

Characteristics of Learning Disabilities

Learning disabilities may occur in the following academic areas:

1. Spoken language: Delays, disorders, or discrepancies in listening and speaking;
2. Written language: Difficulties with reading, writing, and spelling;
3. Arithmetic: Difficulty in performing arithmetic functions or in comprehending basic concepts;
4. Reasoning: Difficulty in organizing and integrating thoughts; and
5. Organization skills: Difficulty in organizing all facets of learning.

EDUCATIONAL IMPLICATIONS

Because learning disabilities are manifested in a variety of behavior patterns, the Individual Education Program (IEP) must be designed carefully. A team approach is important for educating the child with a learning disability, beginning with the assessment process and continuing through the development of the IEP. Close collaboration among special class teachers, parents, resource room teachers, regular class teachers, and others will facilitate the overall development of a child with learning disabilities.

Some teachers report that the following strategies have been effective with some students who have learning disabilities:

- Capitalize on the student's strengths;
- Provide high structure and clear expectations;
- Use short sentences and a simple vocabulary;
- Provide opportunities for success in a supportive atmosphere to help build self-esteem;
- Allow flexibility in classroom procedures (e.g., allowing the use of tape recorders for note-taking and test-taking when students have trouble with written language);
- Make use of self-correcting materials, which provide immediate feedback without embarrassment;
- Use computers for drill and practice and teaching word processing;
- Provide positive reinforcement of appropriate social skills at school and home; and
- Recognize that students with learning disabilities can greatly benefit from the gift of time to grow and mature.

Types of Learning Disabilities

By the late 1960s, the present model of learning disabilities was established. This model distinguishes four stages of information processing used in learning: input, integration, memory, and output. **Input** is the process of recording in the brain information that comes from the senses. **Integration** is the process of interpreting this information. **Memory** is its storage for later retrieval. **Output** of information is achieved through language or motor (muscular) activity. Learning disabilities can be classified by their effects at one or more of these stages. Each child has individual strengths and weaknesses at each stage.

Input

The first major type of problem at the input stage is a visual perception disability. Some students have difficulty in recognizing the position and shape of what they see. Letters may be reversed or rotated; for example, the letters d, b, p, q, and g might be confused. The child might also have difficulty distinguishing a significant form from its background. People with this disability often have reading problems. They may jump over words, read the same line twice, or skip lines. Other students have poor depth perception or poor distance judgement. They might bump into things, fall over chairs, or knock over drinks.

The other major input disability is in auditory perception. Students may have difficulty understanding because they do not distinguish subtle differences in sounds. They confuse words and phrases that sound alike — for example, "blue" with "blow" or "ball" with "bell." Some children find it hard to pick out an auditory figure from its background; they may not respond to the sound of a parent's or teacher's voice, and it may seem that they are not listening or paying attention. Others process sound slowly and therefore cannot keep up with the flow of conversation, inside or outside the classroom. Suppose a parent says, "It's getting late. Go upstairs, wash your face, and get into your pajamas. Then come back down for a snack." A child with this disability might hear only the first part and stay upstairs.

Integration

Integration disabilities take several forms, corresponding to the three stages of sequencing, abstraction, and organization.

A student with a sequencing disability might recount a story by starting in the middle, going to the beginning, and then proceeding to the end. The child might also reverse the order of letters in words, seeing "dog" and reading "god." Such children are often unable to use single units of a memorized sequence correctly. If asked what comes after Wednesday, they have to start counting from Sunday to get the answer. In using a dictionary, they must start with "A" each time.

The second type of integration disability involves abstraction. Students with this problem have difficulty in inferring meaning. They may read a story but not be able to generalize from it. They may confuse different meanings of the same word used in different ways. They find it difficult to understand jokes, puns, or idioms.

Once recorded, sequenced, and understood, information must be organized — integrated into a constant flow and related to what has previously been learned. Students with an organization disability find it difficult to make bits of information cohere into concepts. They may learn a series of facts without being able to answer general questions that require the use of these facts. Their lives in and outside of the classroom reflect this disorganization.

Memory

Disabilities also develop at the third stage of information processing, memory. Short-term memory retains information briefly while we attend to it or concentrate upon it. For example, most of us can retain the 10 digits of a long distance telephone number long enough to dial, but we forget it if we are interrupted. When information is repeated often enough, it enters long-term memory, where it is stored and can be retrieved later. Most memory disabilities affect short-term memory only; students with these disabilities need many more repetitions than usual to retain information.

