# STOCKTON | WELLNESS

Learning Access Program

Faculty and Staff Handbook Part Two

Policies and Procedures for University Students with Disabilities

# Table of Contents

Disabilities: Conditions, Accommodations, and Instructional Strategies

General Strategies for Optimum Learning
Learning Disabilities
Attention Deficit/Hyperactivity Disorder (ADHD)
Hearing Impairments
Mobility Impairments
Psychiatric Disabilities
Speech Impairments
Systemic Disabilities
Traumatic Brain Injury4
Vision Impairments
Additional Disability Information
Disability Organizations
Diagnostic Testing
Other Programs
Rights and Responsibilities of Students with Disabilities

Colleges and universities typically serve students with the following disability conditions: mobility impairments, vision impairments, hearing impairments, learning disabilities, attention deficit/hyperactivity disorder, systematic disabilities, psychiatric disabilities, and brain injuries. An estimated 428,280 students with disabilities were enrolled at 2 year and 4 year post-secondary education institutions in 1996-97 or 1997-98. According to the U.S. Department of Education, specific learning disabilities was the most frequent disability with almost half of the students with disabilities (195,870 out of 428,280 students.) The remaining was comprised of 59,650 students with mobility and orthopedic impairments, 49,570 students with health impairments or problems, 33,260 students with mental illness or emotional disturbances, 23,860 hearing impaired students, 18,650 students who were blind or visually impaired, 4,020 students who had a speech or language impairment and 38, 410 specified as "other" (1999).

Some of these conditions are readily apparent, while others are not always visible to an observer. This section presents an overview of disability conditions and the instructional strategies one can implement to enhance the accessibility of course instruction, materials, and activities.

No two students are alike, even with the same disability; each student is an expert concerning his or her own specific disability and in some cases has a lifetime of experience at creating accommodations. Therefore, communicating with the student is essential to discovering methods of accommodation. In thinking about necessary accommodations, faculty should consider a student's physical accessibility to the classroom as well as the student's ability to fully participate in all course activities. Accessibility and communication are key to providing an environment where a student with a disability can realized his or her academic potential.

# **General Strategies for Optimum Learning**

Many teaching strategies that assist students with disabilities are also known to benefit students without disabilities. Instruction utilizing different approaches will reach more students than instruction using one method. The LAP offers the following suggestions to help professors in meeting the needs of the growing diversity of student needs in the classroom, particularly those with disabilities.

#### **During registration**

- Make class syllabus and list of required texts available by request to students. This allows time for students to obtain materials in alternative formats and to begin reading assignments.
- Be available to discuss class content and teaching style.
- If available and appropriate, select a textbook with an accompanying study guide for optional student use.
- If available and appropriate, select a textbook that is already in an e-text or tape format.

#### Early in the semester

- Include a disability access statement in your syllabus and make an announcement at the first meeting of the class such as: "Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hours. A letter of accommodation from the Learning Access Program authorizing your accommodations will be needed." This approach preserves students' privacy and also indicates your willingness to provide accommodations as needed.
- Include a disability access statement in your syllabus and make an announcement at the first meeting of the class such as: "*Any student who may need an accommodation due to a disability, please make an appointment to see me during my office hours. A letter of accommodation from the Learning Access Program authorizing your accommodations will be needed.*" This approach preserves students' privacy and also indicates your willingness to provide accommodations as needed.
- Because many students with disabilities need additional time to process and complete assignments, convey expectations at the beginning of the course (e.g. grading, material to be covered, due dates) in written and oral form.
- Announce reading assignments well in advance for students using taped materials or other alternative formats. To record an entire book takes an average of six weeks. The LAP can produce the materials in installments when informed of the sequence in which the materials will be used.

#### General strategies for teaching and presentation

- Begin class with a review of the previous lecture and an overview of the topics to be covered that day. Give questions the student should be able to answer by the end of the lecture. At the conclusion, summarize the key points.
- Highlight major concepts and terminology both orally and visually.
- Emphasize main ideas and key concepts during the lecture and highlight them on the blackboard or overhead.
- Speak directly to students; use gestures and natural expressions to convey further meaning.
- Diminish or eliminate auditory and visual distractions.

• Present new or technical vocabulary on the blackboard or overhead, or use a handout.

5

- Use visual aids such as diagrams, charts, and graphs; use color to enhance the message.
- Give assignments both orally and in written form; be available for clarification.
- Provide adequate opportunities for participation, questions and/or discussion.
- Provide timelines for long range assignments.
- Use sequential steps for long range assignments; for example, for a lengthy paper, 1) select a topic, 2) write an outline, 3) submit a rough draft, 4) make necessary corrections with approval, 5) turn in a final copy.
- Provide exam review questions.
- Give sample test questions; explain what constitutes a good answer and why.
- Encourage students to seek assistance during your office hours and to use campus support services such as the Writing Lab (J105-a) and the Math Lab (J108.)

#### Points to remember

- Flexibility may be necessary when applying attendance and promptness rules to students with health-related or mobility difficulties. Please discuss any concerns that arise with the student and, if necessary, with LAP.
- Confidentiality of all student information is essential. At no time should the class be informed that a student has a disability, unless the student makes a specific request to do so.

# Learning Disabilities (LD)

Neurological in origin, learning disabilities impede a person's ability to store, process, and/or produce information (NCLD, 1999). Federal regulations for implementing the Rehabilitation Act and the Americans with disabilities Act use the term "specific learning disabilities"---disorders in one or more central nervous system processes involved in perceiving, understanding, and using verbal or non-verbal information (Gerber and Rieff, 1994).

Learning disabilities are a group of disorders that affect the ability to acquire and use listening, speaking, reading, writing, reasoning, or math skills. These difficulties differ in severity, may persist across the lifespan, and may affect one or more areas of a person's life, including learning, work, and social and emotional functioning (Gregg, Hoy and Gay, 1996; Pennington, 1991). In some people, many overlapping learning disabilities may be apparent.

A diagnosis of a learning disability typically requires normal intelligence, a significant discrepancy between measured ability and achievement, and the absence of other conditions that may produce the observed delay (Gregg, Hoy and Gay, 1996; Kavale and Forness, 1995; McGraw, 1994;). Other people may have a single, isolated learning problem that has little impact on other areas of their lives. The diagnosis of a learning disability in an adult typically requires documentation of at least average intellectual functioning along with a deficit in one or more of the following areas:

- auditory processing
- visual processing
- information processing speed
- abstract and general reasoning
- memory

- spoken and written language skills
- reading skills
- mathematical skills
- visual spatial skills
- motor skills
- executive functioning

#### **Some Considerations:**

Students with disabilities are enrolling in post-secondary education institutions in increasing numbers. According to data gathered by the American Council on Education (Henderson, 1995) the segment of the college population with disabilities that has grown the most are those involving learning disabilities.

A learning disability is not a disorder that a student outgrows (Gregg, Hoy and Gay, 1996; NCLD pamphlet). It is a permanent disorder affecting how students with normal or above-average intelligence process incoming information, outgoing information, or both. Learning disabilities are often inconsistent. They may be manifested in only one specific academic area, such as math or foreign language. There might be problems in grade school, none in high school, and again in college.

Learning disabilities are not the same as mental retardation or emotional disorders (Adelman and Olufs/AHEAD, 1992). Learning disabilities often run families. Attention deficits and hyperactivity sometimes co-occur with learning disabilities, but not always. Learning disabilities are not the same in all people. Each individual is unique, and manifestations of learning disabilities vary tremendously.

