DISABILITY AWARENESSS

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Tab 2 Disability Awareness

Antelope Valley Union High School District

LEARNING DIFFERENCES

Definition

A learning difference (disability) is generally characterized by difficulty in one or more of the neurological functions that foster academic skills at developmentally targeted times. Learning differences generally occur by affecting one of the psychological processes for developing language: receptive (auditory, hearing or processing sound, visually interpreting the symbols of language) or expressive (speaking, responding to questions, or encoding (writing)). It may also affect second language skills such as math. We may have to think about language in a new way. For example, spoken language is our first language; therefore everything else (reading, writing acquiring vocabulary, etc.) are second language skills.

1. **Characteristics of Students with Disabilities are Different, Even When They Have the Same Type of Disability.**
   Even within the same category of disability, students will have vastly different characteristics. For example, one student with learning disabilities may have limitations in visual, but not auditory perception. For another, the reverse may be true. The more you learn about students with disabilities, the more each student appears unique. Remember that descriptions in this lesson identify only general characteristics.

2. **Acknowledging Student's Abilities Will Ultimately Be More Valuable than** Acknowledging Their Disabilities
   As you work with individual students, you will develop an appreciation for their unique strengths, learning styles, interests, goals, aspirations, feelings and fears. Information about their disabilities will become gradually less important.

3. **Students with Disabilities Have More in Common with Their Non-disabled Peers than They Have Differences**
   Frequently, instructors comment on how well students with disabilities get along with kids in the regular classroom after only a brief period of adjustment. Initially, students with and without disabilities may be fearful of each other. However, once they discover a common interest, they usually get along quite well.

"Person First": It's the Language of Respect

The language we use is important to people with disabilities. Note these guidelines, and practice using them in your daily language.

- Use "person first" language. Refer to the person with a disability, not a disabled person.
- Avoid outdated and degrading terms like "handicapped," "spastic," "crippled," or "retarded." Instead, use "person with a disability," or "person with retardation (or intellectual disability)," respectively.
- Refer to a "person who uses a wheelchair" not a "person who is confined to a wheelchair."
- If you must describe people according to their size, refer to "people of short stature" and "people or large stature" instead of "dwarfs" or "fat people."
- Talk directly to the person, not through a companion standing nearby.

4. **Students with and without Disabilities Have the Same Rights**
   All students have the same rights to be a part of our society and participate in its activities. Students with disabilities have the same rights to try something new and risk failing. The only true failure in education is failing to try. As instructors, we must remember not to shelter students with disabilities, but to give them opportunities to learn and grow, just as we give opportunities to other students.

   Except for Attention Deficit Hyperactivity Disorder (ADHD), the following disability categories have been recognized as disability classifications by federal legislation called the Individuals with Disabilities Act (IDEA).

Understanding Students with Autism

Autism is a syndrome affecting language, measured intelligence, rate of development, and responses to people, events and objects. It may be caused by biochemical problems in the regulation of the body's immune system (Warren, 1986). In some cases, the characteristics of students with autism appear similar to those of students with severe emotional disability. They may be unable to communicate or socialize in typical ways. These students may seem preoccupied with objects or other items that appear unimportant. They may display body rocking, head-banging, unusual hand movements, uncommon posturing, or repeated speech. Autism is rare; one in 10,000 students has autism. About 75% of students with autism are boys (Hallahan & Kauffman, 2000).

For students with autism, the focus is often on developing alternative behaviors that are more appropriate. Most students with autism have problems with social and

communication skills. They may need explicit assistance in identifying cues for social occasions and responding in ways considered appropriate by others.

Interacting with students who have autism. Interacting with students with autism presents major challenges. Effective interaction often depends on developing two-way communication. Find out what communication system the student uses, and become familiar with it. Many students with autism require a highly structured classroom environment, clear expectation, fast-paced instruction, and positive consequences for acceptable behavior. The classroom activities should be as regular and predictable as possible. Ask your instructor or a specialist how to interact with specific students.

Understanding Students with Blindness or Low Vision

Students are considered legally blind if, even with glasses and using their better eye, they see at 20 feet what other students see at 200 feet (Hallahan & Kauffman, 2000). Thus, students who are blind have severely impaired or nonexistent vision. They require assistance in understanding their place in space and often read using the Braille language. Computerized voice synthesizers allow these students to "read" by hearing information. Students with low vision (or partial sight) may also use computers, or books with large print.

Interacting with students who are blind or have low vision.

- Ask students if you can assist them in moving from one place to the next.
- Keep the physical layout of the environment consistent.
- Find out what assistive devices the student uses, and become familiar with them.
- Ask your instructor or a specialist how to interact with specific students.

Understanding Students Who Are Deaf or Hearing Impaired

Deafness means a hearing loss so severe that a student cannot hear spoken language even with hearing aids. Hearing impairment means a hearing impairment, which is not as severe as deafness, but one which adversely affects classroom performance. Students with deafness or hearing impairments may have delays in speech and language. Some students learn to communicate by using sign language, speech-reading (reading lips, face and gestures), communication boards or computers. Some use telecommunication devices, which change verbal messages into writing. Many individuals with deafness or hearing impairment do not consider their condition a disability. They view themselves as members of the deaf culture who simple use American Sign Language or its variations to communicate (Hallahan & Kauffman, 2000). Some of them resist efforts to be included in a general education classroom because they say it depreciates their identity as a separate culture.

Interacting with students who are deaf or have hearing impairments:

- Speak clearly. Make sure they have an unobstructed view of your face and lips. Do not cover your mouth! Do not talk loudly unless the student requests that you speak up.

- Find out if the student communicates using manual signs, a communication board, or other means. Become familiar with the method of communication.
- Ask your instructor or a specialist how to interact with specific students.

Understanding Students with Emotional Disturbance

Students with emotional disturbance have extreme emotional or behavioral problems that affect their ability to perform in classrooms. Students with a emotional disturbance may display a wide range of behaviors that are different from those expected in classrooms, including aggression, violence, verbal threatening, destruction of property, inappropriately seeking attention, tantrums, hyperactivity, compulsiveness, impulsiveness, irritability, or withdrawal. However, these behaviors do not occur all of the time! They merely occur at a rate greater than average for a particular age group.

Students with emotion disturbance seem unable to control or change their patter of behavior. They may appear to have poor memory and short attention span. Some appear preoccupied or anxious. They may have a poor image of themselves. Many have problems in some or all academic areas. Others may seem quite confused in their thinking process and talk about things that do not make sense.

Most students with emotional disturbance are boys (80%). Most are identified in later elementary grades. In adolescence, many drop out of school. Often, these students have difficulties in their home life (Hallahan & Kauffman, 2000).

Interacting with students who have an emotional disturbance. When students have a poor self-image, they look to confirm it in the reactions they get from others. Do not fall into the trap! Here are some recommendations:

- Be respectful, supportive, and reassuring. Try to maintain trust by making eye contact, talking in a straightforward and honest way, listening carefully, and negotiating.
- Make expectations small (at least at first) and achievable. Success means everything!
- Praise success in a genuine, sincere way. Instructors must point out the successes of these students so they can build their self-esteem.

Understanding Students with Mental Retardation

Students with mental retardation learn more gradually than their peers. They are limited in their learning of academic, language, communication, and social skills. Consequently, their skills are often delayed in comparison to their peers without disabilities.

Students are classified as mentally retarded based on three factors:

- First, they receive low scores on intelligence (IQ) tests. In most states, mental retardation is defined by an IQ score of 69 or below, which means the score is in the lowest 2.3% of the population (American Association on Mental Retardation,

1992). (The average IQ score is 100). Students with mental retardation have difficulty solving problems. They may not be able to grasp concept or understand clichés. They may have difficulty learning things that other people take for granted, such as solving simple arithmetic problems. Students with severe retardation require continuous support with basic skills such as dressing and toileting.

- Second, students with mental retardation show limitations in "ADAPTIVE BEHAVIOR," which refers to the extent to which people meet the personal and social standards expected of their age group and culture. These students may have problems making responsible decisions. They may need support to successfully accomplish daily activities.

- Third, the diagnosis of mental retardation is made during the "developmental period," i.e., before age 18.

