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AUTHOR Turchi, Jeanette  
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ABSTRACT

This handbook for faculty was developed as part of the EASE (Equal Access for Students to Education and Experience) Project at Mesabi Community College in northeastern Minnesota. After an introduction stating the college's commitment to all students including those with disabilities, the guide discusses disabilities in general, and learning disability, visual impairment, hearing impairment, seizure disorder, motor impairment, and psychological impairment in particular. The handbook provides information on incidence, definition, and problems commonly manifested by individuals with the specific disability. The next section focuses on teaching students with disabilities. It stresses the importance of planning and lists recommended teaching strategies. A chart matches specific learning difficulties with accommodations. Suggestions for evaluation strategies and accommodations are also provided. The following section contrasts myths and facts about disabilities and includes a list of prominent individuals with disabilities. The final section summarizes rights of the student with disabilities under Section 504 of the Rehabilitation Act of 1973. Contains seven references. (DB)

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# **S**tudents with Disabilities

## **A Resource Guide For Mesabi Community College**

**Project EASE  
Arrowhead Community Colleges**

**Developed by  
Jeanette Turchi, EASE Director  
Duluth Community College Center**

EC304229

**"The only man who is educated is the man who has learned to learn; the man who has learned how to adapt and change; the man who has realized that no knowledge is secure, that only the process of seeking knowledge gives a basis for security."**

**- Carl Rogers -**

**"All men by nature desire to learn."**

**- Aristotle -**

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## FOREWORD

To Be the Best - Mesabi Community College is the place to be! Mesabi Community College is a great place for individuals to pursue post-secondary education. Mesabi holds superior educational opportunities, committed, supportive faculty, and a welcoming atmosphere. Our community college allows students to strengthen their abilities, to successfully access education and meet career goals.

This handbook is a compilation of material from several sources and is designed to assist the faculty and staff at Mesabi Community College in understanding disabilities and appropriately accommodating students with disabilities. It is our mission - faculty, staff, and administration - to provide an atmosphere in which all students, disabled or not, may achieve their educational goals.

In addition to this handbook, the EASE office provides many resources for your use. Please stop by or contact me if you have any questions or need assistance. I look forward to working with you.

Jane Chilcote

Services to Students with Disabilities

## INTRODUCTION

Twenty years have elapsed since the Rehabilitation Act, PL 93-112, was signed in September, 1973, providing persons with disabilities a "bill of rights" against discrimination. Section 504 of the Rehabilitation Act states: "No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance." (P.L. 93-112)

Section 504 states, "a handicapped person" means "any person who has a physical or mental impairment that substantially limits one or more major life activities." Learning and taking part in the educational process is considered to be a major life activity.

As educators, our goal is to provide assistance to all students in reaching their educational objectives. A student with a disability has the same right to achieve success in school as a student who is non-disabled. As no two people are alike, and no two people learn in exactly the same way, we need to provide the accommodations so a student with a disability can thrive in the educational setting, with his peers who are non-disabled.

Mesabi Community College has students with a wide range of abilities and disabilities. The faculty, staff and administration need information on certain disabilities so accommodations may be provided for students' disabilities. Understanding a disability and the manner in which it affects a student will allow

us to ensure students with disabilities a positive educational experience.

A discussion of certain disabilities, their characteristics, problems and accommodations follows:



## DISCUSSION OF DISABILITIES

## **SPECIFIC LEARNING DISABILITIES**

It is estimated that 6,000 students with identified disabilities exited Minnesota public schools between 1987 and 1990. The numbers are larger now and if individuals that possess a learning disability are to become independent, productive members of society, they must have further education. A post-secondary experience at a community college, a university or technical school may be the most appropriate setting in which persons with a disability learn the skills needed to be self-sufficient.

A person who uses a white cane, sign language, or walks with crutches has an obvious disability. An individual with a learning disability shows no outwardly visible characteristics. The instructor, staff member, or fellow student has no way of realizing that, due to difficulty in processing information, a student with a learning disability copes differently from a student who is non-disabled in school and every day life. An individual may be able to think clearly and logically but be unable to construct a paragraph. A verbally articulate person may be unable to read and comprehend a set of instructions.

A specific learning disability interferes with the way in which an individual acquires, organizes and/or expresses information.

This disability is demonstrated by a significant discrepancy between expected and actual performance in one or more of the following areas:

- oral expression
- listening comprehension
- written expression
- basic reading skills
- reading comprehension
- mathematical calculation
- mathematical reasoning

A specific learning disability is not a result of the following:

- visual, hearing or motor handicaps
- mental retardation
- emotional disturbance
- environmental, cultural or economic disadvantage

The long-term frustration is a major problem with adults with learning disabilities. They are bright but unable to learn without some intervention. In addition, these adults have experienced low self-esteem and do not see the positive skills they possess because the disability overshadows those skills. Often, older adults are unaware of the disability: something nags at them, they know that something is not quite right, but they are not aware that the "problem" is a learning disability. As the self-esteem erodes, the individual may refer to himself as "stupid", "dumb", or "slow".

The official "definition" of learning disabilities was first devised in 1968 and later became a foundation for Public Law 94-142 in 1975, (The Education for All Handicapped Children Act). Nearly 25 years later, children identified as learning disabled in the 1970's are adults and have learned that a learning disability is a condition that one does not "out grow". It is a life-long, disabling condition.

As more students with learning disabilities are "mainstreamed" in high school, more will choose to continue their education with some type of post-secondary education whether it is a technical school, a 2-year or a 4-year institution.

An individual with a learning disability is sometimes confused with a person who is mentally retarded; on the contrary, an adult with a learning disability has an average to above-average intellectual ability.

A second misconception about persons with learning disabilities is that someone who is learning disabled is lazy or lacks motivation. Usually, the student who is learning disabled puts in much more work and study to achieve results similar to that of a student who is non-disabled. It can take two or three times longer to accomplish the same task: write an essay, finish a reading assignment or to complete a test or exam. And while the task may involve twice the work, the disability also raises the level of frustration. The student with a learning disability has to have a high level of perseverance to accomplish the final goal: to finish the course, to finish the quarter, to finish the degree.