Adults with learning disabilities may experience personal, social, and emotional difficulties that may affect their adaptation to life tasks (NCLD, 1985). These difficulties may be an integral aspect of the learning disability or may have resulted from past experiences with others that were unable or unwilling to accept, understand, or cope with the persons' disabilities (Bender, Rosenkrans and Crane, 1999).

When trying to decide what constitutes "reasonable accommodation" Scott (1994) suggests three types of accommodations:

- alternative instructional methods
- auxiliary aids such as taped texts
- testing accommodations

Common accommodations for students with learning disabilities are alternative print formats, taped lectures, note takers, alternative ways of completing assignments, early syllabi, exam modifications, priority registration, and study skills and strategies training (NCLD pamphlet; Gadbow, 1998).

- Prepare syllabus and textbook information in advance so the student can tape record assignments if needed
- Break assignments, exercises, and exams into smaller components
- Use of a note taker
- Provide written copies or dated outlines of lectures
- Allow the student to use a typewriter, computer, or tape recorder to answer exam questions, or to dictate answers to a designated scribe
- Encourage the use of word processors, spell checkers, and grammar checkers or working with a proofreader or an editor while preparing written papers
- Provide special testing conditions. Contact the LAP for appropriate suggestions for

alternate test taking and if other special arrangements are needed

• Recommend use of the Writing Lab (J105a) and the Math Lab (J108.)

#### **Instructional Strategies**

Include a disability access statement in your syllabus.

Faculty attitudes are important in the successes of students with learning disabilities (Nowacek, McKinney, and Hallahan, 1990). Students who have learning disabilities may experience problems learning, but faculty should keep in mind these students are capable of learning. Faculty can facilitate the academic and degree goals of all students by giving some thought to their teaching styles, content delivery, sequence of assignments and measurement of content knowledge.

Starting with the planning for the course and the syllabus, many techniques can be used to help students with learning disabilities (AHEAD, 1991). The first involves the timeliness of preparing the syllabus: the earlier the better. If the syllabus is available at the time of registration, the students with learning disabilities can peruse it, order taped textbooks (if necessary) and balance their course load based on their personal strengths and weaknesses. Second, preparing a complete syllabus with office hours and location, complete textbook list, course goals and objectives, detailed assignments with due dates, text readings, detailed grading and evaluation methods, course policies and information about each lecture topic is important. Third, planning and organization of the course assignments is important. It is necessary to allow enough time for students with learning disabilities to learn material before and between tests and to research and write papers. Students with learning disabilities may not be able to accomplish the work in short periods of time (Adelman and Olufs/AHEAD, 1992).

Random or abstract information can be associated with key points already presented. Linking previous lectures to current lecture, leaving overheads up longer, making lectures interactive, making notes available on the Internet, varying delivery approach, writing key terms and technical vocabulary on the board, and summarizing or drawing conclusions at the end of the lecture also facilitates learning (Rosenshine and Stevens, 1986). If the student has an auditory processing weakness, hearing the term may be insufficient, particularly if the term is not in the text or other assigned reading material. Oral and written materials presented simultaneously enhance learning for students with learning disabilities (Adelman and Olufs/AHEAD, 1992). Creating assignments and exams that allow the student to demonstrate mastery based on course goals, objectives and the nature of the curriculum is essential.

Faculty can also identify the patterns of organization necessary for learning material in their classes. Sometimes a subject will rely on cause and effect relationships, such as science, history. Others times a course is a foundation course, requiring memorization of definitions, lists and facts. Sometimes the material is sequential or follows a specific time order while other times comparing and contrasting information is essential to learning and evaluating knowledge. Identifying these learning relationships in lectures

and then recommending the students to use these as a guide in organizing information will be invaluable in facilitating learning.

Modeling the kinds of test and exam questions you use before the test, writing clear and direct questions, avoiding double negative questions (which of the following is "not" one of the...), and allowing for a variety of knowledge demonstration styles will accurately measure the student's knowledge.

# Academic Deficit/Hyperactivity Disorder (ADHD)

The official criteria for a diagnosis of ADHD like criteria for all psychiatric disorders are based on the DSM-IV. Students with ADHD have diverse areas of strength and needs. While ADHD is a separate condition, students with ADHD use some of the same accommodations and instructional strategies as those with learning disabilities. ADHD is a persistent pattern of inattention or hyperactivity/impulsivity manifested in academic, employment, or social situations. It is marked in educational settings by careless mistakes and disorganized work. Students often have difficulty concentrating on and completing tasks, frequently shifting from one uncompleted activity to another. In social situations, inattention may be apparent by frequent shifts in conversations, and poor listening comprehension. Symptoms of hyperactivity may take the form of restlessness and difficulty with quiet activities. ADHD arises during childhood and is attributed neither to gross neurological, sensory, language or motor impairment nor to mental retardation or severe emotional disturbance. There is near universal agreement that this is not an adult onset disease (Gordon, 1998).

#### Some considerations

ADHD symptoms are normal human characteristics that become manifest in the extreme (Gordon, 1998).

Students with ADHD have problems with organizing, prioritizing, completing tasks on time, doing lengthy assignments, performing tasks with many steps, interacting with people appropriately, meeting expectations and following rules.

Students with ADHD must learn to use good study, organizational and test taking skills.

Theory and research point to behavioral disinhibition as ADHD's core feature (Barkley, 1997).

AD/HD in females can often be masked. Women with AD/HD are most often diagnosed as depressed (Nadeau, 1998).

Some effects of ADHD are a high energy level, intensity about interests, and creativity. Properly channeled, these qualities can work for the student.

Accommodations should provide the student with structure and reduced distractions (Hallowell and Ratey, 1994), assistance with organizing and prioritizing, clear guidance

as to expectations, and specific and repeated instructions, as needed. As with any disability, particular accommodations should be tailored to the needs of the individual to maximize success in learning.

Possible specific accommodations (Barkley, 1990) include:

- Provide structure and reduce distraction in class.
- Simplify and repeat instructions.
- Give frequent and specific feedback from faculty and disability services staff.
- Reduced course load
- Study guides and summary of important points
- Alternative testing arrangements (e.g., testing in reduced distraction environment)
- Advocacy with faculty and staff
- Note taking services
- Assistance with time management and organization
- Announce, post and keep clear office hours during which the student can meet with you for clarification of information or assignments. Students with ADHD often need more structure and help in organizing their work than their classmates and will benefit from the opportunity to work privately with you.
- Testing in a private room free of distractions

#### **Instructional Strategies**

Individuals with AD/HD benefit from an educational setting that is flexible enough to allow for a heightened degree of structure, instruction and reasonable compensation (Gordon, 1998).

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations.

- Keep instructions brief and as uncomplicated as possible.
- Include a disability access statement on the syllabus.
- Assist the student with finding an effective lab assistant or study partner from the class.
- Allow the student to tape-record lectures.
- Clearly define course requirements, the dates of exams, and when assignments are due; provide advance notice of any changes.
- Provide handouts and visual aids.
- Use more than one way to demonstrate or explain information.
- Break information into small steps when teaching many new tasks in one lesson.
- Allow time for clarification of directions and essential information.
- Provide study guides or review sheets for exams.
- Provide alternative ways for the students to do tasks, such as dictations or oral presentations.
- Encourage use of Writing Lab (J105a) and the Math Lab (J108).
- Stress organization and ideas rather than mechanics when grading in-class written assignments.

- Allow the use of spell-check and grammar-assistive devices.
- When in doubt about how to assist the student, ask him or her.
- Allow the student the same anonymity as other students.