Interacting with students who have mental retardation. Since individual characteristics vary widely, how one interacts depends on the specific student. General recommendations include the following:

- Use clear, simple, specific language. Avoid "old sayings," abstract concepts, or clichés. After communicating important information, check to find out if students understand.
- Make sure you have student's attention before communicating or delivering instruction. First, say students' names and make eye contact before starting to speak.
- Demonstrate appropriate social behavior so that students can learn from it. The social skills of students with mental retardation may appear "immature." However, most students can learn by imitating someone who demonstrates, or "models," the correct behavior.
- Recognize students when they are successful. Students with mental retardation may not recognize their own success, at least initially. They need specific praise and recognition.
- Instruction usually requires that tasks be divided into small parts, which is a process called "task analysis" (see Unit 5). The instructor then teaches each task in sequence.

Understanding Students with Multiple Disabilities

Some students have multiple disabilities; that is, two or more disabilities, such as mental retardation and cerebral palsy, or blindness and deafness (called "dual sensory impairment"). While students with multiple disabilities account for only about 2% of all students who have disabilities, they present considerable challenges for instructors. Highly specialized instruction is necessary. Interaction depends entirely on the specific student.

Understanding Students with Orthopedic Impairments

Orthopedic impairments include “PHYSICAL” and “NEUROLOGICAL DISABILITIES” (Hallahan & Kauffman, 2000). Some of the more common impairments are cerebral palsy, spina bifida, and muscular dystrophy. Characteristics of students vary depending on the type and severity of the impairment.

Cerebral Palsy. Students with cerebral palsy experience physical and neurological problems due to damage of the nervous system, which occurs before, during, or immediately after birth. Seventy percent of these students have “spastic cerebral palsy,” which means their muscles are rigid and contracted. Coordination, mobility, balance, and communication may be affected. About half of these students are labeled mentally retarded and 80% have speech disorders. Many use assistive technology devises to promote independence.

Spina Bifida. Students with spina bifida experience a birth defect of the spinal cord. During the first trimester of pregnancy, part of the spinal cord is pushed out of its protective tube, causing neurological damage. In rare cases, the condition can be corrected with surgery. Usually, even with surgery, the student has at least some degree of permanent disability. Students may experience motor impairment, muscle weakness, or paralysis. In many cases, students with spina bifida also have hydrocephalus, or fluid on the brain. Some students with spina bifida may need assistive technology devices, such as wheelchairs or braces.

Muscular Dystrophy. Students with muscular dystrophy experience deterioration of muscles connected to the skeleton. The deterioration is “progressive,” that is, it becomes more prominent with age. Students with muscular dystrophy have limited muscle movement and mobility. Most require assistive devices.

Interacting with students who have orthopedic impairments. Methods for interacting with these students vary greatly. Interaction depends on specific characteristics of individuals. Talk to the classroom teacher, occupational or physical therapist, or other specialist about how to interact with specific students. Some students may require physical lifting or transferring. In these cases, paraeducators must be trained to use correct body positioning and handling procedures so as not to injure the student or themselves.

Severely Multiply Impaired

“Multiple disabilities” means concomitant impairments (such as mental retardation-blindness, mental retardation-orthopedic impairment, etc.), the combination of which causes such severe educational needs that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include dea-blindness. (34 CFR 300.7©(7))

“Severely Multiply Impaired” means a pupil who has severe learning and developmental problems resulting from two or more disability conditions determined by assessment.

Understanding Students with Other Health Impairments

Other health impairments are those not otherwise classified. These include children who experience attention deficit problems, epilepsy, heart conditions, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, lead poisoning, leukemia, arthritis, or diabetes. Two types of Other Health Impairments will be described here: epilepsy and attention deficit disorder or attention deficit hyperactivity disorder (ADHD).

Epilepsy. Students with epilepsy have temporary lapses of consciousness, or seizures (Engle, 1995). The seizures may occur frequently or rarely. Also, seizures may vary in length and intensity from a few seconds during which students stare blankly, to several minutes during which students display major convulsions. Many students with epilepsy take medication, which partially or completely controls seizure. Epilepsy affects 1-2% of the students in U.S. schools. Managing seizures requires supervised, on-site training, which is beyond the scope of this program. Explore local training opportunities with your instructor or supervising teacher.

Attention deficit disorder or attention deficit hyperactivity disorder (ADHD). Students with ADHD have extreme difficulty attending to tasks in a classroom. They may appear impulsive and “out-of-control.” In classrooms, their attention may be drawn to sounds of a fan, a cough, a sneeze, or they may be distracted by the sight of someone walking in the hallway, a poster of a basketball player, or a missing floor tile. They may “react” to unimportant things by turning their head, shifting positions in the chair, etc. Students with ADHD are sometimes labeled “hyperactive” (Barkley, 1998).

Many students with ADHD take a medication. The medications influence the dopamine levels in the brain, which may affect a student’s attention level. While medication is effective with 70-80% of children, it is not a cure-all and should not be considered a substitute for good teaching (Hallahan & Kauffman, 2000). See other sources of information on medication (C.H.A.D.D., 1992; Pancheri & Prater, 1999; Smith-Read, 1995).

Interacting with students who have ADHD:

- Minimize distractions in the classroom. If possible, seat students away from hallway doors, windows, and major traffic ways in the classroom.
- Keep instructional materials within your reach by out of reach of students until it is time to use them.
- Keep the pace of instruction fairly rapid. Move faster if students appear bored, or slower if students appear hyperactive.
- Describe expectations in positive terms. Tell students what they should do, not what they should avoid. Make expectations small (at least at first) and achievable.

- Introduce a lesson by describing what information will be covered, what students will learn, how they can apply what they learn, and what positive consequences will be available.
- Provide "hands-on" learning experiences. Students with ADHD learn best by doing!
- Structure lessons by obtaining responses from each student, moving quickly from student to student, and spending as little time as possible correcting a student's error.
- Alternate complex academic tasks with easy, preferred ones. Mix easy and hard tasks.
- Avoid going off on tangents. Stick to the topic.

Understanding Students with Specific Learning Disabilities

One's first impression of students with learning disabilities is that they are similar to students without disabilities. However, they experience problems which influence their ability to understand and use language. Generally, students with learning disabilities have deficits affecting information processing, perception, memory, or attention. These deficits produce problems in reading, writing, spelling, math, listening, or speaking. About one out of 10 to 20 students in U.S. schools is considered to have learning disabilities (Hallahan & Kauffman, 20000.

Information Processing. Students with learning disabilities have problems with "input" and "output" of language. They may have trouble interpreting what they read of hear. They may take much longer than other students to answer questions or solve problems.

Perception. Perhaps the most popular notion of learning disabilities is that students reverse letters and numbers like "p, b, q, d, 6, and 9." While this is true, it is only one of many perceptual problems. Students with learning disabilities may also have difficulty distinguishing right from left, or different kinds of patterns or symbols (like a "plus" sign in arithmetic from a "times" sign: "+" versus "x"). In some cases, they may see letters with stems, such as "p, b, q, and d" as thick or fuzzy. They may perceive lines of text on a page as wavy, stair-stepped, or overlapping.

Memory. Students gather information by hearing (auditory) or seeing (visual). Students with learning disabilities may experience problems remembering auditory or visual information, or both. For example:

> Auditory memory: A student may hear this instruction from the teacher: "Joel, please find the custodian, Mr. Allen, and tell him to come here right away." Joel nods, begins to carry out the instruction, but then forgets it when he reaches the hallway. Students with learning disabilities are sometimes mistaken as "noncompliant."
>
> Visual memory: An instructor writes on the chalkboard: "Assignment for March 29: Problems 1-10 from Chapter 6, p. 42." A student with learning disabilities may try to copy the assignment but become frustrated because of visual

perception problems. He says to himself, “I’ll just remember it,” but forgets due to problems with visual memory.

Attention. Some students with learning disabilities may appear distractible. They attend to many things but are unable to “filter out” things that are unimportant.

Students with learning disabilities appear to have average to above average intelligence, although they have difficulties in academics. They do not learn at expected rates, or even after repeated practice. Some students become frustrated, angry, or withdrawn. They may appear unmotivated and eventually drop out of school.