The Association for Children and Adults with Learning Disabilities (ACLD) states that:

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 non-verbal abilities. It (Special Learning Disabilities) exists as a distinct, handicapping condition in the presence of average to superior intelligence, adequate sensory and motor systems, and adequate learning opportunities. The condition varies in its manifestations and in degree of severity and can affect self-esteem, education, vocation, socialization and daily living activities.

Older adults may be unaware of a learning disability; some students may choose not to disclose a disability for a number of reasons. Embarrassment, fear of ridicule, anxiety regarding the effect on faculty and peers; all are valid reasons why a student with a learning disability withholds information about his/her condition. We can assist these students by indicating on course syllabi, in college catalogs and on examinations that if a student has or suspects a disability that will interfere with his/her progress, he/she is encouraged to speak to the instructor or the disabilities director about the disability. All information will remain confidential.

### Characteristics

Each adult with a learning disability has a distinct combination of abilities and deficiencies: some areas will be average or above average while deficiencies will vary from minimal to severe.

Adults with learning disabilities have processing deficits. Auditory and visual perceptions are the most persistent deficits. When a person misperceives what is heard, he/she misunderstands or does not comprehend. Others have difficulty seeing what is before them. These persons with disabilities have problems with reversals, rotations or inversions of letters and/or numbers.

Copying a phone number can be a struggle for someone who tends to reverse numbers, and repeating the number as it is being written is not a fool-proof aid. A person can hear the numbers, repeat them and still write them with a reversal.

Memory deficits - long and short-term auditory and visual memory - are quite common in adults with learning disabilities. Some have difficulty remembering what they hear. Verbal information is hard to retain (i.e. complicated oral directions). Numerical information like distances, dates and sizes may not be remembered. Spelling, non-phonetic words or place-names in which a person has to remember a series of letters demands long-term visual memory. Many adults with a learning disability are poor spellers due to the persistence of this type of memory deficit. An adult who is learning disabled may be able to express himself orally and with fluency but be unable to write the same ideas in a correct sentence.

It is important to understand that students with disabilities are "consistently inconsistent". Difficulties with memory, achievement, and concept development may appear, disappear and reappear with unpredictability. These characteristics may appear in mild, moderate or severe forms.

#### **ORAL LANGUAGE**

- \* Difficulty understanding oral language presented at a rapid rate
- \* Difficulty attending to long lectures
- \* Inability to remember a series of events in correct sequence
- \* Usage errors (i.e. subject/predicate agreement)
- \* Difficulty pronouncing multisyllabic words (i.e. anonymity, statistics)

- \* Oral contributions to class discussions are far superior to written essays (This is particularly significant when the person is writing under timed conditions, i.e. essay tests)

## **READING**

- \* Inaccurate comprehension
- \* Poor retention
- \* Inability to identify important points, main idea, thesis statement
- \* Difficulties relating reading materials to lectures
- \* Incomplete mastery of phonics
- \* Poor tracking skills (i.e. skipped words, missed words or lines, loses place on page)

## **WRITTEN LANGUAGE**

- \* Poor penmanship and/or preference for manuscript over cursive writing
- \* Overly large or cramped handwriting; poorly formed or illegible letters
- \* Frequent spelling errors: transposition of letters, omissions, additions, attempts at phonetic spelling for non-phonetic words
- \* Essays limited in length

- \* Sentence structure problems: no variety of sentences (too many simple sentences), fragments, run-on sentences, overly-long, complex sentences, or sentences with unacceptable syntax or missing inflectional endings (i.e. missing /ed/)
- \* Essays lack organization, development of ideas and appropriate transition words

### **MATHEMATICS**

- \* Computational skill difficulties
- \* Reasoning and abstract concept deficits
- \* Incomplete mastery of basic facts (in particular, multiplication tables)
- \* Problems remembering a formula or sequence of steps in an operation
- \* Number reversals or transpositions especially when writing numbers to dictation
- \* Difficulty copying problems; cannot align numbers in columns
- \* Difficulty understanding word problems

### **STUDY SKILLS WEAKNESSES**

- \* Inability to organize and budget time
- \* Problems beginning and sustaining consistent effort on a task or assignment
- \* Difficulty taking notes or outlining material



- \* Inability to relate material from several sources regarding an assignment (i.e. cannot relate lecture and reading assignment)
- \* Difficulty following directions
- \* More time needed to complete assignments

#### **SOCIAL SKILLS PROBLEMS**

- \* Cannot "read" facial expressions or body language
- \* Spatial disorientation; gets lost easily
- \* Low frustration level; gives up easily
- \* Responds poorly to pressure
- \* Low self-esteem; avoids eye contact
- \* Does not respect "body space" - stands too closely, talks too loudly
- \* Can take remarks made in humor or sarcasm as personal affront

## **VISUAL IMPAIRMENT**

Visual impairment is the loss of the sense of vision to the extent where special aids are needed to allow the student to achieve performance that would otherwise be allowed through visual clues. Students could be partially or totally blind. Visual impairment does not mean a student could not be an active participant in classroom activities. Specialists in the area of rehabilitation, mobility and orientation can assess the need and recommend accommodations that will assist the student in the classroom.

