City College-High Tech Center
Making Connections
Disability Support Programs and Services
1313 Park Blvd., San Diego, CA 92101

Disability Support Programs and Services

Quick Tips

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Teaching Strategies for Students with Learning Disabilities


Information Overload

Most people know, or are taught, at an early age, how to process information and develop an organized plan or strategy when confronted with a problem, whether that problem is social, academic, or job related. Others find such cognitive processes quite difficult.

Learning disabilities have only recently been recognized as disabilities. This neurological disorder causes difficulty in organizing information received, remembering them, and expressing information and therefore affects a person's basic function such as reading, writing, comprehension, and reasoning.

DEFINTION

The easiest way to think of learning differences is: "something which affects the manner in which individuals with normal or above average intelligence take in, retain, and express information."

There are many types of learning disabilities as one person varies from another. Some of the situations commonly found are dyslexia (inability to read), dyscalcula (inability in math reasoning), dysgraphia (difficulty with syntax), visual, and audio difficulties. Generally, persons with learning disabilities experience difficulties in study skills, writing skills, oral skills, reading skills, math skills, and social skills.

In studying, students experience an inability to organize time and therefore are unable to finish assignments on time. They have trouble taking notes and following instructions. They often have difficulty spelling correctly and have frequent grammatical errors which results in poor sentence structure and poor penmanship. If the lecturer speaks too fast, they will have difficulty understanding the lecture and recalling the words. They are usually slow readers and sometimes have incorrect comprehension and poor retention. Confusion with math symbols are common, as well as difficulty with concepts of time and money. Realizing their inabilities results in low self-esteem which greatly af-

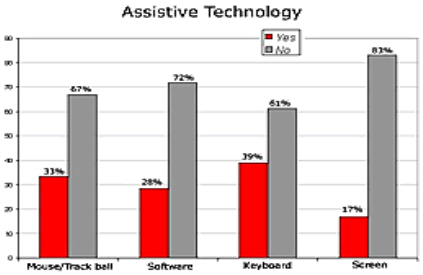
Special Points of Interest:

- General Courtesy and Strategies
- Teacher Presentation Strategies
- Laboratory Strategies
- Groups and Discussion
- Testing for Students with Learning Disabilities

Source of Information: "The Mainstream Teaching of Science: A Source book", Keller et al
Learning Strategies for Problem Learners, by Thomas Lombardi

Technology Aids For Students With Learning Disabilities

Technology in itself is not the answer to all problems faced by people with learning disabilities. Technology does, however provide valuable tools. The focus for technological assistance is not on the device but on what the device can do for the individual. The fit must be right. The biggest or most expensive may not always be the best fit. The key is optimizing the appropriate tools.



Uses of Assistive Technology 2005-06
www.communityatcp.org

Assistive technology (AT) is an important piece for individuals with learning disabilities. AT is an item, piece of equipment, or product that is used to increase, maintain

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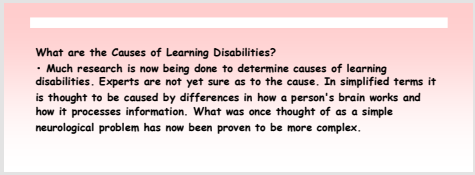
GENERAL COURTESY

- Don't assume that the person is not listening just because you are getting no verbal or visual feedback.
- Don't assume that you have to explain everything to students with learning disabilities. They do not necessarily have a problem with general comprehension.
- Never assess a student's capabilities based solely on test scores.

TEACHER PRESENTATION STRATEGIES

- Always ask questions in a clarifying manner. Have the students with learning disabilities describe their understanding of the questions.
- Use an overhead projector with an outline of the lesson or unit of the day.
- Provide clear photocopies of your notes and overhead transparencies, if the student benefits from such strategies.
- Provide students with chapter outlines or study guides that cue them to key points in their readings.
- Provide a detailed course syllabus before class begins. Ask questions in a way that helps the student gain confidence.
- Keep oral instructions logical and concise. Reinforce them with a brief cue words. Repeat or re-word complicated directions.
- Frequently verbalize what is being written on the chalkboard.
- Eliminate classroom distractions such as, excessive noise, flickering lights, etc.
- Outline class presentations on the chalkboard or on an overhead transparency. Outline material to be covered during each class period unit. (At the end of class, summarize the important segments of each presentation.)
- Establish the clarity of understanding that the student has about class assignments.
- Give assignments both in written and oral form.
- Have practice exercises available for lessons, in case the student has problems.
- Have complex homework assignments due in two or three days rather than on the next day.
- Present new and or technical vocabulary on the chalkboard or overhead.
- Provide and teach memory associations (mnemonic strategies).
- Support one modality of presentation by following it with instruction and then use another modality.
- Technical content should be presented in small incremental steps.
- Use plenty of examples, oral or otherwise, in order to make topics more applied.
- Use straight forward instructions with step-by-step unambiguous terms. (Preferably, presented one at a time).
- Write legibly, use large type; do not clutter the blackboard with non-current / non-relevant information.
- Use props to make narrative situations more vivid and clear.
- Consider peer tutoring if the student appears unable to keep up with the class pace or with complex subject matter. The more capable reader can help in summarizing the essential points of the reading or in establishing the main idea of the reading.