# **Hearing Impairments**

The causes and degrees of hearing loss vary across the deaf and hard of hearing community, as do methods of communication and attitudes toward deafness. In general, there are three types of hearing loss:

*Conductive loss* affects the sound-conducting paths of the outer and middle ear. The degree of loss can be decreased through the use of a hearing aid or by surgery. People with conductive loss might speak softly, hear better in noisy surroundings than people with normal hearing, and might experience ringing in their ears.

*Sensorineural loss* affects the inner ear and the auditory nerve and can range from mild to profound. People with sensorineural loss might speak loudly, experience greater high-frequency loss, have difficulty distinguishing consonant sounds, and not hear well in noisy environments.

Mixed loss results from both a conductive and sensorineural loss.

Given the close relationship between oral language and hearing, students with hearing loss might also have speech impairments. One's age at the time of the loss determines whether one is prelingually deaf (hearing loss before oral language acquisition) or adventitiously deaf (normal hearing during language acquisition). Those born deaf or who become deaf as very young children might have more limited speech development (University of Minnesota, 1997).

#### **Some Considerations**

- The inability to hear does not affect an individuals native intelligence or the physical ability to produce sounds.
- Not all deaf students are fluent users of all of the communication modes used across the deaf community, just as users of the spoken language are not fluent in all oral languages.
- In addition to sign language and lip-reading, deaf students also use sign and oral language interpreters. These are professionals who assist deaf or hard of hearing persons with understanding communications not received aurally.
- If a deaf person is with an interpreter, speak directly to the deaf person-not the interpreter.

Common accommodations for deaf or hard of hearing students include sign language or oral interpreters, assistive listening devices, volume controlled telephones, signaling devices, priority registration, early syllabi, note-takers, and real time captioning for films and videos.

#### **Instructional Strategies**

The following strategies are suggested in order to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations (NETAC, 1998).

- Attempt to arrange to be in a classroom with proper acoustics.
- Include a disability access statement on the syllabus.
- Reduce as much as possible interfering sounds emitted from lights, vents, air conditioning units, etc.
- Close doors and windows to reduce interference from outside noise.
- Do not speak while writing on the blackboard.
- Point out who is speaking in group discussions.
- Do not drink or chew gum while lecturing.
- Lecture from the front of the room, not pacing around.
- Do not stand or sit in front of a window where shadows will impede speechreading.
- Offer to seat the student close to the instructor.
- Circular seating arrangements offer deaf or hard of hearing students the best advantage for seeing all class participants.
- Repeat the questions and comments of other students, especially those from the back rows.
- When appropriate, ask for a hearing volunteer to team up with a deaf or hard of hearing student for in-class assignments.
- Assist the student with finding an effective lab assistant from the class.
- Make sure you have a deaf student's attention before speaking.
- Look directly at a person with a hearing loss during a conversation. Speak clearly, without shouting. Writing is also a good way to clarify.
- Make sure that your face is clearly visible. Keep your hands away from your face and mouth while speaking.
- Speak with a clear resonant voice, but don't exaggerate. Use normal speed unless asked to slow down.
- Face the class while speaking; if an interpreter is present, make sure the student can see both you and the interpreter.
- If there is a break in the class, get the deaf or hard of hearing student's attention before resuming class.
- Because visual information is a deaf student's primary means of receiving information, films, overheads, diagrams, and other visual aids are useful instructional tools.
- Be flexible: allow a deaf student to work with audiovisual material independently and for a longer period of time.
- When in doubt about how to assist the student, ask him or her.
- Allow the student the same anonymity as other students.

# **Mobility Impairments**

Mobility impairment broadly describes any disability that limits movement of the body. Some mobility impairments are caused by conditions present at birth while others are the result of illness or physical injury. Injuries cause different types of mobility impairments, depending on what area of the spine is affected. *Quadriplegia*, paralysis of the extremities and trunk, is caused by a neck injury. Students with quadriplegia have limited or no use of their arms and hands and often use electric wheelchairs. *Paraplegia*, paralysis of the lower extremities and the lower trunk, is caused by an injury to the midback (University of Minnesota, 1997). Students often use a manual wheelchair and have full movement of arms and hands. Below are brief descriptions of other causes of mobility impairments.

*Amputation* is the removal of one or more limbs, sometimes caused by trauma or another condition.

*Arthritis* is the inflammation of the body's joints, causing pain, swelling, and difficulty in body movement.

*Back disorders* can limit a student's ability to sit, stand, walk, bend, or carry objects. They include, but are not limited to, degenerative disk disease, scoliosis, and herniated disks.

*Neuromuscular disorders* include a variety of disorders, such as muscular dystrophy, multiple sclerosis, and ataxia that result in degeneration and atrophy of muscle or nerve tissues.

## Some Considerations

- Access is the most common concern for a person who uses a wheelchair. A physical barrier can handicap an otherwise capable person who happens to use a wheelchair.
- A physical disability is often separate from matters of cognition and general health; it does not imply that the student has other health problems or difficulty with intellectual functioning (Gordon and Keiser, 1998).
- People adjust to disabilities in many ways; students should not be assumed to be brave and courageous on the basis of disability.
- When talking with a wheelchair user, attempt to converse at eye level as opposed to standing and looking down. In addition, some mobility-impaired students have trouble turning their head from side to side. It is best to position yourself in front on the student.
- A wheelchair is a part of the person's body space. Do not automatically hang or lean on the chair; it is similar to hanging on or leaning on the person.
- Ask before giving assistance, and wait for a response.
- Be considerate of the extra time it might take a disabled student to speak or act. Allow the student to set the pace when walking or talking.
- A wheelchair should be viewed as a personal-assistance device rather than something one is "confined to."

- Mobility impairments vary over a wide range, from temporary to permanent. Other conditions, such as respiratory conditions, affect coordination and endurance; these can also affect a student's ability to perform in class.
- Physical access to a class is the first barrier a student with mobility impairment may face, and this is not only related to the specific accessibility of the building or classroom.
- If a classroom or faculty office is inaccessible, it will be necessary to find an accessible location or alternate class section that is held in an accessible location.

Common accommodations for students with mobility impairments include: Priority registration, flexibility in applying attendance rules, note-takers, accessible classroom/location/furniture, alternative ways of completing assignments, lab or library assistants, assistive computer technology, exam modifications, and conveniently located parking.

#### **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations.

- Include a disability access statement in your syllabus.
- If necessary, arrange for a room change before the term begins.
- If possible, try not to seat wheelchair user in the back row. Move a desk or rearrange seating at a table so the student is part of regular classroom seating.
- Pay attention to seating needs. Wheelchair users need a flat or ramped access. Classroom tables or desks must have enough clearance for students using wheelchairs to get their legs underneath. Lab tables and computer consoles should be set up so that wheelchair user can comfortably reach the equipment.
- Make arrangements early for field trips and ensure that accommodations will be in place on the given day.
- Make sure accommodations are in place for in-class written work.
- Be flexible with deadlines: assignments that require library work or access to sites off-campus will consume more time for a student with mobility impairment.
- When in doubt about how to assist the student, ask him/her.