A student with a visual impairment will have problems in the following areas:

### **GENERAL:**

- \* Inability to use visual aids such as films, graphs, demonstrations, written materials
- \* Traditional tests may not be appropriate
- \* Student may need extended time to complete tests or assignments
- \* Student may have difficulty in small group discussions, especially where more than one group is functioning
- \* Will need a variety of low-vision aids to assist in classroom work

### **SOCIAL:**

- \* Low self-esteem
- \* Feeling of isolation and social inadequacy
- \* Feeling of reduced personal independence
- \* Limited job opportunities or career choices

**Assisting a person who is visually-impaired:**

1. Offer help but wait until the help is accepted before giving it.  
Many individuals who are blind are extremely independent.
2. If you are helping, ask the individual if you do not know exactly what to do.
3. A gentle touch in the elbow or arm will indicate to a person who is visually-impaired that you are speaking to him/her.
4. If you are walking with a person who is blind, let him/her take your arm.
5. Blind isn't deaf; don't shout.
6. If you have a question, ask the person who is visually-impaired. Don't talk to a companion as if the person who is blind is non-existent.
7. Never pet a guide or leader dog unless the dog is "off-duty" and the owner gives permission.
8. Don't worry about using the words, "see", "look" or "blind". Don't avoid them if they fit. If you search for a substitution, both of you will feel uncomfortable.
9. When you meet a visually-impaired person you know, mention your name. It is difficult to recognize a voice unless you have a very distinctive one.

## HEARING IMPAIRMENT

Hearing impairment is a reduction in sensitivity to sound. It also means that a person loses the ability to distinguish auditory stimuli. Even amplification of stimuli does not assist the person in interpreting auditory stimuli. Persons who lose their hearing late in life have a less severe consequence. Those who are deaf at birth have a greater challenge: not only are they unable to hear, their verbal communications are more limited. In spite of this, persons with hearing impairment succeed at every level of education.

A person who is hearing impaired will have difficulty in one or more of the following areas:

- \* Language development may be affected (includes comprehension of written materials, speaking and writing)
- \* Directions for assignments may be misinterpreted
- \* Small group discussions are difficult, especially if more than one group is functioning due to extraneous noise
- \* Abstract concepts are difficult to grasp
- \* Student cannot participate in class independently; will need an interpreter
- \* Students who use hearing aids could have reduced comprehension due to environmental noises
- \* Student depends heavily on visual clues
- \* Standardized test scores can reflect inaccurate assessments of strengths and weaknesses.

**Socially, a student could exhibit:**

- \* **Social isolation**
- \* **Low self-esteem**
- \* **Lack of confidence**
- \* **Sense of vulnerability**

**When working with a student and an interpreter:**

- \* **Speak to the student, not the interpreter.**
- \* **When using audio-visual materials, maintain enough light so the interpreter can be seen.**
- \* **Provide a vocabulary list of technical terms to facilitate interpretation.**
- \* **Notify the interpreter in advance of scheduled changes or class cancellations.**

**When you work with a person who is hearing-impaired:**

1. **Speak clearly and distinctly, don't exaggerate. Use normal speed unless asked to slow down.**
2. **Make sure you don't chew gum or hold something in front of your mouth; it makes lip-reading impossible.**
3. **Use normal tone unless asked to raise your voice.**
4. **Speak directly to the person, not from the side or back.**
5. **Speak expressively. Persons who are deaf cannot hear subtle changes in tone which indicate sarcasm or seriousness. They rely on facial expressions, gestures and body language to understand you.**

## SEIZURE DISORDER

A seizure may be defined as episodes of abnormal motor, autonomic or psychic activity as a consequence of sudden, excessive electrical discharge from cerebral neurons. Petite mal seizure is a brief suspension of activity; psychomotor is automatic motor activity or a complex alterations of behavior. Grand mal is a generalized motor seizure.

Persons with a seizure disorder appear and function like persons without the disorder, but may experience memory dysfunction. Educationally, persons with a seizure disorder can expect to perform well in school as long as the seizures are controlled and there is not a serious memory dysfunction.

A student exhibiting a seizure disorder could have difficulty in one or more of the following areas:

- \* Brief lapses of consciousness which disrupt the learning process.
- \* Anticonvulsant medication may have detrimental side effects such as slowed reaction time, clumsiness, poor hand coordination, difficulty focusing of the eyes.
- \* Increased absences if grand mal seizures are not well controlled with medication.
- \* Due to complex partial seizures, memory deficits may occur.
- \* Effects of medication and chronic seizure disorder can result in clouded thinking.

A student may:

- \* Feel social isolation because of the misunderstanding in fear of seizures.
- \* Avoid social situations due to fear of embarrassment if a seizure occurred.
- \* Fear negative employer attitudes and rejection in job-searching due to ignorance of the disorder.

Assisting a student if a seizure occurs:

- \* Stay calm and reassure other students.
- \* Do not call an ambulance. Usually it is not needed and can be expensive for the student.
- \* Do call an ambulance if another seizure occurs within 30 minutes of the first OR if a seizure persists for 30 minutes or more.
- \* Ease student to the floor.
- \* Remove objects that could injure the student.
- \* Do not try to stop the seizure or try to restrain the student.
- \* **NEVER** put anything in the mouth. Turn the head so the tongue does not slip to the back of the throat and interfere with breathing.
- \* Do not attempt to revive a student who turns pale, breathes irregularly or stops breathing. The seizure will end and the student will breathe on his/her own.
- \* Reassure a student who has had a seizure that you understand.
- \* Attempt to give a student some privacy if bladder incontinence occurs after a grand mal seizure.

- \* Allow a student to rest after experiencing a grand mal seizure.  
The student may be disoriented and very tired.
- \* Do not give food or liquid until the seizure has passed.
- \* Check the student's enrollment card and contact the person listed to call in an emergency.



## MOTOR IMPAIRMENT

The partial or total loss of the function of a body part due to spinal cord injury, amputation or musculoskeletal back disorder is motor impairment. The results could include muscle weakness, reduced stamina, lack of muscle control, involuntary movements or total paralysis. These impairments may be obvious (paralysis or amputation) or invisible (chronic back pain).

A student with motor impairment may have difficulty in one or more of these areas:

- \* Moving from one location or class to another.
- \* Impaired writing or speaking.
- \* Sitting, standing or walking for extended periods of time.
- \* Participating in classes involving physical activity.
- \* Completing traditional paper and pencil tests.

Special accommodations may include:

- \* Make sure the classroom may be accessed by a wheelchair.
- \* Provide the proper facilities for a student in a wheelchair - i.e. wheelchair height work stations, aisle widths, etc.
- \* Do not lean on the wheelchair; it is considered a person's "body-space."
- \* Offer to push the wheelchair; do so only if help has been accepted.
- \* Remember, too, some medications have side effects that can interfere with school performance.

