



Expand Your Child's Ability to Learn

What do You Visualize When You Read?

When reading the word "car" in a newspaper, a book or a magazine article, do you see your car? "No!" No one sees their own car. Since you have no confusion about what the word looks like (c-a-r), what it sounds like (kär), and what it means (a vehicle that moves on wheels), you keep reading until the sentence or paragraph fills in the details of what the car looks like in the story.

How do you recognize words you hear? How do you visualize them?

The following exercise will give you an experience of how you and your friends visualize words.

Word Visualizing Exercise: Ask your spouse or some other adult to:

"Picture pencil" ... "What do you see?"

"Picture beach ball" ... "What do you see?" ...
"Make it spin ... Now make it stop."

"Picture house" ... "What did you see?"
Four out five people will see their own house.
(If the person has not pictured his house, ask him to "picture spouse.")

Now ask your spouse or adult to:

"Picture 'the.'" ... the answer you get over 99% of the time is:
(the letter symbols) "t-h-e," or "blank... I see nothing."

Notice that when I said to you, "picture pencil," you did not go to picturing the letters of the word pencil. Instead you pictured the 3-dimensional object. The same occurred when you pictured beach ball and house. These are concrete objects that are easy to visualize. However, there is no 3-dimensional object that the word "the" represents; therefore, you could not picture it. Moreover, confusion can start to build for a child or Individual while reading each time that he encounters an abstract word or symbol like "the." This type of confusion continues for this child or Individual until he masters all three parts each abstract word.ⁱ

Concrete words can be pictured or can be internally experienced by any of the senses, so there is no confusion in learning their meaning and how to recognize and read them, once the abstract written symbols are learned! The opposite is true for all abstract words. They cannot be pictured or sensed, and yet they make up more than 50% of the words in books read by children in Kindergarten through 3rd grade! So, how can we expect the young reader to know how to think when he meets any abstract words (for example, the, in, on, there, me, his, or I) in a reading assignment?



The Creation of Thought is a Product of Imaginationⁱⁱ

A child aged 4-7 years is primarily a multi-sensory learner. He actively develops his imagination during these years. Magically, so it seems to anyone watching, the child puts together light patterns, sounds, smells, tastes,

pressure on the skin, the rhythm of movements within his body, and other sensation patterns, and gradually creates an impression of his own self living in an external world. As the child's imagination grows, he sees clouds in the form of animals, plays with imaginary friends and animals in the yard, invites you to a "pretend" tea party, or digs trenches with his trucks (which can be simple blocks of wood) around a castle to protect it from the dragon.

A child sees all possibility with his mind's eye, with his internal ability to imagine and make imagery. As he plays, he projects what he imagines into his physical world, and works with the projections of his imagery in 3-dimensions. In turn, his play provokes more inner experiences and imaginings. Slowly as he learns to work with his imagination, he learns to interact with his external world. As a result of his play and his imagination, his understanding of the world and his preferences grow. He slowly learns who he is and what is beyond his physical being.

Play Develops the Thinking of a Child

Movement is essential for thinking to occur, and young children play and move to stimulate their brains and bodies to develop. The thinking dynamics of the brain begin to develop in the womb through the sensory and movement feedback that the fetus senses. The muscular movements and sounds used in speech also develop while in the womb, in response to hearing mother's voice or the sounds of other voices from outside of mother. Sensory-motor input drives the learning system of the child in the womb, and it is just as essential for the learning dimensions of the young child to expand.

Children learn through play, story-telling, and imaging "what if we pretend that" Play is repetitive and this provides the child's brain with the sensory-motor input he needs to develop his imagination. Through his play, the child learns to learn and to think.

The learning dimensions of a child 4-7 years old expand when his multi-sensory nature is given a "playing field" within which to explore and discover. Although the traditional early learner may seem precocious and capable of learning concepts and skills that older children are being taught, he also needs lots of time for play, movement and imagination so that he can develop a healthy integration of all parts of his brain. It is unwise to sit this child behind a desk, tell him to be still, and expect him to develop abstract, logical thinking skills suited for the brain of an 11-year-old! Such emphasis on logical development and stillness will restrict the dimensions of his learning and his preparation for successfully meeting the rigors of his future development. The imagination that develops in the first 7 years of a child's life becomes the resource that will later enable the rich functioning of the logical areas of the left hemisphere of his brain.

During the child's first year, the corpus callosum, which connects the neurons and information of the two cerebral hemispheres of the brain, slowly begins to develop. Until the corpus callosum is fully developed and



functioning, there can be little sharing and exchange of information between the 2 cerebral (thinking) hemispheres. As a result, in the 1 to 4-year-old child brain, most “thinking” occurs in the brainstem, the midbrain, and then the right cerebral hemisphere (the realm of intuition and imagination) of the child. This is why we call these thinkers “sensory thinkers” or “3-D thinkers.” They picture, hear, taste, smell, touch, feel, move and then imagine their world in terms of 3-D sensory input.

Around age 4, the corpus callosum begins to function more fully. Now all the information and processes occurring in both of the left and right hemispheres of the cortex, as well as in the rest of the brain, can begin to be connected and integrated. From 4-7 years of age, the child creates an integrated balance between his sense of his body, his emotions, and his developing mind.

From ages 7 to 11, the balance of a child’s awareness and thinking moves into the left hemisphere. The brain is now ready to begin developing its functions of logical thinking, deduction and abstraction. During these years, a child gradually develops the ability to think abstractly and to know that he is other than what he thinks. The rich internal creativity and stimulating energy of his intuition (the creativity of his right hemisphere) is shared with his left hemisphere’s ability to linearly systematize, organized and analyze and express planned action in the physical world. Ultimately, as the left and right hemispheres of the brain work together, through the bridging of the corpus callosum, the rich mind of the teen, and later the adult, can develop.

A child is usually around 11 years old before his brain and mind are ready to think objectively — to be able to see himself as standing outside of what he is thinking and to operate on what he is thinking (e.g., to see that he can direct what he dreams and send away images he does not want to experience, as in nightmares.). By age 15, the individual’s mind is no longer localized in any part of the brain, and seems to exist vaguely somewhere in his head. Brain and mind are no longer viewed as one unit, but rather as counterparts of the other’s function and development. Conceptualization develops as the outer world provides models and opportunities for discovering, experiencing and developing an internal awareness and world-model that is no longer identified with the physical world itself.

Expand Your Child’s Learning Dimensions

Help your child to become a successful and confident learner. Understand your child’s need for multiple-sensory input in order to easily learn, recognize and comprehend the letters of the alphabet, and more than 300 punctuation marks and abstract words that have no inherent meaning (they do not represent concrete objects or motions). They are all symbols that your child must learn to relate to and give meaning to in order to learn to read and expand his learning horizon.

Whether your child is a traditional early learner, who is ready to work with written symbols and words, or your child is in school and struggling to learn to read (often labeled dyslexic), the solution is the same. Your child needs an approach to learning that fits the way his brain is primarily functioning and developing at this time. He needs a multi-sensory approach to learning to read in order to give him the chance to learn successfully, which most importantly, includes the mastery of ALL three parts of the 300 abstract words and symbols – specifically, 1] what the word looks like, 2] sounds like and 3] means 3-dimensionally.



ⁱ Common Labels used for Abstract Words: Abstract words, Stumble Words, Dolch Words, Outlaw Words, Trigger Words, Interrupter Words, Most Commonly Read Words.

ⁱⁱ The information for this paper was gathered from Joseph Chilton Pearce's, *Magical Child Matures*; and Charles T Krebs, PhD, L.E.A.P. Program, 2001 – 2005... A program about how the brain learns.