

Dale R. Jordan, Ph. D.  
Jordan-Adams Learning Center  
Oklahoma City, Oklahoma

## CREATIVE EDUCATION

234½ Washington Suite 202  
Grand Haven, MI 49417

### PERCEPTUAL DEVELOPMENT AND SCHOOL LEARNING

Teachers use the term perception to designate the learning that comes through seeing, speaking, hearing, and touching. These four pathways send information to the memory centers, much as a computer receives information. We say that learning disability exists when any or all of these four sensory channels is not doing its job. Most learning disabled children see well enough, hear well enough, talk well enough, and feel what they touch well enough. The problem is that all the information they take in does not connect within their memory systems.

Visual perception refers to seeing information, then holding a mental image of what was seen long enough to solve a problem. Many LD children have very poor memory for what they see. Short term visual memory means that a child looks at a pattern (word on the chalkboard, math problem in the book), then turns his eyes away to write it down. Immediately he loses what he just saw. Sometimes the letters or numbers turn backward (b for d). Sometimes they turn upside down (6 for 9). Sometimes the whole sequence gets scrambled and the child loses his mental image. This keeps the child from learning on schedule. He is always behind the class. He never wins or receives praise for good work.

Auditory perception refers to hearing information, then building a mental picture of what it means. This involves combining listening with speaking. It also involves the child hearing his own inner voice clearly. Learning disability children often are tone deaf to speech sounds. They cannot hear the differences between short vowels or long vowels. They usually have trouble picking out the middle sound or the last sound in a word. Children with poor auditory perception are poor spellers. They don't hear all the sounds within words. When they finally hear the sounds, they can't connect the sounds to the right letters for correct spelling.

Poor auditory perception also makes it hard for the child to follow instructions. As he listens he does not build a mental picture of the sequence his teacher or parents are saying. Adults usually blame him for being a lazy listener. The truth is that what he hears doesn't stick in his memory for later use.

Tactile perception refers to what the child learns through his body. Handling a pencil, touching pictures, sweeping a finger under the words in reading, turning a corner, and moving around the room all send information to the memory centers. Many LD children don't receive clear information through touching or feeling. What they feel or touch does not connect quickly with what they see, hear, or say. Their mental pictures are cluttered and unclear. Putting a pencil to paper involves muscle pressure. This often causes a child to lose his mental picture of what he meant to write.

Children with these problems have trouble with handwriting. They often use backward (clockwise or bottom-to-top) hand strokes in writing letters or numbers. They have trouble spacing words and numbers on the page. They usually turn certain letters or numbers backward or upside down. Sometimes they mirror write, starting on the right side and going left. They seldom do well in phonics. Sounding out words in reading is hard, and spelling from memory is frustrating. They have to work as hard to write a few words as other children work

in writing a whole page. LD children are very slow with paper/pencil work. They cannot be rushed or be forced to hurry.

Learning disabled children do not remember information in sequence. They have trouble with the alphabet, days of the week, months of the year, seasons of the year, and multiplication tables. Later they have trouble with long division, fractions, history facts in sequence, science formulas, and parts of speech in grammar. They have a very hard time with foreign languages. Usually they can tell information orally much better than they can write it in longhand.