When you meet a person who has mobility-impairments:

1. Offer assistance but wait until it is accepted before giving it.
2. Accept the fact that a disability exists, but do not ask personal questions regarding the disability. It is inappropriate unless you have a close personal relationship with the person who is disabled.
3. Speak directly to the person who is disabled, not to his/her companion.
4. Treat a person who is disabled as a healthy person. Just because the person has a functional limitation does not mean the individual is ill.
5. Keep in mind that persons who are disabled live life much the way persons who are non-disabled do. They are customers, patrons, or clients and deserve equal attention when shopping, dining or traveling.
6. **Do not use handicapped parking spaces.**

## PSYCHOLOGICAL DISORDERS

One in ten persons in the United States suffers from some kind of psychological problem. These disorders vary in severity and may be grouped into several categories:

- \* Psychoses --

usually indicate the loss of the ability to distinguish fact from fantasy. Disorganization of personality, distortion of reality, marked lack of emotional response, loss of impulse control, withdrawal from other people and preoccupation with fantasy mark a psychosis in a person.

- \* Neuroses --

are not as severe as psychoses. The personality is intact but the individual has difficulty dealing with emotional problems. The person may have phobias or compulsive disorders, poor impulse control, is anxious and, while not functioning at optimum level, is in touch with reality.

- \* Organic brain syndrome --

is a result of a physiological or structural changes in the brain. This includes: stroke, arteriosclerosis, head injury, alcohol/drug abuse, metabolic changes and brain tumors. A person could be disoriented as to time or place, lethargy, moodiness, memory impairment, impaired judgment and impaired intellectual functions

such as comprehension, general knowledge and the ability to calculate and learn.

\* Substance Abuse Disorder -

relates to agents that affect the nervous systems. This includes alcohol, marijuana, cocaine, opiates, barbiturates, hallucinogenics and amphetamines. Persons usually abuse these agents because of emotional distress in their lives.

\* Mood Disorders --

are the most common neuroses, including clinical depression which affects one in five adults and twice as many women as men. Symptoms include sleep disturbances, change or lack of appetite, loss of interest, guilt feelings, lack of energy or motivation, possible suicide ideation.

\* Personality Disorder --

includes antisocial, histrionic, borderline, paranoid, schizoid, passive-dependent and passive-aggressive personalities. The three most common types are:

Passive-dependent: person is passive and dependent on others for direction and life-decisions.

Passive-aggressive: person shows aggression in a passive way (includes stubbornness, intentional inefficiency and obstructionism).

Anti-social: the essential defect in this personality is the failure to develop a conscience; it is marked by seeking immediate gratification. The person does not have a sense of responsibility and has personal charm and charisma but will not change behavior in spite of humiliation or punishment.

Psychological disorders or symptoms of such disorders may be exhibited by many individuals during a lifetime. These behaviors become a condition when they are severe and disabling. An instructor does not need to try to remediate these problems, but should act as an observer for behaviors that vary from the norm and which may indicate referral or intervention.

Instructors should be aware of the following:

- \* High but realistic expectations should be maintained so a student can realize full social and vocational potential.
- \* Be aware that a student with an emotional disorder may be treated with medication that affects performance.
- \* Understand that behaviors in a student that vary from the norm may indicate a recurrence of symptoms and are in need of intervention.
- \* Realize that students can and must take full responsibility for thought, feelings and action but are helped when an instructor displays empathy.

Special accommodations will include:

- \* Encourage students to discuss any problems they have regarding medications and side effects of such medications.
- \* Allow extra time in testing situations where medication side effects interfere with performance.
- \* Be sensitive to changes in behavior that could mean recurrence of problems that call for referral or intervention.
- \* Encourage the use of relaxation techniques especially during exams.

## TEACHING STUDENTS WITH DISABILITIES

## PLANNING

As an instructor surveys a classroom full of students on the first instructional day of a quarter, he/she is surveying a classroom full of students with unique assets and deficits. The class probably includes students that are gifted, of average abilities and those with disabilities. Those students with disabilities could fall in one of three categories: those who have a known, disclosed disability, those with a known, undisclosed disability, and those with an unknown, undisclosed disability.

The course instructor is responsible for teaching all the students enrolled in the course and sometimes those instructors assume that it requires special training and skills to teach students with disabilities. Good preparation and flexibility are the cornerstones needed to create a good foundation in a good course. A well-planned course with solid organization and structure will benefit all students. It also allows the instructor time to consider alternatives, revisions and exceptions based on individual student needs.

Students present themselves with many differences and courses cannot be taught in exactly the same manner each quarter. An experienced instructor will spend time preparing for each course, whether the course is new or one that has been taught for years. That instructor will be able to provide various approaches to learning and will be able to accommodate students with different learning styles.



## WRITING A COURSE SYLLABUS

A well-organized, informative syllabus will reassure the students who have disabilities that you are approachable, that you care about their education and that you encourage them to ask questions.

**First, a disability disclosure should be included, somewhere in the syllabus:**

**Individuals with any disability, either permanent or temporary, which may affect their ability to perform in this class are encouraged to inform the instructor at the beginning of the quarter. Adaptation of methods, materials in testing may be made as necessary to provide for equitable participation. In addition, if you have not consulted with the disabilities director, you are encouraged to do so. The Disabilities Office is Room A-1.**

Section 504 of the Rehabilitation Act of 1973 indicates that academic accommodations are mandated except where such alterations would result in a change or modification to course objective.

The syllabus cannot overcome the intrinsic problems relating to a learning disability but it will help inform students of the expectations of the instructor. All students will benefit and will add to an instructor's accountability.

As in testing and examinations, the design of a good syllabus is important. Do not try to cram too much information on a page; make sure there is proper "white space." A student with a learning disability becomes anxious when asked to sift through a mountain of information, all the while worrying that he/she would miss an important date or assignment.