# **PSYCHIATRIC DISABILITIES**

Mental illness is a term that describes a broad range of mental and emotional conditions. The term "psychiatric disability" is used when mental illness significantly interferes with the performance of major life activities such as learning, thinking, communicating. Students with psychiatric disabilities have experienced significant emotional difficulty that generally has required treatment in a hospital setting. Someone can experience a mental illness over many years. The type, intensity and duration of symptoms vary from person to person. They come and go and do not always follow a regular pattern. With appropriate treatment, often combining medications, psychotherapy, and support, the majority of psychiatric disorders are cured or controlled. The National Institute of

Mental Health estimates that one in five people in the United States have some form of psychiatric disability, but only one in five persons with a diagnosable psychiatric disorder ever seeks treatment due to the strong stigmatism involved. Below are brief descriptions of some common psychiatric disabilities (Disability Compliance For Higher Education, 1998).

*Depressive disorders* (depression, bi-polar, dysthemia, seasonal affective disorder), also known as mood disorders or affective disorders, are major disorders that can begin at any age. These illnesses share disturbances or changes in mood, usually involving either depression or mania. Major depression may be characterized by a depressed mood most of each day, a lack of pleasure in most activities, thoughts of suicide, insomnia, and feelings of worthlessness or guilt.

*Bipolar disorder* (manic depressive disorder) causes a person to experience periods of mania and depression. In the manic phase, a person might experience inflated self-esteem and a decreased need to sleep.

*Anxiety disorders* (panic disorder, agoraphobia, obsessive/compulsive disorder, post traumatic stress disorder) can disrupt a person's ability to concentrate and cause hyperventilation, a racing heart, chest pains, dizziness, panic, and extreme fear.

*Schizophrenia* can cause a person to experience, at some point in the illness, delusions and hallucinations.

#### **Some Considerations**

- Trauma is not the sole cause of psychiatric disabilities; genetics may play a role.
- Psychiatric disabilities affect people of any age, gender, income group, and intellectual level.
- Disruptive behavior is not an attribute of most people with psychiatric disabilities.
- Eighty to ninety percent of people with depression experience relief from symptoms through medication, therapy, or a combination of the two.
- There are not more people with psychiatric disabilities, just more people seeking treatment outside the walls of state mental health institutions.
- The presence of a full-fledged DSM-IV mood or anxiety disorder must be documented.

Some psychological/emotional conditions, such as manic depression or bipolar disorder, may also cause fluctuations in performance. These can often be greatly moderated by medications, depending upon the type of condition.

Common accommodations for students with psychiatric disabilities are: exam modifications, alternative way of completing assignments, time extensions, taped lectures, early syllabus, study skills and strategy training and flexible scheduling (Disability Compliance for Higher Education, 1998).

#### **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations.

- Include a disability access statement on your syllabus.
- Spend extra time with the student, and assist the student with planning and time management.
- Be flexible with deadlines.
- Allow the student to tape record lectures.
- Assist the student with finding an effective study group or lab assistant from the class.
- Clearly define course requirements, the dates of exams, and when assignments are due.
- When in doubt about how to assist the student, ask him/her.
- Allow the student the same anonymity as other students.

Some conditions, such as anxiety disorders, may require exam accommodations or some accommodations in instructional style.

# **SPEECH IMPAIRMENTS**

Speech impairments may be congenital or the result of illness or injury. They may be found alone or in combination with other disabilities. In any case, the college student with speech impairment will probably have received some speech therapy.

#### **Types of Speech Conditions**

Impairments range from problems with articulation or voice strength, to being totally non-vocal. That includes stuttering, chronic hoarseness, difficulty in evoking an appropriate word or term, and esophageal speech.

Many students with speech impairments will be hesitant about participating in activities that require speaking. Even if the student has adjusted well to speech impairment, new situations may aggravate old anxieties. Please keep in mind that speaking in front of a group can be an agonizing experience for any student, whether or not they have speech impairment.

#### Some Considerations

- Speak directly to the student
- Be attentive to gestures and facial expressions
- Accept and respond to all attempts at communication
- Avoid the temptation to complete words or phrases for the student
- Acknowledge when you do not understand the student's response and ask the student to try again

Common accommodations for students with speech impairments include:

- Reserve a front row seat for the student
- Consider replacing verbal assignments with written assignments
- Allow students who are unable to communicate orally to use a typewriter, word processor, sign language interpreter or real-time captioner in class

#### **Instructional Strategies**

Be patient. Pressure to communicate increases anxiety and produces further frustration for everyone. Remember the ability to articulate is not a measure of intelligence. Your attitude of acceptance and respect will set an example for the class.

In general:

- Talk, ask questions, and make remarks as usual
- The disabled individual may speak, but very slowly and indistinctly. Ask for appropriate clarification
- Speak naturally, using the sentence structure you normally use
- If you do not understand, do not pretend that you do

#### **Interacting with the Student**

It is important that expression be encouraged. Pressure to speak is not likely to be helpful. It is best for the instructor to accept and respond to all attempts at communication. Allow time for the speech-impaired student to express him/herself so that confidence can be gained.

Be patient. When speaking to a person with speech impairment, continue to talk naturally. Make a point of concentrating on the content of what the student says rather than on the format, and keep in mind that regardless of the type of communication the student is always an equal intellectual participant in the class. The professor can set the mood that encourages a student's effective self-expression in class and appropriate reactions by the other students.

# SYSTEMIC DISABILITIES

Systemic disabilities are conditions affecting one or more of the body's systems. These include the respiratory, immunological, neurological, and circulatory systems. There are many kinds of systemic impairments, varying significantly in their effects and symptoms. Below are brief descriptions of some of the more common types:

*Cancer* is a malignant growth that can affect any part of the body. Treatment can be time consuming, painful, and sometimes result in permanent disability.

*Chemical dependency* is considered a disabling condition when it is documented that a person has received treatment for a drug or alcohol addiction and is not currently using. Chemical dependency can cause permanent cognitive impairments and carries with it a great deal of stigma.

*Diabetes mellitus* causes a person to lose the ability to regulate blood sugar. During a diabetic reaction, a person may experience confusion, sudden personality changes, or loss of consciousness. In extreme cases, diabetics can also lose vision, experience cardiovascular disease, kidney failure, stroke, or necessitate the amputation of limbs.

*Epilepsy/seizure disorder* causes a person to experience a loss of consciousness. Episodes, or seizures, vary from short absence or "petit mal" seizures to the less common "grand mal."

*Epstein- Barr (Chronic Fatigue Syndrome, immune dysfunction syndrome)* is an autoimmune disorder that causes extreme fatigue, loss of appetite, and depression. Physical or emotional stress may adversely affect a person with this condition.

*Human immuno-deficiency virus* (HIV+), which causes AIDS, inhibits one's ability to fight off illness and infections. Symptoms vary greatly.

*Lyme's disease* is a multi-systematic condition, which can cause paralysis, fatigue, fever, dermatitis, sleeping problems, memory dysfunction, cognitive difficulties, and depression.

*Lupus erythematosis* can cause inflammatory lesions, neurological problems, extreme fatigue, persistent flu-like symptoms, impaired cognitive ability, and connective tissue dysfunction.

*Multiple chemical sensitivity/environmental illness* (MCS/EI) often results from prolonged exposure to chemicals. A person with MCS/EI becomes increasingly sensitive to chemicals found in everyday environments. Though reactions vary, nausea, rashes, light-headedness, and respiratory distress are common to MCS/EI.

*Multiple Sclerosis* (MS) is the number one cause of chronic disability among young adults. Because MS most often occurs between the ages of 20 and 40, the college student with MS is apt to be currently adjusting to having this disability. One of the most difficult aspects of MS is that the symptoms have a tendency to come and go but they continue to progress. When affected, the student may appear as intoxicated—slurred speech, staggering when walking, unfocused eyes. The physical adaptations required by the student with MS, if any, will vary from student to student depending on functional limitation.