Interacting with students with learning disabilities. Again, characteristics vary widely, so methods of interaction depend on the specific student. Here are some general recommendations:

- Don’t accept “I don’t know.” Students with learning disabilities *do know*! Allow them more time and accept any reasonable response.
- Create a respectful, trusting relationship. Try to understand the student’s frustration.
- Combine visual and auditory information. For example, when delivering an assignment, write it down *and* say it. Then, have the student read it, write it, *and* verbally repeat it.
- Divide a lesson into parts. Review material after presenting small parts. Then, return and review the entire lesson.
- Be patient. Allow as much time as possible.

Interacting with students who have speech or language impairments:

- Be respectful, supportive, and reassuring. Students with speech or language disorders are sometimes very self-conscious and quick to give up. Never mock a student with a speech disorder.
- Ask your instructor or a speech/language specialist how to interact with specific students.

Understanding Students with Traumatic Brain Injury

These students have experienced severe head injuries. Their disabilities depend on the part of the brain that sustained injury and the severity of the damage. Abilities that might be affected include speech, language, memory, motor function, intelligence, and behavioral adjustment. Most students sustaining brain injury recover some abilities, although few recover all skills (Begali, 1992). Brain injuries take a huge toll on the individual, family, and friends. Understanding, patience, and well-timed encouragement are important. Interaction requires consistency, frequent positive reinforcement, and encouragement.

Assistive Technology and Its Role in Education of Students with Disabilities

"ASSISTIVE TECHNOLOGY" refers to the use of devices that increase the ability of people to get along in society or that improve their quality of life (Franklin, 1991). Examples of assistive technology devices include wheelchairs, computers with synthesized "voices" to aid in communication, computer screen readers for those with visual impairments, magnifiers for reading, hearing aids, teletypewriters so that people who are deaf can read and type phone messages, a lever to replace a round door know for people with reduced muscle control, and so forth. As you can see, assistive devices can be sophisticated and expensive or very simple and inexpensive. Assistive technology is consistent with the goal of making each student as independent as possible.

What Does Assistive Technology Mean to the Paraeducator?
What is the Paraeducator's Role?

1. Paraeducators should receive training in the correct and appropriate use of assistive technology used by people obtaining services. Gather information on assistive technology resources. For a listing of resources, see Appendix C.

2. Make people aware of available technologies. A study found that potential consumers knew little about available technologies because there is no central source of information (National Rehabilitation Hospital, 1994). For a listing of resources on assistive technology, see Appendix C.

3. If a person may benefit from an assistive device, discuss with the person and the classroom teacher whether an evaluation should be conducted.

4. Ensure that you know how to operate the assistive device before using it. Ask the classroom teacher or the student using the device to show you how it works.

5. Because assistive devices will occasionally require repair or maintenance, talk to your classroom teacher about developing a plan for back-ups. Ensure that back-ups are available.

Guidelines for Working with Students Who Have Different Learning Characteristics

To assist in delivering instruction, it is important for the paraeducator to develop different styles of communication and instruction to match student needs. This section provides general guidelines for working with students who have specific learning disabilities, mental retardation, emotional disturbance, autism, speech and language impairment, visual impairment, hearing impairment, and students who use wheelchairs

(Hallahan & Kauffman, 2000; Smith, 2001). Guidelines for only the most prevalent types of disabilities are presented. For more information, see Unit 1, Lesson 2. The information below is meant to assist the paraeducator in understanding needs of different students. We caution the reader not to infer that communication style and instructional methods vary according to types of disabilities, or that all students with a certain type of disability respond the same way. All students are different, and the most effective form of instruction ultimately depends on the individual student, not the category within which the student is placed.

Guidelines for Working with Students Who Have Learning Disabilities

1. Don't accept "I don't know." Students with learning disabilities, and others as well, learn quickly that "I don't know" gets them off the hook. Ask for part of the answer, or ask another question that the student can answer correctly.
2. Praise correct responses. Avoid harsh criticism of incorrect responses.
3. Teach comprehension of words, then teach comprehension of combinations of words and then sentences. Do not assume comprehension occurs "automatically" when students show they know isolated words.
4. When possible, extend time limits. Many times, students with learning disabilities are capable of outstanding performance, but they require more time.
5. Establish and maintain a respectful, trusting relationship with the student. Understand the student's anxiety and frustration in learning situations.
6. Seat the student with learning disabilities near the instructor for better comprehension.
7. Use visual aids. Combine visual and auditory stimuli.
8. Summarize key points before, during, and after a lecture. Periodically review the material.
9. Listen to the students. They often have insight as to how they learn best.
10. Try to present information multi-modally. Offer visual, auditory, and tactile exercises to reinforce learning.
11. Allow questions to be asked. Cue students with key words to get them started with an answer.
12. Provide extra time for students to process the information. Have them restate the question to give clarity and processing time.
13. Do not have students do any task for an extended length of time without a physical break, even if it is just to stand up and stretch.
14. Provide skeletal outlines of lectures. This provides a road map for the students to follow.
15. Repeat new information as many ways as you can. Tell them what you're going to tell them. Tell them. Then explain what you've just told them.
16. Success breeds more success; therefore, praise even partially correct answers.
17. Use your students to present information to each other. In order to teach they must truly understand the material. Help them to be successful.
18. Create flashcards for new information, especially vocabulary.
19. Use manipulatives to illustrate concepts. For example, place three smaller boxes into a larger box to represent a topic and three main ideas.

20. Micro-unit tasks. Break down assignments into components, i.e. outline, title page, abstract (summary), thesis, main body, conclusions and references.
21. Provide additional resources and perhaps models of assignments.
22. Teach time management, sequencing and organizational skills.
23. Assist the student with proofreading.

Guidelines for Working with Students Who Have Mental Retardation

1. Don't accept "I don't know."
2. Break down tasks into small steps (component parts). Example: "identifying coins" means first identifying each coin in isolation, then identifying "tails" as well as "heads," then identifying each coin with one other coin nearby, then two, then three, etc.
3. After breaking down tasks, teach tasks in a logical sequence. Example: To teach how to use vending machines, first teach a student to decide on a selection, then identify the price, then select coins, then place coins in slot, then press the button, then take the selected item, etc.
4. Use clear, simple, specific instructions. Use the student's name first to ensure that you have attention. If appropriate, ask the student to repeat back what he/she heard to ensure comprehension. Example:
   "Sarah, please take this lunch list to Mrs. Ferguson in the cafeteria. Now, what are you going to do?"
5. Praise success. When praising, describe the behavior/skill being praised, so there is no doubt what the student did. Tailor the statement to the student's age, gender, culture, and personal preference. Encourage similar or better performance in the future.
6. Some students with mental retardation appear dependent on instructors to do things for them. Many times we do too much as instructors! Pause when it is time for the student to respond. If you intervene by responding for the student, you are denying him/her an important learning opportunity.

Guidelines for Working with Students Who Have Emotional Disturbance

1. Provide support and reassurance.
2. Emphasize appropriate behaviors, which are good alternatives to the ones you want to eliminate. Avoid calling attention to the inappropriate ones. Tell the student "what to do," NOT what "not to do."
3. Praise success, even when the accomplishment seems minor. Students with emotional disturbance often have long histories of being told about their failures. Some have "failed" so much that they do not even recognize success. Recognize it for them so that they will begin to see it.
4. When students believe they are hopeless failures, they look to confirm their poor self-image in the reactions they get from others. The instructor's job is not to fall into this "trap." You must maintain the trust, not matter what the student will toss at you. Key ingredients are (a) making eye contact, (b) talking straight and being honest with the student, (c) listening to the student and negotiating, and (d)

making expectations clear from the beginning and making them achievable in small, progressive steps.
5. Seat the student with emotional disturbance near the instructor for better behavior management.

Guidelines for Working with Students Who Have Autism

1. Students with autism often depend on a routine and a consistent schedule. Maintain consistency when possible. Announce changes in schedule ahead of time.
2. Many students with autism can participate in behavior intervention programs. Find out what role you may play in carrying out the intervention.
3. Some students with autism display social behavior that is different from behavior of other students. Accept differences in social behavior unless the student participates in an intervention program to change behavior.

