



Parts-to-Whole Learning

An important thing to understand about experienced-based learning and concept development for children who are deaf-blind is the idea of a parts-to-whole approach to learning. This document contains excerpts from articles by Susan Bruce and Barbara Miles that explain what this means for children with deaf-blindness.

From Bruce, 2005:

Sighted children learn about the world through a **whole-to-parts approach**. Through vision, they can immediately view the "whole" of an object and then focus on the details, which helps them to easily note similarities and differences. Children who are blind or deaf-blind learn through a **parts-to-whole approach**, whether they are using functional vision or touch. They may not have the opportunity to explore the "whole" of an object; thus, they may identify key characteristics that are different from those noted by sighted children. For example, a child touches the door handle of an oven and is told, in sign language, that it is an oven. Unless the child has opportunities to explore more of the oven, he or she will eventually associate the sign for oven with the oven door, and his or her perceptions about what constitutes an oven will be distorted and incomplete.

From Miles & McLetchie, 2008:

There is an old familiar story that sheds light on the challenge of helping deaf-blind children develop meaningful concepts. The story goes like this: Four blind men touch an elephant. The one who touches the trunk says, "An elephant is like a thick wiggling vine." The one who touches an ear says, "No, an elephant is like a big leathery fan." The one who touches the body says, "No! An elephant is like a big brick wall!" And the one who touches the tail says, "How could you all be so wrong?! An elephant is like a hanging, swaying rope!"

This story teaches us that concepts are related to individual experiences. Concepts are the ideas that give meaning to our world. We develop concepts based upon our particular experiences. Each of the blind men had an entirely different experience of the elephant and, therefore, each had an entirely different concept of "elephant." None of the concepts were wrong if we understand them as the products of individual experiences. Each idea of "elephant" makes sense from the perspective of the man who touched a different part of the elephant.

Like the blind men in the story, each deaf-blind child develops their own unique concepts based on their personal experiences. Here are some ideas that make

sense from the perspective of the deaf-blind people who had them, but that might seem “odd” to someone with sight and hearing:

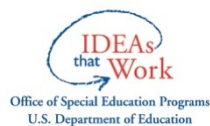
- A boy thought “going home” meant the feel of a bumpy road and a series of turns in the car
- A boy experiencing snow for the first time thought it was ice cream and asked for chocolate
- A girl touched a wet leaf and signed “cry” (it felt like tears)
- A girl thought food came from a mysterious place up high (it was always set down on the table from above)
- A young man didn't know, even after many years, that his family's pet cat ate (he had never seen it or touched it as it ate, and no one had ever told him)

What each of these examples teaches us is how important it is to always be sensitive to and curious about a child's perceptions of the world. We need to continually ask, “What idea might she have or be developing about this experience, object, person, or place?” If we want to help a child develop meaningful concepts, we must be willing to enter into a relationship and seek to understand the child's concepts. Most importantly, we must take the responsibility of providing experiences that will maximize the child's opportunities to develop useful and meaningful concepts of the world. If we think for a moment about the elephant story, for example, we see that we can help a child to develop a well-rounded concept of “elephant” if we show as many of the parts of the elephant as possible. Children who lack sight and hearing or who have significant impairments in these senses, need to be consciously given continual access to the world and the society around them.

REFERENCES

From Bruce, S. M. (2005). The application of Werner and Kaplan's concept of "distancing" to children who are deaf-blind. *Journal of Visual Impairment & Blindness*, 99(8), 464-477.

From: Miles, B., & McLetchie, B. (2008). Developing concepts with children who are deaf-blind. National Consortium on Deaf-Blindness. <http://documents.nationaldb.org/products/concepts.pdf>



The contents of this document were developed under a grant from the U.S. Department of Education, #H326T180026. However, those contents do not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government. Project Officer, Susan Weigert.