*Renal disease/failure* can result in loss of bladder control, extreme fatigue, pain, and toxic reactions that can cause cognitive difficulties. Some people with renal disease are on dialysis and have to adhere to a rigid schedule.

#### **Some Considerations**

Students affected by systemic disabilities differ from those with other disabilities because systemic disabilities are often unstable. This causes a person's condition to vary; therefore, the need for and type of reasonable accommodations must be personalized to the individual.

Some common accommodations for students with systematic disabilities include:

- Conveniently located parking
- Note-takers
- Extended time to complete a task
- Modified course or workload
- Flexible deadlines
- Relocation of a meeting or class
- Early syllabus
- Priority registration
- Exam modifications

#### **Instructional Strategies**

Systemic disabilities often require instructional strategies similar to those listed for other disability conditions. The use of such strategies will depend on how the disability is manifested. If a faculty member would like more information about instructional strategies for students with systemic disabilities, he/she should contact the LAP

# TRAUMATIC BRAIN INJURY

Though not always visible and sometimes seemingly minor, brain injury is complex. It can cause physical, cognitive, social, and vocational changes that affect an individual for a short period of time, or permanently (HEATH Resource Center). Depending on the extent and location of the injury, symptoms caused by a brain injury vary widely. Some common results are seizures, loss of balance or coordination, difficulty with speech, limited concentration, memory loss, and loss of organizational and reasoning skills.

#### **Some Considerations**

- A traditional intelligence test is not an accurate assessment of cognitive recovery after a brain injury and bears little relationship to the mental processes required for everyday functioning.
- Well over half of people incurring head injuries are between the ages of 15 to 28 years, the same age range seeking post-secondary educational opportunities (HEATH Resource Center).
- Recovery from a brain injury can be inconsistent. A student might take two steps forward, one back, do nothing for a while, and then unexpectedly make a series of gains. A "plateau" is not evidence that functional improvement has ended.

Students with traumatic brain injuries (TBI) are one of the fastest growing groups of students with disabilities. In teaching a student with a traumatic brain injury, one must keep in mind that individual strengths differ and are directly related to the nature and scope of insult to the central nervous system. Individuals with a TBI may have any of a combination of physical, cognitive, or behavioral symptoms.

Memory deficits are probably the most common characteristic of students with brain injury (HEATH).

Head injury survivors and learning disabled students have similar problems although each head injury survivor is unique.

Common accommodations for students with brain injuries are exam modifications, time extensions, taped lectures, alternative ways of completing an assignment; early syllabus, note-takers, priority registration, and alternative print formats.

Accommodations for students with TBI vary with the specific manifestations of their disability. Review the sections under teaching students with vision, hearing, and mobility impairments to learn about accommodating students with TBI who experience difficulty in these areas.

#### **Instructional Strategies**

Brain injuries often require instructional strategies similar to those listed for other disability conditions. The use of such strategies will depend on how the disability is manifested. If a faculty member would like more information about instructional strategies for students with brain injuries, he/she should contact the LAP.

- In cooperation with the LAP, assist the students with finding note-takers or lab assistants as necessary
- Permit lectures to be taped and/or provide copies of lecture notes where appropriate
- Be flexible with assignment deadlines
- Allow students to take tests through the LAP with extended time and specialized accommodations to fit their problem areas
- Paraphrase abstract concepts in specific terms and illustrate them with concrete examples
- Make required books available prior to the first day of class to allow students time to begin their reading early or to have their texts put on tape
- Prepare a syllabus with clear expectations, reading assignments, and exam dates to provide needed structural and organizational assistance
- Students should not be exempt from examinations or be expected to master less content or a lower level of scholastic skills because of a TBI. Students themselves and the LAP may offer suggestions on testing and evaluation strategies

# **VISION IMPAIRMENTS**

Approximately 500,000 Americans have vision impairments to the extent that they are considered "legally blind." There are three degrees of vision loss: 1) visual acuity of 20/200—the legally blind person can see at 20 feet what the average-sighted person can see at 200; 2) low vision—limited or diminished vision that cannot be corrected with standard lenses; and 3) partial sight—the field of vision is impaired because of an illness, a degenerative syndrome, or trauma. Only two percent of the people with vision impairments are totally blind; most blind people have some amount of usable vision (HEATH Resource Center).

#### **Some Considerations**

- Some students with vision loss use canes or guide dogs for mobility.
- Each student with a visual impairment is different.
- A gentle touch on the elbow will indicate to a visually impaired person that you are speaking to him/her.
- Like anybody, students with vision impairments appreciate being asked if help is needed before it is given.
- Introduce yourself and anyone else who may be with you when speaking with the student.
- Words and phrases such as "I'll see you later" are commonly used expressions and usually go unnoticed unless a speaker is particularly self-conscious.
- When talking with or greeting a student with vision impairment, speak in a normal voice. When entering a room, identify yourself to the student.
- When giving directions, say "left" or "right," "step up" or "step down." When guiding a student into a room, for example, offer your arm and let him or her take it rather than pulling the person's sleeve.
- Inform the student when furniture has been rearranged.
- If a student has a harnessed guide dog, it is working and should not be petted.
- Because their visual impairments are less apparent and less easily understood than students who are totally blind, many students with low vision may have additional difficulty in school (HEATH).
- Offer to seat the student close to the chalkboard. This will enable him/her to see and hear class discussions more easily.
- Keep pathways clear of obstructions.
- Use verbal descriptions to supplement use of visual aids.
- Try to make sure that printed material is readable. (Blue ink is very difficult for a low vision person to see.)
- Select textbooks early so that the student will have time to acquire material in large print, on cassette or in Braille.
- Discuss special emergency evacuation procedures if there are any.

Common accommodations for students with vision impairments include:

- Alternative print formats
- Magnification devices and enlargers

- Bright lighting
- Raised lettering
- Adaptive "talking" computer equipment
- Readers and scribes for exams
- Print scanners
- Priority registration
- Taped lectures
- Lab or library assistants

#### **Instructional Strategies**

The following strategies are suggested to enhance the accessibility of course instruction, materials, and activities. They are general strategies designed to support individualized reasonable accommodations:

- Have copies of the syllabus and reading assignments ready three to five weeks prior to the beginning of classes so documents are available for taping or Braille transcription.
- Provide vision-impaired students with materials in alternative formats at the same time the materials are given to the rest of the class.
- Repeat aloud what is written on the board or presented on overheads and in handouts.
- Pace the presentation of material: if referring to a textbook or handout, allow time for students to find the information.
- Allow students to tape record lectures.
- When appropriate, ask for a sighted volunteer to team up with a vision-impaired student for in-class assignments.
- Keep a front row seat open for a student with vision impairment. A corner seat is especially convenient for a student with a guide dog.
- Make arrangements early for a field trip and ensure that accommodations will be in place on the given day.
- Be flexible with deadlines if the document conversion process holds up assignments.
- When in doubt about how to assist the student, ask him or her.
- Allow the student the same anonymity as other students.