Guidelines for Working with Students Who Have Speech and Language Impairments

1. Do not draw attention to the differences in the student's speech or language.
2. Repeat back what the student communicates to ensure accurate comprehension.
3. If the student has difficulty in expressive communication (e.g., speaking, signing, or using a communication board), set high expectations for clear expression. Reinforce success.

Guidelines for Working with Students Who Have Visual Impairments or Blindness

1. Announce your name when coming and going.
2. Describe the physical features of new environments such as the positions of tables, desks, doors, etc.
3. Seat the student with visual impairment near the instructor for better comprehension.
4. Communicate facing the student with visual impairment and avoid placing hands or materials over your mouth.
5. When possible, avoid writing on a chalkboard because it is difficult to face the student with visual impairment. Instead, use an overhead projector.
6. Use large print text of high contrast (e.g., black on white background). Read key parts of the text to the student.
7. If possible, tape record lectures and assignments.
8. When escorting a student, offer your right or left forearm and walk about a half step ahead. Announce approaching objects and changes in floor material or pavement.

Guidelines for Working with Students Who Have Hearing Impairments or Deafness

1. Speak clearly, not necessarily louder. Reduce background noise.
2. Seat the student with a hearing impairment near the instructor for better comprehension.
3. During group discussion, announce the names of students who make verbal responses so the student with hearing impairment can identify who is talking.
4. For lectures, make copies of notes or arrange for a note taker to assist the student with a hearing impairment.
5. If a student has an interpreter, position yourself so that the student can see you and the interpreter in close proximity.

Guidelines for Working with Students Who Use Wheelchairs

1. When communicating, position yourself at eye level of the student.
2. Arrange the learning environment so that all areas are accessible to the student using the wheelchair.
3. The chair is an extension of the student's body. It is not something the person is "confined to."
4. Ask the student if you may assist in opening doors. For some student using wheelchairs, the answer is "no thanks, I'll do it myself."

To Follow:

- **"10 Commandments"**

- **Accommodations and Modifications**

Disability Awareness

Core Information

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Activities

Activity 1

Disability in the media:

Provide the group with a newspaper or magazine article about someone with a disability, then ask each person to complete the following exercise:

Read the article. Does the way it is written (including editorial content, adjectives and tone) convey a positive image of the person with a disability as a "normal" human being, focussing on the person or does it portray the person as "different", focussing on the person's disability? How could the article be re-written to be more positive. (Hint: imagine you are the person being talked about in the article - how do you feel about the way the article describes you?)

Find a similar article about a person without a disability and compare the two (for example, a profile on a Paralympian and a piece on an Olympian).

Activity 2

Some famous people with disabilities:

Following is a list of famous people with disabilities.

Mix up the names, occupations and disabilities and get group members to re-arrange them into the correct columns.

Discuss how the various person's disabilities made an impact on their career and/or way of life. (This may require some research.)

Discuss individuals who are known to group members who have found their disability does not hold them back from doing what they want to do.

Name	Occupation	Disability
Agatha Christie	Author	Epilepsy
Alan Marshall	Author	Epilepsy
Beethoven	Composer	Hearing impairment
Christopher Reeves	Actor	Quadriplegia
Christy Brown	Writer and poet	Cerebral Palsy
David Helfgott	Pianist	Psychiatric disability
Douglas Bader	Fighter Pilot	Physical disability (amputee)
Evelyn Glennie	Percussionist	Hearing impairment
Handel	Composer	Epilepsy
Harry Truman	US President	Polio
Helen Keller	Teacher	Hearing and vision impairment
Jacqueline Du Pre	Cellist	Multiple Sclerosis
Julius Caesar	Ruler of Rome	Epilepsy
Louis Braille	Inventor	Vision impairment
Marli Matlin	Actress	Hearing impairment
Napoleon	General	Epilepsy
Ray Charles	Singer	Vision impairment
Ray Orbison	Singer	Vision impairment

Steady Eddie	Comedian	Cerebral Palsy
Stevie Wonder	Singer	Vision impairment
Tom Cruise	Actor	Dyslexia
Tony Grieg	Former English Cricket Captain	Epilepsy

Resources

Books

ACQUIRED PHYSICAL DISABILITY:
So Much To Tell You - John Marsden

ASTHMA:
This Air - David Getz

CEREBRAL PALSY:
Let the Balloon Go - Ivan Southall
Trapped Inside - Bradley Harris Wolf

CHILDREN WITH DISABILITIES:
Crutches are Nothing - short stories - Edel Wignell

DIFFERENCE:
Gulliver's Travels - Jonathon Swift

EPILEPSY
Apprentice Devil - Lisa Vasil

HAEMOPHILIA
April Fools Day - Bryce Courtney

HEARING IMPAIRMENT
Broken Silence - S. Ackehurst
Seeing Voices - Oliver Sacks
God Simon - Jean Ure

JUVENILE RHEUMATOID ARTHRITIS
Jodie's Journey - Colin Theile

MONOPLEGIA

Bree and Friends - Maureen Stewart

PARAPLEGIA
Shadowdancers - Sally Odgers

PHYSICAL DISFIGUREMENT
The Weirdo - Theodore Taylor

PHYSICAL DISABILITY
Colt - Nancy Springer
I Can Jump Puddles - Alan Marshall
Hammers Over The Anvil - Alan Marshall

SPEECH IMPAIRMENT
Blubber Mouth - Morris Gleitzman
Sticky Beak - Morris Gleitzman

VISION IMPAIRMENT
Dolphin in the Bay - Dianna Noonan
Eye in the Storm - Judy Nunn
Nightwatch - Errol Broom
See you Thursday - Jean Ure
Stars come out within - Jean Little
The Country of the Blind - H. G. Wells

Videos

The following videos look at issues affecting people with a disability and include themes such as overcoming social barriers, the value of the individual and difference:

Just Like Everyone Else: Living with Disabilities (30 mins)

Focuses on various aspects that teenagers with disabilities face in living life just like everyone else. Five segments examine one person with a specific disability and address issues such as other people's attitudes and expectations, family/sibling influences, challenges and how they overcome them, needs/goals and how they want to be treated. A set of teacher notes accompanies the video. Human Relations Media, USA

Get Real (22 mins)

The story of a fat high school boy who suffers from low self esteem and lacks motivation to learn. He is a concern to his teachers and a joke to his classmates. The humorous story line shows how George is compelled to take action against the school bully and earn the respect of his new friends. The Australian Film Institute, 1990.

George (30 mins)

A documentary which looks at attitudes towards people with disabilities by focusing on a group of students who meet with George, a young person who has both intellectual and physical disabilities.
Through a communication board, George demonstrates that he is able to communicate his wants, needs and feelings and control his life with dignity.
Brisbane, Department of Health, 1985

My Left Foot (102 mins)

1989 Colombia Tristar Starring Daniel Day-Lewis

The true story of Christy Brown, born in Dublin 50 years ago with no control over his body apart from his left foot. Many of his relatives suggested to Christy's mother that she should put Christy in a home, but she refused to believe that nothing could be done for him. Although his father refuses to accept his new son's disability, Mrs Brown welcomes him into the heart of her large family. Through her encouragement and faith, Christy manages to demonstrate that, in spite of his disability, he is a warm and fiercely intelligent human being with a fine sense of humour. Using his left foot, Christy is able to channel his words and images into what soon become works of art and best-selling novels and poetry - a true triumph against the odds.

Other videos looking at disability issues include:

- An Angel at My Table
- Annie's Coming Out

- *Born on the Fourth of July*
- *Children of a Lesser God Coming Home*
- *Elephant Man*
- *Feel Me Dancing*
- *Of Mice and Men*
- *Mask*
- *Mr Holland's Opus*
- *Shattered Silence*
- *Shine*
- *Spinning Out* (Contact the Schizophrenia Association)
- *Struck by Lightning*
- *The Man Without a Face*
- *The Money or the Gun: The Year of the Patronising Bastard* (Australian Broadcasting Corporation)

World Wide Web

A good starting point is the Victorian Government's Directory of Disability Services:

http://hnb.dhs.vic.gov.au/ds/disabilitysite.nsf/

VICNET has a comprehensive disability site at:

http://www.vicnet.net.au/disability/

One of the best directories of disability sites available on the Net is:

http://www.rsa.lib.il.us/~hitbc/disabled.htm#general

This will give you access to myriad international sites.