Output

At the fourth stage, output, there are both language and motor disabilities. Language disabilities almost always involve what is called "demand language" rather than spontaneous language. Spontaneous language occurs when we initiate speaking — select the subject, organize our thoughts, and find the correct words before opening our mouths. Demand language occurs when someone else creates the circumstances in

which communication is required. A question is asked, and we must simultaneously organize our thoughts, find the right words, and answer. A child with a language disability may speak normally when initiating conversation but respond hesitantly in demand situations — pause, ask for the question to be repeated, give a confused answer, or fail to find the right words.

Motor disabilities are of two types: poor coordination of large muscle groups, which is called gross motor disability; and poor coordination of small muscle groups, which is called fine motor disability. Gross motor disabilities make children clumsy. They stumble, fall, and bump into things; they may have difficulty in running, climbing, riding a bicycle, buttoning shirts, or tying shoelaces. The most common type of fine motor disability is difficulty in coordinating the muscles needed for writing. Children with this problem write slowly, and their handwriting is often unreadable. They may also make spelling, grammar, and punctuation errors.

Detecting Learning Disabilities in Children

There are several early clues to the presence of a learning disability. In preschool children we look for failure to use language in communication by age three, or inadequate motor skills (buttoning, tying, climbing) by age five. In school-age children, we observe whether they are learning the skills appropriate to their grade. Schools and families should always consider the possibility of a learning disability before assuming that a child who has been doing poorly in school is lazy or emotionally disturbed. The Individuals with Disabilities Education Act (IDEA), Public Law (P.L.) 105-17—formerly known as the Education for All Handicapped Children Act (EHA), P.L. 94-142—requires public school systems to evaluate children who are at risk for a learning disability. Evaluations can also be performed by professionals in private practice, beginning with family doctors. Attention deficit disorder (ADD), attention deficit hyperactivity disorder (ADHD), and other problems should always be considered as well and evaluated by qualified professionals with expertise with these conditions. It is important to distinguish between emotional, social, and family problems that are causes and those that are consequences of academic difficulties, because they require different treatments.

The psychological assessment may include a neuropsychological or a clinical psychological evaluation. The intelligence of the child should be determined to learn whether the child is performing below potential. Discrepancies in performance between different sections of the IQ (intelligence quotient) test will help to clarify learning strengths and weaknesses. Other tests may be used to assess perception, cognition, memory, and language abilities. Current academic skills are judged by achievement tests. Both IQ and achievement tests help to clarify discrepancies between potential and actual ability. There are also specific tests that help to uncover learning disabilities. A speech pathologist, occupational therapist, or other professional may contribute further information, as can parents.

Treating Learning Disabilities in Children

Special education is the treatment of choice for learning disabilities in school. The Individuals with Disabilities Education Act requires that school personnel, in conjunction with the child's parents, develop an individualized education program (IEP) for each student with learning disabilities who is eligible for special education. This plan is revised every year to take into account each eligible student's present skills and learning disabilities and abilities. The specific instruction students receive will vary depending upon their needs and capabilities. Some children need specific related services as well: a notetaker (for a student with a fine motor disability), word processors, laptop computers, books on tape, or extra time for tests. The IDEA requires schools to provide these special education and related services at no cost to families.

Parents must also try to understand the nature of their children's problems. Like classroom teachers, they must build on the child's strengths while compensating for or adjusting to the child's needs without exposing them unnecessarily. A child with a visual motor disability, for example, might find it hard to load a dishwasher but could carry out the trash. The same child might have difficulty catching or throwing a ball, but no trouble swimming. Parents must think ahead about these matters to minimize their child's stress and to maximize his or her chance to experience success, make friends, and develop self-esteem. Treatment that affects only school work will not succeed, because learning disabilities are life disabilities.

It is essential to recognize learning disabilities and related problems as early as possible. Without recognition and help, children may become increasingly frustrated and distressed as they persistently fail. By the time they reach high school, they may give up. On the other hand, children whose special needs are recognized early and treated appropriately can overcome or learn to compensate for their disabilities.

Helping Your Child Learn: Some Suggestions for Parents

If you suspect that your child is having trouble learning to read, or trouble with learning in general, there is help available. For parents of school-age children, the first source of help should be the public school serving your area. Contact your child's school principal, express your concerns, and ask to have your child evaluated to see if he or she has a disability.

If the school thinks your child may have a disability and may need special education and related services, it must evaluate your child before providing your child with these services. *This evaluation is at no cost to you.*

The results of the evaluation will show whether or not your child has a problem with reading or learning and, if so, the nature of the problem. You may be told that your child has dyslexia or another type of learning disability. If the evaluation shows that your child *does* have a learning disability and, because of that disability, needs special education, the school is required by federal and state law to provide special education for your child—also at no cost to you or your family.