# PART III: FURTHER DISABILITY INFORMATION

# **DISABILITY ORGANIZATIONS**

#### Association on Higher Education and Disability (AHEAD)

107 Commerce Centre Drive, Suite 204 Huntersville, NC 28078 USA voice: 704.947.7779 • fax: 704.948.7779 www.ahead.org

#### Children and Adults with Attention Deficit Disorder CHADD National Office

4601 Presidents Drive, Suite 300 Lanham, MD 20706 Tel: 301-306-7070 / Fax: 301-306-7090 www.chadd.org Council for Exceptional Children 2900 Crystal Drive, Suite 1000 Arlington, VA 22202 1-888-232-7733 https://www.cec.sped.org

#### **Department of Justice**

U.S. Department of Justice 950 Pennsylvania Avenue, NW Civil Rights Division Disability Rights Section - NYA Washington, D.C. 20530 202-307-0663 http://www.justice.gov/crt/disability-rights-section

#### HEATH Resource Center The George Washington University

2134 G Street, NW Washington, DC 20052 Tel: 202-973-0904 800-544-3284 www.heath.gwu.edu

#### Learning Disabilities Association of America

4156 Library Road Pittsburgh, PA 15234-1349 Phone (412) 341-1515 | Fax (412) 344-0224 http://ldaamerica.org/

#### Library of Congress

National Library Service for the Blind and Physically Handicapped Library of Congress 1291 Taylor Street, NW Washington, DC 20542 http://www.loc.gov/nls/

National Attention Deficit disorder Association <a href="https://add.org/">https://add.org/</a>

National Center for Learning Disabilities (NCLD) 32 Laight Street, Second Floor New York, NY 10013 http://www.ncld.org/ Office for Civil Rights, U.S. Department of Education http://www2.ed.gov/about/offices/list/ocr/index.html

Orton Dyslexia Society http://www.dyslexiaconsultants.com/contact-us.html

#### **Recording for the Blind and Dyslexic (RFB&D) CPUC Communications Division** 505 Van Ness Avenue

San Francisco CA 94102 1-800-806-1191 TTY: 1-800-806-4474

# SPECIFIC CONDITIONS THAT MAY CAUSE DISABILITIES

**Cerebral Palsy** is congenital brain damage resulting in motor, sensory, and perceptual difficulties. The most common functional limitations are impaired coordination of limbs, speech and /or sight and limitations in functional activities, especially mobility and fine motor movements such as prolonged writing or keyboarding.

**Cystic Fibrosis** is a congenital disease of the exocrine (mucous) glands, which pour secretions into or out of the body instead of into the blood. This disease causes pulmonary problems and blockage of formation of many organs.

**Diabetes Mellitus** is a chronic disorder in which the pancreas produces an inadequate supply of insulin. This lack of insulin causes a disorder of the metabolism that transports glucose into the cells of the body.

**Fatigue** is the result of many chronic medical problems including heart, respiratory, AIDS, Chronic Fatigue Syndrome and medication side effects. Typical signs of fatigue include chronic absenteeism, slow movements, inability to concentrate, and lack of stamina.

**Hypoglycemia** is a disorder that causes the body to utilize too much blood sugar, leaving a sugar deficiency that can result in fatigue, lightheadedness, and dizziness. Monitoring activity and diet can control these effects. Students with this may require sustenance and/or rest before they are able to function at their normal capacity and may also require additional time to complete assignments and/or exams.

**Multiple Sclerosis** is usually a progressive degeneration of the myelin sheath which surrounds the central nervous system. This disorder can affect sight, speech, hearing, coordination, ambulating (walking), or general activity. When determining what accommodations are necessary, the faculty member should discuss with the student the nature of the student's impairment.

**Muscular Dystrophy** is usually a progressive degeneration of the body's muscle fibers which are replaced by fatty and fibrous tissue. This disorder affects strength, mobility and physical activity.

**Paraplegia** is paralysis involving both legs and the trunk. The most common functional limitations are limited physical activity or ambulation.

**Quadriplegia** is paralysis involving parts or all of the four limbs and the trunk. The most common functional limitations are limited physical activity or ambulation.

**Seizure Disorders** are caused by a disturbance in the central nervous system and are sometimes marked by periods of unconsciousness, involuntary motor activity, and inappropriate behavior. Such subtle signs as picking at clothes, eyelids flickering, wandering around, or appearing to be in a trance state for more than a few seconds characterize the "petit mal" seizure. If a student reports experiencing one of these seizures, allow him or her additional time to complete the activity that has been interrupted. If the seizure is characterized by sudden loss of consciousness and rigidity, the student is experiencing a "grand mal" seizure. The duration of a grand mal seizure is usually a few minutes. During that time, the instructor should

- 1. remain calm and help the student safely to the floor
- 2. place padding beneath his or her head if at all possible
- 3. tilt the student's head to release saliva
- 4. remove any objects that may injure the student
- 5. cover the student, allowing the seizure to run its course
- 6. not force any objects into the student's mouth or between his teeth

When the seizure subsides, allow the student to rest if he or she desires. Report details of the seizure to the student after class in order to help him or her in making a report to a physician. In the event that a seizure extends beyond a few minutes, medical help should be called for the student.

**Specific Learning Disability** is a disability that affects one or more of the psychological processes involved in understanding. Specific learning disabilities can affect a student's ability to listen, think, speak, read, write, spell and calculate

# **Glossary of Learning Disabilities Terms**

This glossary is a compilation of terms and definitions adapted from a number of sources.

Accommodations-Techniques and materials that allow individuals with disabilities to complete school or work tasks with greater ease and effectiveness. Examples include note takers, extra time on tests, tape recorders, and expanded time for completing assignments.

Achievement Test-A test that measures the extent to which a person has acquired certain information or mastered certain skills, usually as a result of education or training.

Akathesia-Extreme restlessness.

Amphetamines-A group of drugs used to stimulate the cerebral cortex of the brain.

**Anorexia-** A deficient amount of oxygen in the tissues of a part of the body or in the bloodstream supplying such part.

**Aphasia-**The inability to acquire meaningful spoken language by the age of three as a result of brain damage.

**Aptitude Test-**A test designed to measure a person's ability to learn and the likelihood of successes in future school, work, or in a specific career.

Articulation (speech)-Refers to the production of speech sounds resulting from the movements of the lips, jaw, and tongue as they modify the flow of air.

**Assistive Technology-** Equipment that enhances the ability of students and employees to be more efficient and successful. For individuals with disabilities, computer grammar checkers, an overhead projector used by a teacher, or the audiovisual information delivered through a CD-ROM would be typical examples.

**Ataxia-** A form of cerebral palsy in which the student suffers from a loss of muscle coordination, especially those movements relating to balance and position.

Attention Deficit Disorders (ADD)-A term frequently used to describe the academic and behavioral problems of children who have difficulty focusing and maintaining attention.

Attention Span-The length of time an individual can concentrate on a task without being distracted or losing interest.

**Auditory Discrimination-**Ability to detect differences in sounds. The two kinds of discrimination are gross ability such as detecting the differences between the noises made

by a cat and a dog and fine ability, such as detecting the differences made by the sounds of the letters "m" and "n."

**Auditory Figure-Ground-**Ability to attend to one sound against a background of sounds as when listening to one speaker in a noisy crowd.

**Auditory Memory-**Ability to retain information which has been presented orally; may be immediate recall, such as recalling information presented several seconds before; short term memory, such as recalling information presented a minute before; long term memory, recalling information presented more than a minute before or sequential memory, such as recalling a series of information in proper order.

**Behavior Modification-**A technique intended to change behavior by rewarding desirable actions and ignoring or "negatively rewarding" undesirable actions.

**Binocular Fusion-**The blending of separate images from each eye into a single meaningful image.

**Brain Damage-**Any actual structural (tissue) damage due to any cause or causes. This means verifiable damage, not neurological performance that is indicative of damage.

