (1999). Reading? ..Pah! (I got it!). *American Annals of the Deaf, 144*(4), 298-307.

Resources

Howard, G. (1991). Culture tales: A narrative approach to therapy in a cross-cultural psychology and psychotherapy. *American Psychologist, 40*, 187-197.

Mason, D., & Ewoldt, C. (1996). Whole language and deaf bilingual-bicultural education—naturally! *American Annals of the Deaf, 141*(4), 293-298.