Organisations

The Victorian Government's Disability Services Division is in the Department of Human Services (03) 9616 7777. You will be directed to the relevant specific area of government and/or disability services organisation.

H U M A N R I G H TS A N D E Q U A L O P P O RT U N I T Y C O M M I S S I O N

http://www.hreoc.gov.au
HREOC administers federal legislation in the area of human rights, anti-discrimination, social justice and

privacy. This includes complaint handling, public inquiries, policy development and education and training.

Agreements have been made with some state governments for the concurrent administration of state and federal anti-discrimination legislation. HREOC's complaint handling powers have been delegated to Equal Opportunity Commissioners in Victoria, South Australia and Western Australia

Disability Services Organisations

Each of the major disabilities has a specialist organisation providing appropriate specialist services for people with the disability.

For example only:

- Vision Impairment
  Royal Victorian Institute for the Blind
- Paraplegia and Quadriplegia
  Paraplegic and Quadriplegic Association of Victoria
- Autism
  Autism Foundation
- Multiple Sclerosis
  Multiple Sclerosis Society of Victoria

Disability Education and Training

D I S A B I L I T Y E D U C A T I O N S E R V I C E S
(0 3) 9 7 2 3 6 7 4 5

Disability Education Services can tailor training to suit the needs of any organisation in addition to conducting a variety of nationally accredited courses.

S TA N D A R D S A U S T R A L I A

Offices in capital cities

Legislation

D I S A B I L I T Y D I S C R I M I N AT I O N

ACT (1992)

DISABILITY SERVICES
ACT (1986)

LEARNING DISABILITIES

A LEARNING DISABILITY IS:

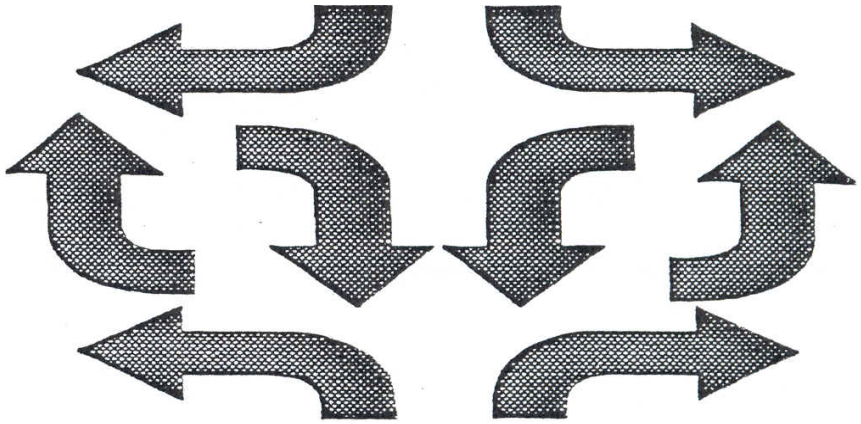
A permanent disorder which affects the way in which individuals with normal or above average intelligence receive, retain, and express information. Persons with learning disabilities have the inability to master one or more of the basic language skills, such as reading, writing, spelling, listening, and speaking. Incoming and outgoing information that is processed by the brain often becomes fuzzy or scrambled, making learning difficult.

Commonly recognized in learning disabled persons as significant deficits in, one or more of the following areas: spelling, reading comprehension, written expression, math computation and problem solving. Frequently there is a problem with organizational skills, time management, or social skills.

Often inconsistent, causing problems one day and not the next. It may cause problems in only one specific area or it may surface in many areas.

FRUSTRATING! Persons with learning disabilities often have to deal not only with functional limitations, but also with the frustration of having to "prove" that their invisible disabilities may be as handicapping as a physical disability.

A LEARNING DISABILITY IS NOT: a form of mental retardation or an emotional disorder. It is not the result of cultural difference or limited experiences.



THE TEN STEPS OF HOW I CAN BE SUCCESSFUL

1. **BE HERE.** Successful people go to work regularly. They tend to work longer hours than less successful people. Remember, right now going to school is your work.

2. **BE ON TIME.** People who are successful get where they are going on time. Others count on them to be where they say they are going to be when they say they are going to be there.

3. **BE FRIENDLY.** No violence. Successful people become successful because they help each other and not because they hurt each other. Successful people build or create. Unsuccessful people destroy by doing physical or spoken violence. To be friendly is to accept the differences of others.

4. **Be POLITE.** Be courteous. Successful people are polite people. They know that other people help them to be successful so they treat others with respect. They listen when others are talking. They wait their turn. They consider the feelings of others. They wait to be called upon in class.

5. **BE PREPARED.** Bring your tools and supplies to class. Successful people take good care of their equipment and they have the equipment they need when they go to work.

6. **BE A LISTENER.** Successful people listen to instructions and follow directions. By listening successful people hear what other need so they can cooperate successful.

7. **BE A DOER.** Do your work the best you can. Successful people are doers. They know the more they do the more they will know how to do. Good baseball players become good baseball players because they play a whole lot of baseball.

8. **BE A TOUGH WORKER.** Keep trying. Successful people keep working even when things get difficult. When the going gets tough the tough get going. Tough times never last but successful people do.

9. **BE A RISK TAKER.** Show courage. Stick your neck out. Ask questions. Successful people are willing to run the risk of failure because they know that sooner or later they will make it if they keep trying.

10. **BE A SUCCESS.** Successful people are achievers. They complete their projects, turn them in on time, and feel good when they have finished their work.

GLOSSARY OF LEARNING DISABILITY-RELATED TERMS

Adapted from material developed by the National Adult Literacy & Learning Disabilities Center, Bridges to Practice Guidebook 1: Preparing to Serve Adults with Learning Disabilities,
pages 89-95.
Taken from: http://ldlink.coe.utk.edu/bridges_glossary.pdf

Accommodations - Techniques and/or materials which legally must be allowed or provided to individuals with disabilities to complete school or work assignments with greater ease and effectiveness. Examples include spell checkers, tape recorders, and extra time for completing assignments.

Adult individualized education plan (AIEP) - A specifically tailored program designed to meet the distinctive needs of adult students diagnosed with a disability.

Advance organizer - Concise overview or summary of a larger body of information that is used to gain prior knowledge before reading or listening to the larger body of information.

Assistive technology - Equipment that enhances the ability of individuals with learning disabilities to be more efficient and successful. Examples include use of an overhead projector by a teacher, use of computer grammar checkers, or the audio/visual information delivered through a CD-ROM.

Attention deficit disorder (ADD) - A disorder characterized by severe and persistent difficulties in one or more of the following areas: attention, impulsivity, and motor behaviors. These difficulties can lead to learning and behavior problems at home, school, or work.

Attention deficit hyperactivity disorder (ADHD) - with hyperactivity, or excessive and exaggerated motor activity.

Auditory - Having to do with the sense of hearing.

Auditory discrimination - The ability to differentiate between speech sounds.

Auditory memory - The ability to remember information which has been presented orally.

Auditory perception - The ability to recognize sounds.

Automaticity - Automatic and correct responses to stimuli without conscious effort.

Basic skills - The fundamental academic skills related to reading, writing, listening, and mathematics that must be mastered for an individual to be successful in daily living tasks.

Best practice - Making good decisions about how best to help an individual learn.

Brain imaging techniques - Recently developed, noninvasive techniques for studying the activity of living brains. Techniques include brain electrical activity mapping (BEAM), computerized axial tomography (CAT), and magnetic resonance imaging (MRI).

Brain injury - The physical damage to brain tissue or structure that occurs before, during, or after birth that is verified by EEG, MRI, CAT, or a similar examination, rather than by observation of performance. When caused by an accident, the damage may be called Traumatic Brain Injury (TBI).

Cognitive skills - Skills that are used for thinking, comprehending, analyzing, or evaluating.

Collaboration - A program model in which the LD teacher demonstrates for or team teaches with the general classroom teacher to help a student with LD be successful in a regular classroom.

Connected instruction - A key principle of LD-appropriate instruction, involves showing the adult how information in and between units and lessons is linked to learning and to the adult's goals.