Also inform students if there are tutorial programs on computer and where they are located.

## INSTRUCTIONAL STRATEGIES

Information. Each day we are bombarded with information in many ways: we see, we hear, we touch, we learn. The delivery of information is as important as the information itself. When a student with disabilities receives information (instruction) it is important that the student receives the information in a way in which it can be processed correctly. If not, the information is useless and becomes gibberish.

An effective instructor has the ability to modify or adapt instructional style to accommodate students with disabilities. A student may be unable to achieve success when an instructor uses one teaching style. If the instructor is able to modify or adapt and present the information in a slightly different mode, the same student could find success in the course. Instruction needs to be provided in an array of approaches in order to assist students in accessing the instruction they need.

Students with disabilities are not suggesting, nor do they want, coursework to be "watered down". That denies the balance of the class of learning opportunities. On the other hand, teaching a class using strategies that assist students with disabilities will help students who are non-disabled as well. An instructor, alert to variations in student motivation, pace and style, will reach more students using a variety of approaches than an instructor who limits his/her style to one method.

The following are teaching strategies that assist students with disabilities:

- \* Make the syllabus available 4-6 weeks before the class begins and, if possible, be available to discuss the syllabus with students considering the course.

The syllabus is a map of the course for the quarter: it tells students where they have been, what is expected of them and where they are going. By having a syllabus ahead of time, students can set a time table and pace themselves.

- \* Select text with a study guide, if available, to assist students in self-evaluation.

The text should also be carefully organized with questions that provide purpose. It should have many subheadings, provide graphics to explain the text, include chapter summaries, glossaries, indexes, and appendices. Contact the publisher to request a copy of the text on tape.

Study skills courses should teach students how to use the parts of text including table of contents, index, glossary, chapter summary, captions of pictures, graphics, and tables. Other areas that study skills courses should include are techniques of emphasis such as bold type and italics.

- \* Assigned advance readings. Assign readings in advance of when the topic is due for class presentation. Pre-exposure to the material will allow students to greater understanding of lectures and discussions.
- \* Type all handouts, quizzes, and exams. This assures the student a clear, readable copy.

- \* Leave space for notes on handouts. The students can keep all pertinent material together. Organization can be a problem for persons with disabilities, particularly students with learning disabilities.
- \* Provide study questions to assist students in preparing for exams. For instance, pose a model question and delineate what would comprise a good answer.
- \* Begin lectures with quick review of the previous lecture and an overview of topics to be covered that day. The review allows for questions about the previous lecture before moving on to new material. A brief recap at the end of a lecture helps to tie up any loose ends a student may have.
- \* Use the chalkboard or overhead projector to outline and summarize material. A multi-sensory approach is very effective with students with learning disabilities.
- \* Explain technical language, terminology, jargon, foreign words.
- \* Watch the students for signs of confusion or frustration.
- \* Try to diminish auditory and visual distractions: noise in the hallway, a flickering fluorescent light, etc.
- \* Emphasize important points, main ideas, key concepts orally in lecture and highlight on the overhead if you are using one.

- \* Teach mnemonics to remember important information. Encourage students to create their own "tricks" like HOMES for remembering the Great Lakes, (Huron, Ontario, Michigan, Erie, Superior).
- \* Administer frequent quizzes. This provides regular, continuous feedback for students with disabilities. It shows students and instructors which areas need more review.
- \* Leave time for questions periodically and at the end of the lecture.
- \* To determine if students understand the material being covered, ask for examples in a summary of key points.
- \* Initial concepts should be taught deductively. Basic concepts are presented simply and in a straight forward manner at the beginning of a lesson. Then, illustrate the concepts with examples. This procedure presents information and a student does not have to guess as to key concepts.
- \* Speak distinctly, and at a relaxed pace, pausing to allow students to catch up in their note taking.
- \* Speak facing the class. Do not lecture while facing the chalkboard. Students who wear hearing assistive devices (hearing aids) often read lips as they listen. Avoid pacing and speaking while writing on the board.
- \* Stick to dates given in the syllabus.

- \* Avoid going off on tangents from the lecture outline. A lecture outline is a very helpful tool for students and helps keep the class session "on course."
- \* Allow extended deadlines for projects or allow students with learning disabilities to begin early.
- \* When assigning a long-range project or paper, suggest a time line and be available if a student gets "stuck" at a certain point.
- \* Give assignments in writing as well as orally. Be available for clarification.
- \* Post office hours and be available for clarification of lecture material, assignment, outside readings, etc.
- \* Encourage students to use proofreaders for written assignments.
- \* Allow students to tape lectures.
- \* Be open to alternative testing environments: a separate room, oral exams, readers for tests, extra time allowed or untimed exams.
- \* Small group discussion can be difficult for a student who is hearing impaired, due to the noise level. If small group discussion is integral to the course, try to arrange a quiet room for those groups which include students who are hearing impaired.
- \* If a student discloses a disability, ask the student what you can do to facilitate his/her learning. Many times the assistance you can give is simple: placing a student in the front of the class, for instance.

- \* If you suspect a student has a disability, discuss the situation in private and, if appropriate, refer the student to the appropriate service.
- \* Students with learning disabilities often have difficulty reading aloud. Calling only on students who volunteer to read aloud will avoid embarrassment.
- \* Be aware that certain medications may have adverse effects on a student's performance.
- \* Learn what to do if a Grand Mal seizure occurs in your classroom. Allow for absences related to recovery from grand mal seizures.