**Brain Imaging Techniques-**Recently developed noninvasive techniques for studying the activity of living brains.

**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.

**Cerebral Cortex-**The outer layer of the brain; it controls thinking, feeling, and voluntary movement.

**Cerebral Palsy-**An abnormal succession of human movement or motor functioning resulting from a defect, insult, or disease to the central nervous system.

**Cognition-**The act or process of knowing; the various thinking skills and processes are considered cognitive skills, the understanding of information.

Cognitive Ability-Intellectual ability; thinking and reasoning skills.

Cognitive Style-A person's typical approach to learning activities and problem solving.

**Compensation-**Process in which a person is taught how to cope with his/her learning problems, how to work around skills or abilities which may be lacking; emphasis is placed on using the individual's strengths.

Conceptual Disorder-Disturbances in thinking, reasoning, generalizing, memorizing.

**Confidential File**-File maintained by the college; contains evaluations conducted to determine whether a student is handicapped, as well as any other related information.

**Congenital-** A condition existing at birth or before birth.

**Coordination-** The harmonious functions of muscles in the body to perform complex movements.

**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.

**Direct Instruction-**An instructional approach to academic subjects that emphasizes the use of carefully sequenced steps that include demonstration, modeling, guided practice, and independent application.

**Directionality-** The ability to know right from left, up from down, forward from backward, and direction and orientation.

Discrimination-Process of detecting differences between and/or among stimuli.

**Distractibility-**The shifting of attention from the task at hand to sounds, sights, and other stimuli that normally occur in the environment.

**Due Process-**The application of law to ensure that an individual's rights are protected. A due process hearing may be requested to ensure that all requirements of The American's with Disabilities Act have been met.

Dysarthria- A disorder of the speech muscles that affects the ability to pronounce words.

**Dyscalculia-**Difficulty in understanding or using mathematical symbols, apply, solve, or identify mathematical functions.

**Dysfunction-**Any disturbance or impairment in the normal functioning of an organ or body part.

**Dysgraphia-**Difficulty in producing legible handwriting with age-appropriate speed.

**Dyslexia** -Impairment of the ability to deal with language. A dyslexic may see letters, syllables, or words upside down, reversed, blurred, backwards, or otherwise distorted which greatly impact reading.

**Dysnomia-** Difficulty in remembering names or recalling appropriate words to use in a given context.

Dyspraxia-Difficulty in performing fine motor acts such as drawing, buttoning, etc.

Encoding-The process of expressing language.

**Figure-Ground Discrimination-**The ability to sort out important information from the surrounding environment, identifying a part from the whole figure, the foreground from the back ground.

**Fine Motor-**The use of small muscles for precision tasks such as writing, tying bows, zipping a zipper, keyboarding.

Gross Motor-The use of large muscles for activities requiring strength and balance.

**Handicapped-** Any person with a physical and/or mental disability who has difficulty in doing certain tasks. Federal law defines handicapped individuals as those who are mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, orthopedically impaired, blind, multi-handicapped, or as having specific learning disabilities and who require special educational services because of these disabilities.

**Hyperactivity**-Excessive physical and muscular activity characterized by extreme inattention, excessive restlessness and mobility. The condition is usually associated with attention deficit disorder or learning disabilities.

**Impulsivity-**Reacting to a situation without considering the consequences. Non-goal oriented activity exhibited by individuals who lack careful thought and reflection prior to a behavior.

Kinesthetic-Pertaining to the muscles and movement.

**Laterality-**The tendency to use the hand, foot, eye, and ear on a particular side of the body.

**Learning Disabilities (LD)**-Disorders of the basic psychological processes that affect the way an individual learns. Learning disabilities may cause difficulties in listening, reading, writing, thinking, talking, spelling, or arithmetic. Included are perceptual handicaps, dyslexia, and developmental aphasia. Excluded are learning difficulties caused by visual, hearing, or motor handicaps, mental retardation, emotional disturbances, or environmental disadvantage.

**Learning Disorder-**Damage or impairment to the nervous system that results in a learning disability.

**Learning Modalities-**Approaches to assessment or instruction stressing the auditory, visual, or tactile avenues for learning that are dependent upon the individual.

**Learning Strategy Approaches-**Instructional approaches that focus on efficient ways to learn, rather than on curriculum.

**Learning Styles-**Approaches to assessment or instruction emphasizing the variations in temperament, attitude, and preferred manner of tackling a task.

**Metacognitive Learning-**Instructional approaches emphasizing awareness of the cognitive processes that facilitate one's own learning and its application to academic and work assignments.

**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.

Modality-The sensory channel used to acquire information.

**Multisensory Learning-**An instructional approach that combines auditory, visual, and tactile elements into a learning task.

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

**Norms-**Statistics that provide a frame of reference by which meaning may be given to test scores. Norms are based upon the actual performance of students of various grades or ages in the standardization group for the test. Since they represent average or typical performance, they should not be regarded as standards or universally desirable levels of attainment. The most common types of norms are standard scores such as stanines or deviation IQ, percentile rank, and grade or age equivalents.

**Oral Language-**Those verbal communication skills needed to understand (listen) and to use (speak) language.

Organicity- A disorder of the central nervous system; brain damage.

**Perceptual Abilities-**The abilities to process, organize, and interpret the information obtained by the five senses; a function of the brain.

**Perceptual Handicap-** Difficulty in accurately processing, organizing, and discriminating among visual, auditory, or tactile information. Glasses or hearing aids do not necessarily indicate a perceptual handicap.

**Perceptual Motor-**Muscle activity resulting from information received through the senses.

**Perceptual Speed-**Specific meaning of this term varies, depending upon the manner in which a given test measures this ability.

**Perseveration-**The repeating of words, motions, or tasks. An individual who perseverates often has difficulty shifting to a new task and continues working on an old task long after classmates have stopped.

**Reasoning Ability-**Specific meaning of this term varies, depending upon the manner in which a given test measures this ability; generally refers to nonverbal, deductive, inductive, analytical thinking.

**Receptive Language (Decoding)-** Language that is spoken or written by others and received by the individual.

**Reversals-**Difficulty in reading or reproducing letters alone, letters in words, or words in sentences in their proper position in space or in proper order.

**Ritalin-**Trade name for one of several stimulant drugs often given to modify hyperactivity.

**Specific Language Disability (SLD)-**A severe difficulty in some aspects of listening, speaking, reading, writing, or spelling, while skills in the other areas are age-appropriate.

**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.

**Social Perceptions-**The ability to interpret stimuli in the social environment and appropriately relate such interpretations to social situations.

**Spatial Orientation-** Awareness of space around the person in terms of distance, form, direction, and position.

**Spatial Relationships -** The ability to perceive the relationships between self and two or more objects and the relationships of the objects to each other.

Syntax-Grammar, sentence structure, and word order in oral or written language.

Tactile-Having to do with the sense of touch.

**Verbal Ability-**Specific meaning of this term varies. Generally refers to oral or spoken language abilities.

**Visual Discrimination-**Ability to detect similarities and/or differences in materials which are presented visually, e.g., ability to discriminate h from n, o from c, b from d, etc.

**Visual Figure-Ground-**Ability to focus on the foreground of material presented visually, rather than background. Those who have difficulty with this may find it hard to keep

their place while copying or reading may find a crowded page of print or illustrations confusing, etc.

**Visual Motor-**Ability to translate information received visually into a motor response. Visual motor difficulties are often characterized by poor handwriting.

Visual Perception-Ability to correctly interpret what is seen.

**Word Recognition-**Ability to read or pronounce a word; usually implies that the word is recognized immediately by sight. This does not imply understanding of the word.