Content mastery approach - Teaching method wherein the learner receives intensive instruction in topics that are needed for daily living, such as obtaining insurance, getting a driver's license, doing taxes, and procuring health care services.

Coping strategy - A method or behavioral strategy that helps an individual succeed despite learning or other disabilities.

Critical content - Specific information that the learner needs to master for a given task, such as the skills needed to pass a driver's test.

Critical questions - Questions that the instructor should pose that will lead to discourse on learning and help the learner identify goals.

Cue-Do-Review - To help ensure learning, the teacher should CUE the learner, explaining the level of instruction, DO the activities in partnership with the learner, and REVIEW the learning at the end of each level.

Decoding - A process of recognizing unfamiliar written words by sequentially segmenting the sounds represented by the letters of the word and then by blending the sounds into a meaningful word or syllables which are then combined into words.

Developmental aphasia - A severe language disorder that is presumed to be due to brain injury rather than because of a developmental delay in the normal acquisition of language.

Diagnosis - Confirmation of the existence of a condition by someone qualified to reach such a conclusion. For example, a licensed psychologist can make a diagnosis of a learning disability.

Diagnostic tests - An aid to assessment that yields information concerning the learner's weaknesses in areas such as reading or math; composed of several parts, including personal history and psycho-educational tests.

Direct instruction - A key principle of LD-appropriate instruction, characterized by high rates of teacher control during initial stages of information acquisition followed by careful performance monitoring as the learner gradually assumes control over application. Instruction is structured, modular, and sequential (simple to complex and concrete to abstract). Direct instruction stresses practice and mastery, and provides a high level of success experiences and positive feedback to the student.

Dyscalculia - Difficulty in performing mathematical functions, reasoning, word problems, or in aligning columns of numbers or distinguishing numbers or operational symbols such as + (plus sign) and – (minus sign).

Dysgraphia - Difficulty in writing well, as marked by slow writing rate, limited vocabulary, poor grammar, poor sentence structure, incorrect use of punctuation, poor penmanship, or trouble organizing and sequencing ideas on paper.

Dyslexia - A specific language-based disorder characterized by problems in learning to read, write, and spell.

Dysnomia - Difficulty in remembering names or other words that are needed for oral or written language.

Dyspraxia - A severe difficulty in performing drawing, writing, buttoning, and other tasks requiring fine motor skill, or in sequencing the necessary movements.

Encoding – In spelling, a process by which students segment sounds of a word, translate each phoneme into its corresponding letter, and then spell the word. Encoding requires predictable sound–symbol correspondences and phonic generalizations (spelling rules).

Enduring instruction - A key principle of LD-appropriate instruction, involves acknowledging and committing the time necessary to ensure that the information is mastered by the learner and used to increase success in life.

Evaluated instruction - A key principle of LD-appropriate instruction, involves adapting instruction based on assessing the adult's progress and response to previous attempts at instruction.

Explicit instruction - A key principle of LD-appropriate instruction, involves providing detailed explanations and models about how to approach, think about, perform, and evaluate learning and performance.

GED tests - General Educational Development Tests: five tests in the areas of writing skills, social studies, science, interpreting literature and the arts, and mathematics; successful completion of these tests results in award of a high school equivalency diploma.

Generalizable instruction - A key principle of LD-appropriate instruction, involves using activities before, during, and after information has been mastered that ensures continued application of the information by the learner to increase life success outside of the literacy setting.

Graphic organizer - Visual depiction of the organization of information used to enhance the comprehension of information. Graphic organizers can be used in advance, during, and/or after presentation of information.

Hyperactivity - Excessive or exaggerated motor activity, as evidenced in an individual's inability to sit still.

Impulsivity - Acting on impulse with no prior consideration of the consequences of one's actions.

Incidence - The number of new cases occurring in a population during a specific time interval.

Independent practice - The learner works independently or with other learners to practice new skills or strategies.

Individualized education plan (IEP) - A specifically tailored program designed to meet the distinctive needs of students diagnosed with a disability.

Informative instruction - A key principle of LD-appropriate instruction, involves making sure that adults learn how they are being taught, what is expected during the instructional situation, and how they can improve learning and performance.

Instructional adaptation - Alternative techniques and/or materials that are provided for an individual by a literacy practitioner to increase the effectiveness of instruction.

Integration - The process in which the brain groups, organizes, reserves, and reconstructs information.

Intensive instruction - A key principle of LD-appropriate instruction, involves maintaining a high degree of learner attention and response during ongoing instructional interactions that are scheduled as frequently and as close together as possible.

Kinesthetic - Learning by doing.

Laterality - A complete awareness of both sides of the body.

Learned helplessness - A tendency to be a passive learner who depends on others for decisions and guidance. In individuals with LD, continued struggle and failure can heighten this lack of self-confidence.

Learning disability - A variety of neurological disorders, including differences in one or more of the basic processes involved in understanding or using spoken or written language. Learning disabilities are lifelong conditions that are not related to visual or auditory deficiencies. Learning disabilities are not the result of delays in mental development.

Learning modalities - The means through which information is perceived, such as visual, auditory, or kinesthetic means.

Learning strategies - How a person approaches learning; includes how a person thinks and acts before, during, and after a task and how a person evaluates the impact of the strategy on learning and performance.

Learning strategy approaches - Instructional approaches that focus on efficient ways to learn, rather than on curriculum. They include specific techniques for organizing, actively interacting with material, memorizing, and monitoring any content or subject.

Learning styles - The learning process that uses one's preferred modality (visual, auditory, tactile, and kinesthetic). Approaches to assessment or instruction that emphasize the variations in temperament, attitude, and preferred manner of tackling a task. Typically considered are styles along the active/passive, reflective/impulsive, or verbal/spatial dimensions.

Literacy - An individual's ability to read, write, and speak in English, and to communicate and solve problems at levels of proficiency necessary to function on the job and in society, and to achieve one's goals and develop one's knowledge and potential.

Locus of control - The tendency to attribute success and difficulties either to internal factors such as effort or to external factors such as chance. Individuals with learning disabilities tend to blame failure on themselves and achievement on luck, leading to frustration and passivity.

Metacognition - The ability to perceive or gain awareness about one's own thoughts or learning process and, acting upon this awareness, to choose appropriate learning strategies.

Metacognitive learning - Instructional approaches emphasizing awareness of the cognitive processes that facilitate one's own learning and its application to academic and work assignments. Typical metacognitive techniques include systematic rehearsal of steps or conscious selection among strategies for completing a task.

Minimal brain dysfunction (MBD) **-** A medical and psychological term originally used to refer to the learning difficulties that seemed to result from identified or presumed damage to the brain. It reflects a medical, rather than educational or vocational orientation.

Mnemonic - Pertaining to memory.

Mnemonic device - A method of remembering information by linking key information to a word or phrase that reminds the learner, such as using the word GAIN to help a person remember the routine for mailing a package: Gather materials, Address envelope, Inspect address for accuracy, Notify mailroom to pick up package.

Morpheme - The smallest unit of meaning in a word, including prefixes, root words, and suffixes. They can be free-form (as in the word pin) or bound (as in the s in pins).

Multisensory learning - An instructional approach that combines auditory, visual, and tactile elements into a learning task. Moving one's finger under each syllable of a word as the word is read and sounded out would be multi-sensory learning.

Neuropsychological examination - A series of tasks that allow observation of performance that is presumed to be related to the intactness of brain function.

Norms - Standard test scores generally based on a national cross-section of representatives.

Orthography - The total writing system of spoken language. The term also refers to the established spelling rules of a written language.

Perception - A process involving the reception, selection, differentiation, and integration of sensory stimuli. The teacher of dyslexics must teach the student to attend actively and consciously to aspects of the perception process until it becomes automatic.

Perceptual handicap - Difficulty in accurately processing, organizing, and discriminating among visual, auditory, or tactile information. A person with a perceptual handicap may say that "cap/cup" sound the same or that "b" and "d" look the same. However, glasses or hearing aids do not necessarily indicate a perceptual handicap.

Phoneme - The smallest unit of speech that serves to distinguish one utterance from another in a language or dialect (as in the /b/ of bat and /m/ of mat). English is made up of 44 phonemes.

