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The handbook presents an introduction and 11 chapters designed to help community college personnel serve handicapped students. A chapter on legal aspects of serving the handicapped addresses the implications of postsecondary and vocational education requirements on admission and programming. Suggestions are made for overcoming the social barriers of negative attitudes, shyness, overprotection and over independence. Psychological barriers (lack of self-confidence, difficulty in defining success, and inexperience in positive social interactions) are addressed. Six succeeding chapters focus on individual disabilities, considering general tips and specific guidelines for dealing with visual impairment or blindness, cerebral palsy, epilepsy, hearing impairments, learning disabilities and mobility impairments. An additional chapter presents suggested remedies for learning problems of the secondary and junior college learning disabled student. The final chapter outlines steps a disabled student should take to ensure needed services and describes help available from such resources as social services and health departments. (CL)

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A REFERENCE MANUAL FOR PERSONNEL WORKING WITH HANDICAPPED STUDENTS

Written by Staff Members of the Special Services Programs in the Virginia Community College System

Coordinated and Edited by
Julie Tapin Lusk

1983
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## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Authors/Institutions</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE AND ACKNOWLEDGEMENTS</td>
<td></td>
<td>pp. 1-2</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>Linnea Olson, Director of Special Services</td>
<td>pp. 3-4</td>
</tr>
<tr>
<td></td>
<td>Southwest Virginia Community College</td>
<td></td>
</tr>
<tr>
<td>LEGAL ASPECTS OF SERVING THE HANDICAPPED</td>
<td>Wendell A. Howlett, Director of Special Programs</td>
<td>pp. 5-12</td>
</tr>
<tr>
<td></td>
<td>J. Sergeant Reynolds Community College</td>
<td></td>
</tr>
<tr>
<td>SOCIAL BARRIERS TO HANDICAPPED STUDENTS</td>
<td>Suzanne S. Reid, Special Services</td>
<td>pp. 13-17</td>
</tr>
<tr>
<td></td>
<td>Virginia Highlands Community College</td>
<td></td>
</tr>
<tr>
<td>POTENTIAL PSYCHOLOGICAL BARRIERS</td>
<td>Barry Crook, Director of Special Services</td>
<td>pp. 18-20</td>
</tr>
<tr>
<td></td>
<td>Dabney S. Lancaster Community College</td>
<td></td>
</tr>
<tr>
<td>THE BLIND OR VISUALLY LIMITED STUDENT</td>
<td>Julia Tapin Lusk, Assistant Dean of Student Affairs</td>
<td>pp. 21-29</td>
</tr>
<tr>
<td></td>
<td>Roanoke College</td>
<td></td>
</tr>
<tr>
<td></td>
<td>formerly of Virginia Western Community College</td>
<td></td>
</tr>
<tr>
<td>CEREBRAL PALSY</td>
<td>Suzanne S. Reid, Special Services</td>
<td>pp. 30-35</td>
</tr>
<tr>
<td></td>
<td>Virginia Highlands Community College</td>
<td></td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS (continued)

**EPILEPSY** .................................................. pp. 36-40  
Laura Waugh  
Special Services Counselor  
Wytheville Community College

**HEARING IMPAIRMENTS** ................................. pp. 41-51  
Cheryl Lewis  
Acting Director of Special Services  
New River Community College

**LEARNING DISABILITIES** .............................. pp. 52-54  
Margaret Burgwyn  
Director of Special Services  
Paul D. Camp Community College

**LEARNING PROBLEMS OF THE SECONDARY AND JUNIOR COLLEGE LEARNING DISABLED STUDENT: SUGGESTED REMEDIES** ........................ pp. 55-65  
Michael S. Kahn  
Rollins College  
Winter Park, Florida

**THE MOBILITY IMPAIRED STUDENT** ...................... pp. 66-70  
Dr. Dorothy Cooke, Sandy Diggs and Mimi Masek  
Special Services Staff  
Rappahannock Community College

**RESOURCES** .................................................. pp. 71-74  
Jim Presgraves  
Director of Special Services  
Wytheville Community College
Preface and Acknowledgements

This manual has been written and compiled by staff members of the Special Services Programs of the Virginia Community College System.

The Special Services Programs are funded through the U. S. Department of Education to provide academic, personal, and social support services to "disadvantaged" students in a postsecondary program of study. Because these students demonstrate financial and/or academic needs, a need for assistance due to physical handicap, and/or are first generation college students, the support functions offered by Special Services include academic, personal, social and career counseling, tutoring, the development of study and test-taking skills, special needs assistance for the physically handicapped, and educational/cultural activities. Ten of Virginia's twenty-three community colleges administer Special Services.

The directors of the Special Services Programs recognized the challenges that handicapped students present to our institutions and to our programs. It became obvious to us that in order to serve handicapped students effectively and efficiently, we needed to combine our talent and resources in serving their special concerns. In an effort to address this matter, we decided to write and publish this concise manual utilizing our individual expertise and experience. People at each of the programs took the responsibility of writing a chapter for this handbook to describe the law, the social and psychological implications of handicaps, descriptions of the major handicapping conditions, popular myths and stereotypes, and tips and suggestions for classroom accommodations. It is our hope that this manual will enable personnel at institutions to better serve handicapped students.
This project would not have been possible without the help of countless people. I would like to express my profound gratitude to them for their unending help and support. I would especially like to thank:

- Each of the authors for their hard work and for their knowledge and dedication to this project.
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- Debbie Weeks of the Audio Visual Department of Virginia Western Community College for designing the cover.
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- All of the other people at Virginia Western for all of their help. In particular, let me thank Dr. Harry C. Nickens, Pat Quinley, Dolores Johns, Texanna Pendleton, Cindy Greer, and last but not least, Margaret Anderson.