LABORATORY STRATEGIES

- Clearly label equipment, tools, and materials. Color code them for enhanced visual recognition.
- Consider alternate activities/exercises that can be utilized with less difficulty for the student, but has the same or similar learning objectives.
- Provide clear photocopies of your notes and overhead transparencies.

- Make available cue cards or labels designating the steps of a procedure to expedite the mastering.
- Use an overhead projector with an outline of the lesson or unit of the day.
- Allow extended time for responses and the preparation and delivery of reports.
- In dealing with abstract concepts, use visual tools such as charts and graphs. Also, paraphrase and present them in specific terms, and sequence and illustrate them with concrete examples, personal experiences, or hands-on exercises.
- To minimize student anxiety, provide an individual orientation to the laboratory and equipment and give extra practice with tasks and equipment.
- Allow the students with learning disabilities the use of computers and spell checking programs on assignments.

What Learning Disabilities Are Not

• Persons with learning disabilities are not "lazy" or "dumb." In fact, they usually have average or above average intelligence. Often they fall within the range or "gifted." Their brains just process information differently.

GROUP INTERACTION AND DISCUSSION

- Always ask questions in a clarifying manner, then have students describe their understanding of the questions.
- Assist the student, if necessary, in borrowing classmates discussion notes.
- Encourage questions during or after class to ensure that materials are understood.
- Give plenty of reinforcement when it is evident that the student with a learning disability is trying things that are made difficult by the disability.
- Have frequent question-and-answer sessions or have individual office hours where students can reinforce their progress as well as understanding of assignments and course content.

RESEARCH ASSIGNMENTS

- Review and discuss with students the steps involved in a research activity. Think about which step(s) may be difficult for the student's specific functional limitations and jointly devise accommodations for that student.

TESTING/ASSESSMENT (also consult policy and procedures for test proctoring with Disability Support Programs and Services-recommendations maybe made regarding use of calculators, computers, thesaurus)

- Avoid overly complicated language in exam questions and clearly separate items when spacing them on the exam sheet.
- Consider other forms of testing (oral, hands-on demonstration, open-book etc.).
- Consider the use of illustrations by the students with learning disabilities as an acceptable form of response to questions in lieu of written responses.
- Eliminate distractions while students are taking exams.
- For students with perceptual problems, for whom transferring answers is especially difficult, avoid answer sheets, especially computer forms. Allow them to write answers (check or circle) on the test (or try to have them dictate their responses on a tape recorder.)
- Time extensions on exams and written assignments when there are significant demands on reading and writing skills are an accommodation that DSPS counselors may recommend.
- Provide study questions for exams that demonstrate the format along with the content of the exam.
- Review with students how to proofread assignments and tests.
- Do not test material just presented or outcomes just produced, additional time maybe required to assimilate new knowledge and concepts.

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We're on the Web!
http://www.sdcity.edu/dsps/

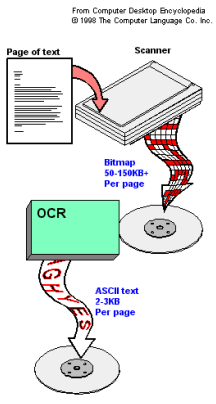
Technology Aids . . . cont'd.

or improve the abilities of individuals with disabilities. These common tools extend from low-tech, low-cost items to high-tech, more expensive devices.

Low tech devices require little or no training; high-tech devices may require extensive training.

The simplicity and ready availability of low-tech devices should not be overlooked. Inexpensive color highlighters, for example, can help individuals with reading difficulties distinguish words that appear the same, like proud, pound, and pond. Students highlight the troublesome words in different colors to visually become aware of the differences between words. Such training can lead the student to a higher level of awareness of his/her disabilities.

High-tech devices, such as an optical character recognition (OCR) system, provides a means of entering text or printed material directly into a computer by use of a scanner. Once the text has been scanned into the computer, it can be read back to the user by means of a speech synthesizer.



When a text document is scanned

into the computer, it is turned into a bitmap, which is a picture of the text. OCR software analyzes the light and dark areas of the bitmap in order to identify each alphabetic letter and numeric digit. When it recognizes a character, it converts it into ASCII text.

Another useful assistive technology is a speech recognition system. Appropriate for adults with learning disabilities, the system operates in conjunction with specially equipped personal computers. Such programs enable the user to dictate to the computer, converting oral language to written text.

Generally, computers can be very useful for students with disabilities because they cut out distractions, decrease the stress of stimuli and leave more of a student's brain for thinking.

Word Processor features

- Spell checkers-Using spell and grammar checking can help the student stay focused on communication rather than getting bogged down in the process of trying unsuccessful to identify and correct errors.
- Outlining programs (included as part of many word processing programs) automatically create Roman numerals for major headings, and letters and numbers for minor headings.
- Text Reading Systems (Text to Speech) These systems allow text on screen (document, Web page or e-mail) to be read aloud through a computer's sound card.
- Listening/ Note-taking Resources
- Variable speed control tape recorders, listening aides, talking calculators
- Text-to-speech, screen-reading software, audio books

- Math software and hardware
- English software and hardware
- Studying/ Organizing Resources, software for brainstorming, organizing and bringing out creativity

Despite adequate cognitive ability, learning disabled students' difficulties with basic skills such as reading and writing can prevent full participation in the classroom and in critical adult life activities. Computer technology provides the answer for many of these students.

Portions adapted from Tools for Life http://www.gatfl.org/