Phoneme awareness - Awareness of the phonological structure of words is exemplified by the ability to manipulate or separate the sounds within words (e.g., which sounds come first or last; which words rhyme; which sounds are the same or different), implying meta-linguistic knowledge.

Phonemic segmentation - The process of sequentially isolating the speech sounds which comprise a spoken word or syllable.

Phonetics - The study of speech sounds, how they are produced (articulatory phonetics), how they are perceived (auditory phonetics), and what are their physical properties (acoustic phonetics).

Phonics - A teaching approach that gives attention to letter–sound correspondences in the teaching of reading and spelling. Phonics is a teaching approach and should not be confused with phonetics.

Phonological awareness - Speech sound awareness is the conscious awareness of the sounds of language; the ability to reflect on the sounds in words separate from the meanings of words.

Phonology - The sound system of a language; the part of grammar which includes the inventory of sounds and rules for their combination and pronunciation; the study of the sound systems of all languages.

Process-sensitive instruction - A key principle of LD-appropriate instruction, involves reshaping the activities within the instructional sequence to take into consideration various cognitive barriers that might inhibit learning.

Reliability (of tests) - The accuracy or precision of a measurement instrument; consistency among measurements in a series.

Remediation - The repeated instruction of skills not learned in the usual time or the usual manner.

Screening instrument - Initial test(s) in a sequence of tests; usually quickly administered. The results are used to determine whether further testing is necessary and possibly to guide the selection of other tests to be administered.

Screening process - A process of collecting information through a variety of sources over time that would lead to the conclusion that an individual might be significantly at risk for a specific condition such as a learning disability.

Self-advocacy - The ability of individuals with learning disabilities to explain their disabilities effectively to others, to request legal accommodations, to act independently, and to cope positively with the attitudes of peers, parents, teachers, and employers.

Specific learning disability (SLD) - The official term used in federal legislation to refer to difficulty in certain areas of learning, rather than in all areas of learning. Synonymous with learning disabilities.

Structured instruction - A key principle of LD-appropriate instruction, involves systematically teaching information that has been chunked into manageable pieces.

Subtype research - A recently developed research method that seeks to identify characteristics that are common to specific groups within the larger population of individuals identified as having learning disabilities.

Syllabication - Breaking a word into its syllables.

Tactile **-** Relating to the sense of touch; tactile learning is learning by touching.

Think aloud - A metacognitive strategy in which the teacher or tutor models thinking, describing thoughts, as he/she reads the text or completes a task.

Transition - Commonly used to refer to the change from secondary school to postsecondary programs, work, and independent living typical of young adults. The term is also used to describe other periods of major change such as from early childhood to school or from more specialized to mainstreamed settings.

Validity (of tests) - Indication that the instrument really measures what it claims to measure.

Visual - Of or relating to the sense of vision.

Visual discrimination - Assuming normal visual acuity, the ability to distinguish slight differences in stimuli, especially in letters and words, which have graphic similarities.

Visual perception - The ability to recognize visual stimuli. Individuals with this learning disability may have problems with such activities as reading, writing, tracking, recognizing people or items, or reading a map or graphic display.

Word attack skills - The ability to decode words using knowledge of the sound–letter correspondence of the language.

Word decoding - A process used to identify words through sounding out letters, letter patterns, or blended sounds.

DEFINITIONS OF THE TERM 'LEARNING DISABILITIES'

When researching information, one finds a multitude of different definitions for the term "learning disabilities" that have evolved over time. These definitions have been attempts at describing a condition that had been labeled such things as developmental aphasia, brain injury, perceptual handicap, Straus syndrome, and minimal brain dysfunction. As terms like minimal brain dysfunction and Straus syndrome began to be less accepted in professional discussions, the term *learning disabilities* became more popular. Since school-related issues were directly related to learning disabilities, the emphasis became less on establishing a medical cause and more on developing educational accommodations and instructional strategies. Many of the definitions share common elements including: 1) problems are not due to environmental disadvantage, mental retardation, or emotional disturbance; 2) an uneven pattern in academic, perceptual, language, and physical development is manifested; 3) the cause of LD may be the result of a problem in the central nervous system; 4) difficulty making progress in academic achievement with noted discrepancies between potential and actual achievement, 5) problems occur in understanding spoken or written language, and 6) learning disabilities can be present at any age. Still, difficulty arises in the field due to the lack of common usage. Because of the multidisciplinary nature of the field, there continues to be ongoing debate regarding definition. The following definitions have been taken from a number of different sources. They are listed in chronological order.

A. A. Strauss and L. Lehtinen - 1947

A brain-injured child is a child who before, during, or after birth has received an injury to, or suffered an infection of, the brain. As a result of such organic impairment, defects of the neuromuscular system may be present or absent, however such a child may show disturbances in perception, thinking, and emotional behavior, either separately or in combination. These disturbances can be demonstrated by specific tests. These disturbances prevent or impede a normal learning process. (Note: This is a precursor of the term learning disabilities as found in: *Psychopathology of the brain-injured child*. NY: Grune & Stratton, page 4.)

Dr. Samuel A. Kirk - 1962

(Note: Many textbooks and articles suggest that Dr. Samuel A. Kirk was the first to originate and use the term learning disabilities. This definition was found in Dr. Kirk's works from the early 1960s.) A learning disability refers to a retardation, disorder, or delayed development in one or more of the processes of speech, language, reading, spelling, writing, or arithmetic resulting from a possible cerebral dysfunction and/or emotional or behavioral disturbance and not from mental retardation, sensory deprivation, or cultural or instruction factors. (Note: Kirk, S. A. (1962). *Educating exceptional children*. Boston: Houghton Mifflin, page 261.)

Dr. Samuel A. Kirk – 1963

(The following quote was deliver at the Conference on Exploration into Problems of the Perceptually Handicapped Child in 1993 by Dr. Samuel A.

Kirk.) "I have used the term 'learning disabilities' to describe a group of children who have disorders in development in language, speech, reading, and associated communication skills needed for social interaction. In this group I do not include children who have sensory handicaps such as blindness or deafness, because we have methods of managing and training the deaf and the blind. I also exclude from this group children who have generalized mental retardation."

Barbara Bateman - 1965

Children who have learning disorders are those who manifest an educationally significant discrepancy between their estimated intellectual potential and actual level of performance related to basic disorders in the learning processes, which may or may not be accompanied by demonstrable central nervous system dysfunction, and which are not secondary to generalized disturbance or sensory loss. [Note: *An educator's view of a diagnostic approach to learning disorders*. In J. Hellmuth (Ed.), Learning disorders (Vol. 1, 217-239). Seattle: Special Child.]

National Institutes of Neurological Diseases and Blindness - 1966

Minimal brain dysfunction refers to children of near average, average, or above average general intelligence with certain learning or behavioral disabilities ranging from mild to severe, which are associated with deviations of function of the central nervous system. These deviations may manifest themselves by various combinations of impairment in perception, conceptualization, language, memory and control of attention, impulse, or motor function.

National Advisory Committee of Handicapped Children - 1968

Children with special learning disabilities exhibit a disorder in one or more of the basic, psychological processes involved in understanding or in using spoken or written language. These may be manifested in disorders of listening, thinking, talking, reading, writing, spelling, or arithmetic. They include conditions which have been referred to as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, developmental aphasia, etc. They do not include learning problems which are due primarily to visual, hearing, or motor handicaps, to mental retardation, emotional disturbance, or to environmental deprivation (disadvantage). (Note: From *First Annual Report on Handicapped Children* given by Dr. Samuel A. Kirk to the Bureau of Education for the Handicapped, Office of Education, Department of Health, Education, and Welfare.)

Education for All Handicapped Children Act: Public Law 94-142 - 1975

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen,

think, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not include children who have learning problems which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance or of environmental, cultural, or economic disadvantage.

U.S. Office of Education - 1977

The term specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, speak, read, write, spell, or to do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. The term does not

include children who have learning disabilities which are primarily the result of visual, hearing, or motor handicaps, or mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage. (Note: *Definition and criteria for defining students as learning disabled*. Federal Register, 42:250, page 65083. Washington, DC: U.S. Government Printing Office.)

