

Language-Based Learning Disabilities (Reading, Spelling, and Writing)

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What is a language-based learning disability?

Language-based learning disabilities are problems with age-appropriate reading, spelling, and/or writing. This disorder is not about how smart a person is. Most people diagnosed with learning disabilities have average to superior intelligence.

What are some signs or symptoms of a language-based learning disability?

Dyslexia has been used to refer to the specific learning problem of reading. The term *language-based learning disability*, or just *learning disabilities*, is better because of the relationship between spoken and written language. Many children with reading problems have spoken language problems.

The child with dyslexia has trouble almost exclusively with the written (or printed) word. The child who has dyslexia as part of a larger language learning disability has trouble with both the spoken and the written word. These problems may include difficulty with the following:

- Expressing ideas clearly, as if the words needed are on the tip of the tongue but won't come out. What
 the child says can be vague and difficult to understand (e.g., using unspecific vocabulary, such as
 "thing" or "stuff" to replace words that cannot be remembered). Filler words like "um" may be used to
 take up time while the child tries to remember a word.
- Learning new vocabulary that the child hears (e.g., taught in lectures/lessons) and/or sees (e.g., in books)
- Understanding questions and following directions that are heard and/or read
- Recalling numbers in sequence (e.g., telephone numbers and addresses)
- Understanding and retaining the details of a story's plot or a classroom lecture

- Reading and comprehending material
- Learning words to songs and rhymes
- Telling left from right, making it hard to read and write since both skills require this directionality
- Letters and numbers
- Learning the alphabet
- Identifying the sounds that correspond to letters, making learning to read difficult
- Mixing up the order of letters in words while writing
- Mixing up the order of numbers that are a part of math calculations
- Spelling
- Memorizing the times tables
- Telling time

How is a language-based learning disability diagnosed?

A speech-language pathologist (SLP) is part of a team consisting of the parents/caregivers and educational professionals (i.e., teacher(s), special educators, psychologist). The SLP will evaluate spoken (speaking and listening) and written (reading and writing) language for children who have been identified by their teachers and parents as having difficulty.

For preschool students, the SLP may do any or all of the following:

- Gather information about literacy experiences in the home. For example, are there books and other types of reading material around the home? How frequently does the child see family members writing letters, notes, lists, etc.? How often do family members read stories to the child?
- Observe the child during classroom activities.
- Evaluate the child's ability to understand verbal and written directions and to pay attention to written information on the blackboard, daily plans, etc.
- Look for awareness of print.
- See if the child recognizes familiar signs and logos.
- Watch to see if a child holds a book correctly and turns the pages.
- Determine if the child recognizes and/or writes name.
- Evaluate whether the child demonstrates pretend writing (writing that resembles letters and numbers).
- See if the child recognizes and/or writes letters.
- Have the child tap or clap out the different syllables in words.
- Evaluate if the child can tell whether two words rhyme or give a list of words that rhyme with a specified word.

For the older child, the SLP may also do any or all of the following:

- Observe whether the child can read and understand information on handouts and in textbooks.
- Assess the student's ability to hear and "play with" sounds in words (phonological awareness skills).
- Have the child put together syllables and sounds to make a word.
- See if the child can break up a word into its syllables and/or sounds (e.g., "cat" has one syllable but three sounds c-a-t).
- Assess the older child's phonological memory by having him or her repeat strings of words, numbers, letters, and sounds of increasing length.

For all children, the SLP will also provide a complete language evaluation and also look at articulation and executive function.

Executive functioning is the ability to plan, organize, and attend to details (e.g., does he or she plan/organize his or her writing? Is he or she able to keep track of assignments and school materials?).

What treatments are available for people with a language-based learning disability?

The goals of speech and language treatment for the child with a reading problem target the specific aspects of reading and writing that the student is missing. For example, if the student is able to read words but is unable to understand the details of what has been read, comprehension is addressed. If a younger student has difficulty distinguishing the different sounds that make up words, treatment will focus on activities that support growth in this skill area (rhyming, tapping out syllables, etc.).

Individualized programs always relate to the school work. Therefore, materials for treatment are taken from or are directly related to content from classes (e.g., textbooks for reading activities, assigned papers for writing activities, practice of oral reports for English class). The student is taught to apply newly learned language strategies to classroom activities and assignments. To assist the child best, the SLP may work side-by-side with the child in his or her classroom(s).

Intervention with spoken language (speaking and listening) can also be designed to support the development of written language. For example, after listening to a story, the student may be asked to state and write answers to questions. He or she may be asked to give a verbal and then a written summary of the story.

Articulation (pronunciation) needs are also treated in a way that supports written language. For example, if the child is practicing saying words to improve pronunciation of a certain sound, he or she may be asked to read these words from a printed list.

The SLP consults and collaborates with teachers to develop the use of strategies and techniques in the classroom. For example, the SLP may help the teacher modify how new material is presented in lessons to accommodate the child's comprehension needs. The SLP may also demonstrate what planning strategies the student uses to organize and focus written assignments.

What other organizations have information about a language-based learning disabilities?

This list is not exhaustive, and inclusion does not imply endorsement of the organization or the content of the Web site by ASHA.

- Learning Disabilities Association
- British Dyslexia Association
- Dyslexia Research Institute
- Dyslexia Awareness and Resource Center
- International Dyslexia Organization
- LD Online

What causes a language-based learning disabilities?

Learning disabilities are caused by a difference in brain structure that is present at birth, is often hereditary, and is often related to specific language problems.

Legislation and Advocacy article on language-based learning disabilities

• Specific Learning Disabilities: What IDEA '04 Says

How effective are treatments for language-based learning disabilities?

The SLP consults with both educators and parents to teach and model language activities that promote success. He or she may:

- Explain the importance of joint book reading and provide demonstration lessons. For example, the SLP may illustrate how to improve students vocabulary skills by having children name items in story pictures and describe the action(s) in these pictures.
- Model how to sharpen comprehension skills by asking questions related to a story plot and having the child predict what may happen next in the story.
- Have the child retell a story in his or her own words or act out the story.
- Teach how to increase the child's awareness of print in his or her environment (e.g., recognition of frequently encountered signs and logos) and the conventions of print (e.g., how to hold a book or how reading and writing are done from left to right).
- Demonstrate strategies to teach letters and their corresponding sounds.
- Show ways that teachers and parents can model literacy activities (e.g., by reading newspapers and magazines, by writing notes and letters, or by making writing materials available for everybody's use).

Learning problems should be addressed as early as possible. Many children with learning disabilities that are treated later, when language demands are greater, experience lowered self-esteem due to their previous academic frustrations and failures. Learning problems that go untreated can lead to a significant decrease in confidence, school phobia (i.e., not wanting to go to school, not wanting to do homework), and depression.

What does a speech-language pathologist do when working with individuals with a languagebased learning disability?

ASHA has developed the following documents that outline the role of the SLP in working with children with learning disabilities and reading and writing problems:

- Relevant Paper: A Model for Collaborative Service Delivery for Students With Language-Learning Disorders in the Public Schools
- Roles and Responsibilities of Speech-Language Pathologists with Respect to Reading and Writing in Children and Adolescents: Position Statement