## ACCOMMODATIONS - ALTERNATIVE WAYS TO LEARN

Learning Difficulty	Accommodations
<b>Difficulty with reading textbooks:</b> decoding or reading print speed	taped texts reader service
<b>Difficulty with reading comprehension:</b> word meanings organizing material analyzing material	reading skills class, study skills class, textbook outlines or notes, study groups, peer tutor, quiet study area, taped texts
<b>Difficulty with lectures:</b> hearing correctly writing legibly remembering	sit in front of classroom sharing peer notes/notetaker tape recorders study groups/peer tutor
<b>Difficulty with exams:</b> reading and understanding questions writing under pressure organizing thoughts spelling, punctuation grammar distractions	<b>Alternative exams:</b> taped/read exams extra time word processing proofreading writing assistance separate room
<b>Difficulty with written work:</b> organization spelling, punctuation	word processing dictation/proofreading
<b>Difficulty with study organization:</b> scheduling study time completing assignments planning for research/longer projects attending class	<b>Techniques:</b> time management class or workshop scheduling time regularly with person assisting with learning disability be prompt for class (buy alarm clock and watch) use calendar to plan scheduled assignment dates for complete school term use daily/weekly/written study plan sheets

\*Source: Unlocking the Doors: Summary of Academic Preparation for Post-secondary Education, 1986, St. Paul, MN HECLD.



## EVALUATION STRATEGIES

No one likes or enjoys being tested. The crucial examination, the "make it or break it" test, the "pop" quiz create tension for all of us. The sweaty palms. The pounding heart. Students with disabilities have more difficulty with examinations than students who are non-disabled. Problems with memory, comprehension and organization add to the tension created when anticipating a test.

The following information includes suggestions for writing an examination that will benefit all students whether they are disabled or non-disabled.

### Suggested Evaluation Accommodations

Students with disabilities panic when asked to write an exam. Panic will keep them from reading exam questions carefully and mistakes will be made. An examination should be a test of a student's knowledge of course materials, not a test of a student's ability to take a test. Specific testing accommodations that are provided are determined on a case-by-base basis considering the student's disability and the severity of the disability, course content and objectives to be measured. Those accommodations could include:

- \* Extended time on exams.
- \* Allow for a taped version of an objective exam.
- \* Provide an alternate format: objective instead of essay or vice versa.
- \* Allow students with disabilities to take exams in a separate room that is free of distractions: a quiet classroom, learning center, or office.

- Allow for oral, taped, or typed (using a word processor) tests instead of a hand-written exam.
- Allow a student to clarify or rephrase a question as a comprehension check before answering a question.
- Analyze the process as well as the solution (especially in math, chemistry, or physics).
- Allow alternative methods of demonstrating mastery of course objectives (i.e. a project, research paper, demonstration).
- Allow students to use computational or spelling aids such as a calculator, secretary's desk reference, Franklin speller, spell-checker software, misspeller's dictionary.

**Tips that will help all students:**

- Provide adequate scratch paper, lined paper or a word processor for students with writing deficits.
- Allow students to indicate their answers on an examination instead of computer scored answer sheets (visual tracking and visual perception make this task very difficult).
- Discount spelling errors when determining a grade (for written work done in class without spelling aid) unless spelling is a course objective.
- Overview the content before the exam. Tell the students what information will be covered, what kind of test, (multiple choice, essay, short answers, combination of these, etc.). What should students bring for the test (calculators, notes, etc).

Instructors can assist students with disabilities to have a better experience in taking tests if a few simple guidelines are followed:

First of all, indicate at the top of the first page the name of the course, the student's name, the date and the section number. On the following pages, indicate the course name and leave a space for the student's name, in case pages of the exam are separated.

Example: Course: Anatomy and Physiology Biol 125

Student: John Doe

Date: \_\_\_\_\_

Section: 01

Second & Subsequent Pages:

Course: Anat & Physiology Biol 125 Page 2

Student: John Doe

Make sure the directions are specific and clear. If you are writing exams that will not require an answer sheet (i.e. providing an exam for each student on which they mark their answers), use descriptive verbs in the directions.

Examples: Circle the simple subject and underline the verb in the following sentences.

To assist the students who are learning disabled, limit the complexity of sentence structure and vocabulary in directions. Students with learning disabilities have difficulties "wading through" long, complex directions. Many times they will read part of the directions and skip the rest and fill in their answers. The results are mistakes that are made in the exam even though the student has mastered the material.

Design is important when writing an exam. Make sure there is enough "white space": students with learning disabilities tend to "freeze" when confronted with a mass of information. If the disability is in reading or reading comprehension, a student could give up rather than attack several pages of closely written material. Leave space between items and allow for adequate margins. Number items appropriately. Again, be specific in directions:

Example: 4. Solve the problem. Be sure to show your work.

$$(3x^3 - 14x^2 + 5x + 12) - (x - 4)$$

5. Solve the problem and show your work.

$$\frac{8x^4 - 4x^3 + 12x^2}{4x^2}$$

Also indicate if partial credit can be gained if the student indicates the proper operation (i.e. in math) even if the answer is wrong.

When designing an exam, group similar test items, i.e. a block of multiple choice questions, a series of true-false statements, a matching exercise. When the task changes, make sure you write a new set of directions for the new task.

When writing multiple choice questions, make sure questions are stated positively. These test items should be arranged with the choices listed vertically rather than horizontally. This arrangement is easier for students who are learning disabled to discern the choices.

**Example: Poor arrangement -**

In the structure of a state court system, a court that handles only cases dealing with a certain subject matter is called: (a) trial court; (b) appellate court; (c) Supreme Court; (d) court of limited jurisdiction.

**Better arrangement -**

In the structure of a state court system, a court that handles only cases dealing with a certain subject matter is called:

- (a) trial court
- (b) appellate court
- (c) Supreme Court
- (d) Court of limited jurisdiction

Make sure to give a consistent number of choices and it is best, if possible, to eliminate the "all of the above" or "none of the above" choices. When giving numbers as choices, list the choices from smallest to largest.

Matching exercises require thought in arrangement. Make sure that all the questions and all the choices are on the same page of the exam. Many students with learning disabilities take the exam very literally: they assume all the choices are on the same page as the questions and they do not even think to check the following page for a possible answer choice. In addition, flipping pages back and forth can be confusing and frustrating. Rather than set up one long matching exercise, break it into smaller groups.

True-false statements should be written as a positive statement:

Example: The circulatory system consists of blood, heart, lungs, arteries, veins and capillaries.

True

False

(The answer is False - because the circulatory system does not include the lungs).