National Joint Council on Learning Disabilities and Learning Disabilities Association - 1981

(Note: The continuance of the PL 94-142 definition in federal law prompted further analysis. In the early '80s a group of stakeholders, described as the National Joint Council on Learning Disabilities and the Learning Disabilities Association, proposed an alternative definition) Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions it is not the direct result of those conditions or influences.

Canadian Association for Children and Adults with Learning Disabilities – (CACLD) - 1981.

Learning disabilities is a generic term that refers to a heterogeneous group of disorders due to identifiable or inferred central nervous system dysfunction. Such disorders may be manifested by delays in early development and/or difficulties in any of the following areas: attention, memory, reasoning, coordination, communicating, reading, writing, spelling, calculation, social competence, and emotional maturation. Learning disabilities are intrinsic to the individual, and may affect learning and behaviour in any individual, including those with potentially average, average, or above average intelligence. Learning disabilities are not due primarily to visual, hearing, or

motor handicaps; to mental retardation, emotional disturbance, or environmental disadvantage; although they may occur concurrently with any of these. Learning disabilities may arise from genetic variations, biochemical factors, events in the pre-to perinatal period, or any other subsequent events resulting in neurological impairment. (Note: The CACLD is now the Learning Disabilities Association of Canada.)

Rehabilitation Services Administration (RSA) -1985

A specific learning disability is a disorder in one or more of the central nervous system processes involved in perceiving, understanding, and/or using concepts through verbal (spoken or written) language or nonverbal means. This disorder manifests itself with a deficit in one or more of the following areas: attention, reasoning, processing, memory, communication, reading, writing, spelling, calculation, coordination, social competence, and emotional maturity.

Learning Disabilities Association of America - 1986

Specific learning disabilities is a chronic condition of presumed neurological origin which selectively interferes with the development, integration, and/or demonstration of verbal and/or nonverbal abilities. Specific learning disabilities exist as a distinct handicapping condition and varies in its manifestations and in degree of severity. Throughout life, the condition can affect self esteem, education, vocation, socialization, and/or daily living activities. (Note: The Association for Children with Learning Disabilities was primarily a parent group whose members rejected the definition accepted by the National Joint Council on Learning Disabilities. The group, now called the Learning Disabilities Association of America, accepted the above definition instead.)

U.S. Interagency Committee on Learning Disabilities - 1987

Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities, or of social skills. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance), with socioenvironmental influences (e.g., cultural differences, insufficient or inappropriate instruction, psychogenic factors), and especially with attention deficit disorder, all of which may cause learning problems, a learning disability is not the direct result of those conditions or influences.

National Joint Committee on Learning Disabilities – 1988 (Revised)

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, serious emotional disturbance) or with extrinsic influences (e.g., cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences.

Individuals with Disabilities Education Act (IDEA) – 1990

Specific learning disabilities means a disorder in one or more of the basic psychological processes involved in understanding and using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, write, spell, or do mathematical calculations. The term includes such conditions as perceptual abilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. (Note: The current IDEA definition remains unchanged from Public Law 94-142.)

Board of Regents of the University System of Georgia – 1991

(Note: All institutions of the University System employ the same definition of learning disabilities in order to promote evenness in the way that students with learning disabilities are accommodated and to serve as the basis for a diagnosis.) Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities, or of social skills. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotion disturbance), with socio-environmental influences (e.g., cultural differences, insufficient or inappropriate instruction, psychogenic factors), and especially with attention deficit disorder, all of which may cause learning problems, a learning disability is not the direct result of those conditions or influences.

National Institutes of Mental Health (NIMH) - 1993

Learning disabilities is a disorder that affects people's ability to either interpret what they see and hear, or to link information from different parts of the brain. These limitations can show up in many ways - as specific difficulties with spoken and written language, coordination, self-control, or

attention. Such difficulties extend to schoolwork and can impede learning to read or write, or to do math. Learning disabilities can be lifelong conditions that, in some cases, affect many parts of a person's life: school or work, daily routines, family life, and sometimes even friendships and play. In some people, many overlapping learning disabilities may be apparent. Other people may have a single, isolated learning problem that has little impact on other areas of their lives.

National Joint Commission on Learning Disabilities (NJCLD) – 1994 revision

Learning disabilities is a general term that refers to a heterogeneous group of disorders in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities, but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance) disability. or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction).

Bridges to Practice: A Research-Based Guide for Literacy Practitioners Serving Adults with Learning Disabilities - 1995

Learning disabilities are a neurological problem often genetic that affect the way that persons process visual, auditory, or other sensory information.

Learning Disabilities Association of Canada (LDAC) - 2002

Learning disabilities refer to a number of disorders which may affect the acquisition, organization, retention, understanding or use of verbal or nonverbal information. These disorders affect learning in individuals who otherwise demonstrate at least average abilities essential for thinking and/or reasoning. As such, learning disabilities are distinct from global intellectual deficiency. Learning disabilities result from impairments in one or more processes related to perceiving, thinking, remembering or learning. These include, but are not limited to: language processing; phonological processing; visual spatial processing; processing speed; memory and attention; and executive functions (e.g. planning and decision-making). Learning disabilities range in severity and may interfere with the acquisition and use of one or more of the following: oral language (e.g. listening, speaking, understanding); reading (e.g. decoding, phonetic knowledge, word recognition, comprehension); written language (e.g. spelling and written expression); and mathematics (e.g. computation, problem solving). Learning

disabilities may also involve difficulties with organizational skills, social perception, social interaction, and perspective taking.

Learning disabilities are lifelong. The way in which they are expressed may vary over an individual's lifetime, depending on the interaction between the demands of the environment and the individual's strengths and needs. Learning disabilities are suggested by unexpected academic under-achievement or achievement which is maintained only by unusually high levels of effort and support. Learning disabilities are due to genetic and/or neurobiological factors or injury that alters brain functioning in a manner which affects one or more processes related to learning. These disorders are not due primarily to hearing and/or vision problems, socio-economic factors, cultural or linguistic differences, lack of motivation or ineffective teaching, although these factors may further complicate the challenges faced by individuals with learning disabilities. Learning disabilities may co-exist with various conditions including attentional, behavioural and emotional disorders, sensory impairments, or other medical conditions. For success, individuals with learning disabilities require early identification and timely specialized assessments and interventions involving home, school, community and workplace settings. The interventions need to be appropriate for each individual's learning disability subtype and, at a minimum, include the provision of: specific skill instruction; accommodations; compensatory strategies; and self-advocacy skills.

National Adult Literacy and Learning Disabilities Center (NALLD)

Learning disabilities is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities, or of social skills. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction. Even though a learning disability may occur concomitantly with other handicapping conditions (e.g., sensory impairment, mental retardation, social and emotional disturbance), with socio-environmental influences (e.g., cultural differences, insufficient or inappropriate instruction, psychogenic factors), and especially attention deficit disorder, all of which may cause learning problems, a learning disability is not the direct result of those conditions or influences. (Note: This definition was selected because it reflected current information and issues associated with LD, allowed for the presence of LD at any age, and was accepted by a committee with broad representation in the learning disabilities community.)

GED Testing Service

A learning disability is a permanent-information processing deficit (disorder) that affects the manner in which individuals with average to above average intelligence learn. Deficits in areas such as reading, mathematics, and written language are presumed to be due to a central nervous system

dysfunction. Learning disabilities occur regardless of gender, race, or ethnic origin and they are not the result of a poor academic background, mental retardation, or emotional disorders. (Note: *How to Request Accommodations When Taking the GED High School Equivalency Tests if You Have a Learning Disability*. Washington,DC: GED Testing Service of the American Council of Education.)

Learning Disabilities Association of Ontario, Canada (LDAOC)

Learning disabilities refers to a variety of disorders that affect the acquisition, retention, understanding, organization, or use of verbal and/or non-verbal information. These disorders result from impairments in one or more psychological processes related to learning, in combination with otherwise average abilities essential for thinking and reasoning. Learning disabilities are specific not global impairments and as such are distinct from intellectual disabilities.

State of Oregon Department of Education

Specific learning disability means a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. Specific learning disability includes conditions such as perceptual disabilities, brain injury, dyslexia, minimal brain dysfunction and developmental aphasia. The term does not include learning problems that are primarily the result of visual, hearing, or motor disabilities, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantage.

Dr. Roy McConkey, University of Ulster