

What Parents Need to Know About the Learning Process

When a child is tested for a learning disability the test questions are based upon the concept of the learning process. When we evaluate a child's perceptual abilities or ability to process and understand information, we are looking to see if there is a problem in some area of the learning process that may be slowing down the processing and understanding of information, thereby interfering in the child's ability to receive, organize, memorize or express information. Severe problems in the learning process can have adverse affects upon a child's ability to function in the classroom.

In order to understand how learning takes place, we must first understand the process by which information is received and the manner in which it is processed and expressed. In very simple terms, the learning process can be described in the following way:

Step 1: Input of Information: In this part the child is presented with information in school through a variety of ways: verbal, visual, touching, movement etc

Step 2: Organization of Information: Once the child receives this information they must make sense of what it is that they just hear, saw, touched, or experienced.

Step 3: Expression of Information: Once the information is understood and given meaning, the child must decide how they will express the information so that it is understood by those around him/her i.e. verbal, writing, gestures.

Information is received in some manner and is filtered through a series of internal processes. As information progresses along this "assembly line", it is given meaning and organized in some fashion and then expressed through a variety of responses. In order to understand how learning takes place, we must first understand the specific parts that make up the learning process.

There are six modalities or channels (avenues through which information is received):

1. **Auditory Modality:** The delivery of information through sound.
2. **Visual Modality:** The delivery of information through sight.
3. **Tactile Modality:** The delivery of information through touching.
4. **Kinesthetic Modality:** The delivery of information through movement.
5. **Gustatory Modality:** The delivery of information through taste.
6. **Olfactory Modality:** The delivery of information through smell.

Skills are usually taught using all six modalities in the primary grades, nursery school to Grade 1. By Grade 2, most teachers teach through approximately four of the modalities with a greater emphasis on visual and auditory input. By the upper elementary grades, this can shift to skill development through the use of only two modalities, visual and auditory. This generally remains the source of informational input in most classrooms until possibly college, where information in many cases, teaching is presented through only one modality, auditory (lectures). Children should be taught using multisensory approaches (the input of information through a variety of receptive mechanisms i.e. seeing, hearing, touching, etc.) whenever possible since retention of information is enhanced by increased input through the senses.

Information is delivered to the senses through one or several of the previously mentioned modalities. Once received, the information goes through a series of processes that attempt to give meaning to the material received. There are several processes that comprise the learning process:

- Reception-the initial receiving of information
- Perception-the initial organization of information
- Association or Organization-relating new information to other information and giving meaning to the information received
- Memory-the storage or retrieval process that facilitates the associational process to give meaning to information or help in relating new concepts to other information that might have already been learned. This process involves short-term, long-term and sequential memory.
- Expression-the output of information through vocal, gestural or written responses