Written Language-Encompasses all facets of written expression, e.g., handwriting, capitalization, punctuation, spelling, format, ability to express one's thoughts in a sentence or paragraph.

#### **RESOURCES CONSULTED**

- Accommodate psychiatric disabilities. Disability Compliance for Higher Education. V4, #4. November 1998.
- Adelman, Pamela and Olufs, Debbie.(1992). Assisting college students with learning disabilities: A tutor's manual. Columbus, OH: Association on Higher Education and Disability (AHEAD).
- Adults with learning disabilities: A call to action. (1985). National Joint Committee on Learning Disabilities. <u>http://www.ldonline.org/njcld/adults\_ld.html</u>.
- A faculty and staff guide: Optimizing the learning environment for students with disabilities. Montgomery College. www.mc.cc.md.us/Departments/studevgt/DisabGde.html.
- American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders (4t<sup>h</sup> edition)*. Washington, DC.
- Americans with Disabilities Act, The Law and its Impact on Post-secondary Education, pamphlet, American Council on Education. Washington, DC. 20036
- Auxiliary aids and services for post-secondary students with handicaps: Higher education's obligations under section 504, pamphlet, U.S. Department of Education, Washington, D.C. 20036.
- Barkley, R.A. (1997). ADHD and the nature of self control. New York: Guilford Press.
- Barkley, R.A. (1990). Attention deficit hyperactivity disorder: A handbook for diagnosis and treatment. New York: Guilford Press.
- Bender, William N., Cecelia B. Rosenkrans and Mary Kay Crane. (1999). *Stress, depression and suicide among students with learning disabilities: Assessing the risk.* Learning Disability Quarterly 22.
- *College students with learning disabilities. (1991).* Pamphlet. Association for Higher Education and Disability (AHEAD). Columbus.OH.
- Disability Services Handbook, Clemson University. http://hubcap.clemson.edu/Disability\_Services/dshandbook.html.
- *Disability Student Services Manual*, Syracuse University. <u>http://fiji.edu/depts/assist/manual.html</u>.
- *Faculty guide in assisting students with disabilities*, Northwestern University <u>http://www.nwu.edu/hr/eeo/facguid.htm</u>.

- Gadbow, N.F. and DuBois, D.A. (1998). *Adult learners with special needs*. Malabar, FL.: Krieger Publishing.
- Gerber, P.J. and Reif, H. eds. (1994). *Learning disabilities in adulthood: Persisting problems and evolving issues.* Stoneham, MA: Butterworth-Heinemann.
- Gordon, Michael and Kieser, Shelby. Eds. (1998). Accommodations in higher educaton under the americans with disabilities act; A no nonsense guide for clinicians, Educators, administrators and lawyers. New York: Guilford Press.
- Gregg, Noel, Cheri Hoy and Alice F. Gay. Eds. (1996). Adults with learning disabilities: Theoretical and practical perspectives. New York. Guilford Press.
- *Guidelines for documentation of a learning disability in adolescents and adults,* Association on Higher Education and Disability (AHEAD). Columbus, Ohio.
- Hallowell, Edward M. and Ratey, John J. (1994). *Driven to distraction*. New York: Guilford Press.
- "Hearing Impairments." University of Minnesota Disability Services Manual. (1997). http://disserv3.stu.umn.edu.
- Henderson, C. (1995). *College freshman with disabilities: A triennial statistical profile.* Washington, DC: American Council on Education.
- Kavale, Kenneth A. and Forness, Steven R. (1995). *The nature of learning disabilities: Critical elements of diagnosis and classification*. Hillsdale, NJ: Erlbaum.
- Latham, Patricia. Attention deficit disorder in college: Faculty and students-partners in Education. <u>http://www.add.org/content/legal/college.htm</u>.
- Mc Grew, Kevin S. (1994). *Clinical interpretation of the woodcock-johnson tests of cognitive ability-revised*. Needham Heights, MA: Allyn and Bacon.
- Nadeau, Kathleen. (1998). *Feeling overwhelmed, disorganized, scattered?* www.add.org/content/women/advance.htm.
- National Center for Education Statistics. (1999). Statistical Analysis Report. An institutional perspective on students with disabilities in postsecondary education. US Department of Education. Office of Educational Research and Improvement. NCES 1999-046.
- National Center for Learning Disabilities, 231 Park Avenue South, Suite 1420, New York, NY 10016. Adult learning disabilities: A learning disability is not something you outgrow.

- National Center for Learning Disabilities, 231 Park Avenue South, Suite 1420, New York, NY 10016. *Visual and auditory processing disorders*.
- National Center for Learning Disabilities. (1999). General information packet on learning disabilities. <u>http://ncld.org/brochure/geninfo.html#warning</u>.
- National Institute of Mental Health, General Information Booklet, <u>http://www</u>.ldonline.org/ld\_indepth/general\_info/gen-nimh-booklet.html.
- 1998 Disability Resource Guide, University of Illinois at Urbana-Champaign, http://www.als.uiuc.edu/dres/98resource\_guide/conditions\_strategies.html.
- "Nonverbal Messages Speak Louder to Students with Psychiatric Disorder." <u>Disability</u> <u>Compliance for Higher Education.</u> V4, #4. November 1998.
- Nowacek, McKinney and Hallahan. (1990), in NICHCY News Digest 25, 8/97. Interventions for students with learning disabilities. Washington, DC.
- Pennington, Bruce. (1991). *Diagnosing learning disorders: A neuropsychological Framework*. New York: Guilford Press.
- Policy and Procedures Regarding Students with Disabilities, University of Connecticut, http://www.ucc.uconn.edu/~stusr2/policies.html.
- Policy Statement for Documentation of Attention-Deficit/Hyperactivity Disorder in Adolescents and Adults, April 1998, Office of Disability Policy, Educational Testing Service, Princeton, New Jersey 08541.
- Rosenshine and Stevens. (1986). in NICHCY News Digest 25, 8/97. Interventions for students with learning disabilities. Washington, DC.
- Scott, S.S. (1994). Determining reasonable academic adjustments for college students with learning disabilities. Journal of Learning Disabilities 27. 403-412.
- Section 504, the Law and Its Impact on Post-secondary Education, pamphlet, American Council on Education. Washington, DC.
- Silver, Larry. (1991). A look at learning disabilities in children and youth in NCIHCY Briefing Paper. (1995). Reading and Learning Disabilities: A Resource Guide. www.ldonline.org/ld\_indepth/reading/reading-2.html.
- Support Services and Accommodations for Students with Diagnosed Learning Disabilities. University of South Carolina. September 1997.

- *The head injury survivor on campus: Issues and resources."* HEATH Resource Center. American Council on Education. One Dupont Circle. Washington, D.C.
- Teaching Students Who Are Hard of Hearing. NETAC. (1998). Northeast Technical Center.
- Understanding Learning Disabilities: A Parent Guide and Workbook, Learning Disabilities Council, Incorporated, Richmond, VA, 1991.
- Vogel, Susan A. Ph.D., *College students with learning disabilities: A handbook.* Fourth edition, Northern Illinois University, 1993.
- *What is meant by "learning disabilities?"*. OERI. US Department of Education. <u>http://www.chadd.org/doe/doe\_ld.htm</u>.

# ADDENDUM

- 1. Guideline for Documentation of a Specific Learning Disability
- 2. Guidelines for documentation of a medical. Mobility or visual impairment
- 3. Testing Accommodation Scheduling Form directions to Student and Faculty
- 4. Testing Accommodation Form