Suppose, however, that the results of the evaluation show that your child does *not* have a disability. In this case, there are a number of actions you can take. If you think that the school's evaluation of your child was not appropriate—for example, only one test was given or the evaluation was based solely upon observation of your child—you can ask the school system to pay for what is known as an Independent Educational Evaluation (IEE). There are usually guidelines for obtaining an IEE at the school's expense. Ask the school or your state's Parent Training and Information (PTI) center about the process you will need to follow to request an IEE. Of course, you can always have your child evaluated independently and pay for the evaluation yourself. Whether the school pays for the IEE or whether you do, the results of this second evaluation must be taken into account in determining whether or not your child has a disability and needs special education.

If evaluation results still indicate that your child's problems in learning to read are not caused by a disability, your child will not be eligible for special education services through the public school. However, most schools have services available for students who are having trouble reading. Your child may be enrolled in a remedial reading program or work with a reading resource teacher to improve his or her skills. You may also wish to contact some of the organizations dealing with literacy.

Suppose, however, that the evaluation results show that your child *does* have a learning disability and is eligible to receive special education services. You and school personnel then meet to discuss the results of the evaluation and to develop what is known as an Individualized Education Program (IEP). Among other things, the IEP will describe the level at which your child is currently performing, as well as identify the specific services or instruction your child will receive to address his or her specific needs. Classroom accommodations are also possible and can help a student compensate for his or her learning disability.

Accommodations can include:

- Taped textbooks available through Recording for the Blind and Dyslexic;
- Extended time to take tests;
- Tutoring;
- Use of a notetaker, for students who have trouble listening in class and taking notes;

- Use of a scribe during test taking, for students who have trouble writing but who can express their answers verbally to the scribe, who writes down the responses;
- Use of a reader during test taking, for students who have trouble reading test questions;
- Tape recording of class lectures; and
- Testing in a quiet place, for students who are easily distracted.

Learn more about learning disabilities

Information on learning disabilities (LD) can help you understand that your child does not learn in the same way as other people do. Find out as much as you can about the problems your child has with learning, what types of learning tasks will be hard for your child, what sources of help are available, and what you can do to make life and learning easier for your child. You can find the information you need by reading many of the publications listed at the end of this document, or by contacting the national organizations that are listed.

Become an unobtrusive detective

Look for clues that can tell you how your child learns best. Does he or she learn best through looking, listening, or touching? What is your child's weakest approach to learning? Also pay attention to your child's interests, talents, and skills. All this information can be of great help in motivating and fostering your child's learning.

Teach through your child's areas of strength

For example, he or she may have great difficulty reading information but readily understand when listening. Take advantage of that strength. Rather than force reading, which will present your child with a "failure" situation, let your child learn new information by listening to a book on tape or watching a video.

Respect and challenge your child's natural intelligence

He or she may have trouble reading or writing, but that doesn't mean learning can't take place in many other ways. Most children with learning disabilities have average or above average intelligence that can be engaged and challenged through using a multi-sensory approach. Taste, touch, seeing, hearing, and moving are valuable ways of gathering information.

Remember that mistakes don't equal failure

Your child may have the tendency to see his or her mistakes as huge failures. You can model, through good-humored acceptance of your own mistakes, that mistakes can be useful. They can lead to new solutions. They are not the end of the world. When your child sees you taking this approach to mistakes—your own and the mistakes of others—he or she can learn to view his or her mistakes in the same light.

Recognize that there may be some things your child won't be able to do or will have lifelong trouble doing

Help your child to understand that this doesn't mean he or she is a failure. After all, everyone has something they can't do. Capitalize on the things your child *can* do.

Be aware that struggling with your child over reading, writing, and homework can draw you into an adversarial position with your child

The two of you will end up angry and frustrated with each other, which sends the message to your child that, yet again, he or she has failed. You can contribute positively to your child's schooling by participating actively in the development of your child's Individualized Education Program (IEP) and by sharing with the school the special insights about your child that only you as a parent have.

Use television creatively

Television, or videos, can be a good medium for learning. If the child is helped to use it properly, it is not a waste of time. For example, your child can learn to focus, sustain attention, listen carefully, increase vocabulary, and see how the parts fit together to make a whole. You can augment learning by asking questions about what was seen. What happened first? Then what happened? How did the story end? Such questions encourage learning of sequence, an area that causes trouble for many children with learning disabilities. Be patient, though. Because your child does not see or interpret the world in the same way you do, progress may be slow.

Make sure books are at your child's reading level

Most children with learning disabilities will be reading below grade level. To experience success at reading, then, it's important that they have books to read that are on their reading level (rather than their age level). Foster reading by finding books on topics of interest to your child or by reading to him. Also let your child choose his or her own books to read.

Encourage your child to develop his or her special talent

What is your child good at? What does he or she especially enjoy? Encouraging your child to pursue areas of talent lets him or her experience success and discover a place to shine.