Avoid the use of double negatives: Students with learning disabilities get tangled up with the semantics and lose the train of thought of the questions. (Students who are non-disabled find the use of double negatives confusing and frustrating; the student with learning disabilities find them overwhelming).

Sufficient space should be allowed for short answer or short essay questions.

To summarize:

1. Make sure the test is identified by student name on each page.
2. Make sure the directions are concise: clear and specific without complex sentences.
3. In designing the exam, group similar questions together: a block of multiple choice, a matching exercise, a series of true-false statements.  
**DO NOT MIX** different types of questions.
4. Make sure you have written **NEW** directions for each section of the exam as the task changes (i.e. from multiple choice questions to true-false statements).
5. Design the exam so that a matching exercise does not extend to a second page. It is better to break it into smaller sections.
6. Ensure that each student receives a good copy of the exam by typing all exams. Check to see that xeroxed material is readable: some copies (if used many times) are faint or blurred.

7. Leave enough "white space" on each page. Do not overwhelm a student with a learning disability with a couple of pages crammed with information.
8. Use vertical rather than horizontal design for multiple-choice and true-false items.
9. Avoid "all of the above", or "none of the above" and double negatives.
10. State test items positively.
11. Indicate on the exam if partial credit will be given for using the correct operation, formula, etc.
12. Be sure to instruct students if spelling, grammar, and punctuation are to be considered part of the exam (for essay questions, for example). Does a misspelled word mean the answer is wrong or does it mean partial credit will be given?

A class of thirty or forty students may have two or three students who have disclosed a learning disability. In addition, the class may contain another one or two students who have not disclosed a learning disability or who are unaware of a learning disability. By creating exams with students with disabilities in mind, you assist all your students in proving their mastery of the course material you have taught.



## MYTHS AND FACTS ABOUT DISABILITIES

## MYTHS AND FACTS ABOUT DISABILITIES

Definition: Handicap - a situation or barrier that is imposed  
on a person with a disability.

There are many myths that surround persons with disabilities: preconceived ideas of what is appropriate, achievable or even possible. Are persons with disabilities so much different from the whole of society? In what way are their aspirations, goals, frustrations and failures different from individuals who are non-disabled? Each person has a unique set of abilities, and short comings, skills, talents, weaknesses and failings.

Here are a few of the myths and the facts needed to "explode" them:

**Myth:** People with disabilities can expect people who are non-disabled to assist them.

**Fact:** Society has the responsibility to provide equal opportunity to all citizens, including those with disabilities. Most individuals will help each other on a personal level as a matter of courtesy. A person with a disability should not learn to take that assistance for granted. It is better to simply state a need, ask for assistance, and then thank the person who provides it.

**Myth:** Persons with disabilities lead totally different lives than people who are non-disabled.

**Fact:** Approximately 40 million US citizens have physical or mental disabilities. Most occupy their time like persons who are non-disabled: they live in their own home, go to work, go shopping, travel, have families, and pay taxes.

**Myth:** Persons who are non-disabled have widely different goals from a person with a disability.

**Fact:** Disability cuts through all segments of society. Persons with disabilities have different backgrounds as do persons who are non-disabled. It is not possible to separate the two groups and stereotype based on disability or non-disability.

**Myth:** People who are non-disabled are insensitive about disability and the lives of people with disabilities.

**Fact:** Almost everyone will have some disability at some time. Many people who are non-disabled will have family members, business associates, friends and/or spouses who are disabled. It is incorrect to assume that all people who are non-disabled are insensitive to disability issues.

**Myth:** Persons with disabilities are happier being with "their own kind."

**Fact:** Some people who are non-disabled do believe that statement. For years persons with disabilities were seen together because they attended separate schools and had separate accessible facilities. They socialized with each other in these settings. Now they are integrated into regular schools, transportation and social situations.

**Myth:** Disability is a constantly frustrating tragedy. Individuals with disabilities are courageous, brave and inspirational by being able to overcome their handicaps.

**Fact:** Disability is an inconvenience, like a broken leg. Most people with disabilities do not sit around and ponder their disability all the time. They live their lives as normally as they can. Persons with disabilities cannot be stereotyped any more than any other minority group. Each person is an individual and, as such, will deal with his/her disability differently.

**Myth:** People who are non-disabled are disgusted by disability.

**Fact:** Our society places great importance on youth and beauty and many people who are non-disabled have mixed emotions when they meet someone who is "different." Feelings of guilt, curiosity, fear or sympathy may be misinterpreted as feelings of disgust. A person who is non-disabled is fearful of saying the "wrong" thing to a person

with a disability and avoids communication altogether. This person may think he/she is being shunned because of his/her appearance. This discomfort can be helped if people who are disabled and non-disabled interact more with each other in work and social settings.

We do not think of disability when we think of prominent individuals, but disability cuts across all sectors and levels of society. Review the list of individuals and decide if these people are "disabled" or "differently abled":

Jim Abbott	Baseball pitcher	Born without right hand
Johann Sebastian Bach	Composer	Cataracts
Alexander Graham Bell	inventor	Hearing impaired
Ludwig von Beethoven	Composer	Progressive deafness
Chris Burke	TV star	Down's Syndrome
Sarah Bernhardt	Actress	Mobility impaired
Roy Campanella	Baseball player	Paraplegic
Ray Charles	Entertainer	Blind
Cher	Actress	Learning disabled
Agatha Christie	Mystery writer	Learning disabled
Winston Churchill	Prime Minister	Learning disabled
Tony Coelho	Former Representative/ California	Epilepsy
Tom Cruise	Actor	Dyslexia
Betty Davis	Actress	Strokes
Robert Dole	Senator/Kansas	Physical disability
Sandy Duncan	Actress	Visually impaired
Thomas Edison	Inventor	Learning disabled
Albert Einstein	Physicist	Learning disabled
Nanette Fabray	Actress	Hearing impaired
Jose Feliciano	Entertainer	Blind
Annette Funicello	Actress	Multiple sclerosis
Vincent van Gogh	Artist	Seizure disorder, mentally disabled
Whoopi Goldberg	Actress	Learning disabled
Mike Gravel	Former Senator/ Alaska	Learning disability

George Frederick Handel  
Stephen Hawking

Katherine Hepburn  
Homer  
Daniel Inouye  
Bruce Jenner  
Magic Johnson  
James Joyce  
Helen Keller  
Evan J. Kemp, Jr.

Ted Kennedy, Jr.  
Robert Kerry  
Greg Louganis  
Toulouse-Lautrec  
John Milton  
Claude Monet  
Mary Tyler Moore  
Patricia Neal  
Louis Pasteur  
Freddie Pendergrass  
Cole Porter  
Franklin D. Roosevelt  
George Shearing  
Lindsay Wagner  
George Wallace

Walt Whitman  
Henry Winkler  
Stevie Wonder  
Larry Wynn

Composer  
Physicist

Actress  
Epic Poet  
Senator/Hawaii  
Olympic runner  
Basketball player  
Novelist, poet  
Social Activist  
Equal Employment  
Opportunity  
Commission Chairman

Senator/Nebraska  
Olympic diver  
Artist  
Poet  
Artist  
Actress  
Actress  
Scientist  
Entertainer  
Composer  
US President  
Entertainer  
Actress  
Former Governor/  
Alabama  
Poet  
Actor  
Composer  
Representative/  
Kansas

Cataracts  
Amyotrophic  
lateral sclerosis  
Parkinson's disease  
Blind  
Amputee  
Learning disabled  
Learning disabled  
Vision impaired  
Blind & deaf  
Muscular dystrophy

Amputee  
Amputee  
Learning disabled  
Mobility impaired  
Blind  
Cataracts  
Diabetes  
Strokes  
Partial paralysis  
Quadriplegic  
Mobility impaired  
Polio/paraplegic  
Blind  
Learning disabled  
Paraplegic

Partial paralysis  
Learning disabled  
Blind  
Amputee

RIGHTS UNDER THE LAW

## RIGHTS UNDER THE LAW

Section 504 of the Rehabilitation Act of 1973 (PL 92-112):

**"No otherwise qualified handicapped individual in the United States shall, solely by reason of his handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance (PL 93-112, material in public domain)."**

Most college and universities, in compliance with the law, have established programs or offices to assist students who are handicapped or disabled. These offices have worked with students, faculty and administration to develop the services, aids and accommodations needed to make this law a reality.

Section 504 defines a handicapped person as "any person who has a physical or mental impairment that substantially limits one or more major life activities (walking, seeing, hearing, speaking, breathing, learning, working, caring for one's self, performing manual tasks). The term physical or mental impairment includes but is not limited to speech, hearing, visual and orthopedic impairment, cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, diabetes, heart disease, mental retardation, emotional illness, and specific learning disabilities (perceptual handicaps, brain injury, dyslexia, minimal brain dysfunction, developmental aphasia), alcoholism and drug addiction. A qualified handicapped person is one who meets the academic and technical standards required for admission or participation in a specific program or activity.



Educational institutions must be sure that any admissions test accurately reflects the applicant's aptitude, achievement level or other factors the test purports to measure, even when administered to an applicant with a disability that impairs manual, sensory, or speaking skills. Also, tests designed for persons with impaired sensory, manual or speaking skills are offered as often and in as timely a manner as other admission tests and that those tests are administered in a facility that is accessible.

Preadmission inquiries regarding whether an applicant has a disability are prohibited except if a school is taking remedial action to correct the effects of past discrimination or taking voluntary action to correct the condition that resulted in limited participation by persons who have disabilities. In each case, the institution must notify the applicant of the primary purpose and voluntary nature of the inquiry. Any information gleaned from such an inquiry must be kept confidential. Postadmission inquiries may be made by the institution on a confidential basis, to determine if a disabling condition will require accommodation.

Federally assisted programs or activities operated by post secondary educational institutions are bound by certain obligations, which, in part, include:

- \* Students with disabilities must be offered equal opportunity to participate in and benefit from all post secondary education programs and activities, including education programs and activities not wholly operated by the institution.

- \* All programs and activities must be offered in the most integrated setting possible.
- \* Academic requirements must be modified, on a case-by-case basis, to afford qualified students with disabilities and applicants an equal educational opportunity. For example, modifications may include changes in the length of time permitted for completion of degree requirements. However, academic requirements that are essential as demonstrated by the institution will not be regarded as discrimination.
- \* The institution may not impose rules that have the effect of limiting the participation of a student with a disability in an education program or activity (i.e. prohibiting tape recorders in classrooms or guide dogs on campus).
- \* Students with a disabling condition in sensory, manual or speaking skills must be provided with auxiliary aids such as taped texts, interpreters, readers, and classroom equipment adapted for persons with manual impairment.
- \* Students with disabilities must have equal opportunity to benefit from financial assistance. The institution may not, on basis of disability, provide less assistance than provided for persons who are non-disabled, limit eligibility for assistance, or otherwise discriminate.

- \* Students with disabilities must have equal opportunity to benefit from programs that provide assistance in making outside employment available to students. An institution that employs any of its students may not discriminate against students with disabilities in such employment.
- \* Students with disabilities must be provided counseling and placement services in a nondiscriminatory manner. Specifically, qualified students with disabilities must not be counseled toward more restrictive career objectives than are students who are non-disabled with similar interests and abilities.

Section 504 (Subpart E) requires that persons with disabilities be provided with aids, benefits and services that are as effective as those afforded to persons who are non-disabled. In providing these aids, benefits and services, it does not mean that the identical result or level of achievement must be produced as with persons who are non-disabled. Rather, it means that persons with disabilities must have the opportunity to obtain the same result, to gain the same benefit, to reach the same level of achievement, and it must be done in the most integrated setting possible. Aids, benefits and services can be defined as tutors, providing classes in basic skills to improve reading, writing, math, and study skills, providing readers for students taking objective tests, allowing students to tape lectures and more.

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