Julie Tapin Lusk
INTRODUCTION

The 1980's are upon us and with them come the emerging challenges for community college personnel to provide services to the handicapped. In Sol Gordon's *Living Fully: A Guide for Young People with a Handicap, Their Parents, Teachers, and Professionals*, a handicapped individual is defined as "any individual who has a physical or mental disability which constitutes a substantial handicap to employment, but which is of such a nature that vocational rehabilitation services may reasonably be expected to render him fit to engage in a gainful occupation, including a gainful occupation which is more consistent with his capacities and abilities." As educators, we have the professional commitment to train students for a career, thereby even providing services to the "handicapped."

The task at hand will not be easy, but it will be, when accomplished, very rewarding. Therefore, this handbook has been compiled to help colleagues answer questions, share techniques and resources, and provide an awareness of the emerging clientele who are enrolling in growing numbers at postsecondary schools.

The first chapter discloses the legal ramifications of serving the handicapped. The next two chapters discuss the psychological and social barriers that the individual experiences. Providing services
for the mobility impaired, the epileptic, the learning disabled, the neuromuscular disabled, and the hearing impaired are explored in the following chapters.

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Historically, there have always been disabled people and efforts to effectively serve them on American college campuses have been going on for some time; recently, however, the rights of these individuals have undergone extensive examination. This is evidenced in part by an increasing number of handicapped students attending institutions of higher education. Congress passed the Rehabilitation Act of 1973, and the regulations implementing this law make up the initial federal legislation protecting the rights of handicapped persons. Sections 503 and 504 of the Act reflect a commitment to end discrimination on the basis of physical and mental disability. The Virginia Community College System is dedicated to accomplishing the requirements mandated by the regulations established in these sections. The following summary (of these sections) focuses on the legal rights of handicapped students.

(SEVICES FOR THE HANDICAPPED-VCCS)

SECTION 503

Handicapped Person

According to Section 503 of the Rehabilitation Act of 1973, a handicapped person is:

(1) any person who has a physical or mental impairment which limits major life activities,
(2) any person who has a record of such an impairment, or

(3) any person who is treated by others as being handicapped, whether a physical or mental impairment exists or not.

(Federal Register, 1977)

Alcohol and drug addicts are also considered to be handicapped, as are the mentally ill and mentally retarded.

Major Life Activities

Major life activities are defined as caring for oneself, performing manual tasks, walking, seeing, hearing, speaking, breathing, working, and learning. (Federal Register, 1977)

Postsecondary or Vocational Education

A handicapped person who applies for entrance to a postsecondary or a vocational institution must meet the normal academic or technical qualifications for entry.

SECTION 504

In September, 1973, Congress passed Section 504 of the Rehabilitation Act. This section states that:

"No otherwise qualified handicapped individual in the United States shall, solely on the basis of his/her handicap, be excluded in the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance." (Federal Register, 1977)

Moreover, a recipient of federal funds may not discriminate in any of the following ways:

* By denying handicapped persons participation in or the benefits of a program without affording to them opportunities which are equal to those afforded to non-handicapped
persons. This does not mean that the recipient must guarantee that handicapped persons must achieve as much as non-handicapped persons, only that they have the same opportunity to do so.

*By choosing a location for a facility which denies handicapped persons the chance to participate in or benefit from the program conducted in the facility.

*By providing assistance to any agency or person which discriminates against handicapped persons or by entering into contracts or arrangements with organizations which discriminate.

*By using criteria and methods of administration which discriminate against handicapped persons when determining what benefit will go to what class of persons in new programs. (Federal Register, 1977)

Postsecondary or Vocational Education

Postsecondary or vocational education is addressed in Section 504 through the following regulations.

Recruitment

If the college recruits non-handicapped students, it must also recruit handicapped persons. Recruiting efforts must include schools for handicapped persons.

Pre-admission

The only pre-admission inquiry which may be made about a handicap is one which is necessary to enable compliance with Section 504. Where the normal criteria for admission do not adequately measure the ability of handicapped persons, different criteria may be used if they:

(a) further the equal educational opportunities of the handicapped person,

(b) do not give preference based on handicap, and

(c) are useful predictors of success in the program.
Admission

No qualified handicapped person may be denied admission or be subjected to discrimination because of his/her handicap. There may be no limit on the number of persons who may be admitted. No test criterion for admission...which has the effect of excluding a disproportionate number of the handicapped persons may be used. unless:

(a) it has been demonstrated that that test does, in fact, show who will be successful in the program, or

(b) no other effective, but less discriminatory, test is available. In particular, when a person with a sensory, manual, or speaking impairment is tested, the tester must be able to show that the test is an accurate measure of the skills being tested and not of sensory, manual speaking ability (except where these abilities are the skills being measured).

Treatment of Students

Handicapped students may not be denied any opportunity afforded non-handicapped students under any program, including academic, occupational training, health, counseling, financial aid, physical education, recreation, extracurricular, or other programs. The college may not enter into arrangements with agencies which discriminate. Moreover, groups of colleges may not establish consortia exclusively for handicapped students.

Academic Requirements

A college must modify its academic requirements as is necessary to ensure that the requirements do not discriminate. This may necessitate changing the length of time...
Academic Requirements (continued)

required to complete a degree, substituting one course requirement for another, or adapting the manner in which courses are conducted. Academic requirements which are essential to the program being pursued by the student, or which are essential to a directly related licensing requirement, are not considered to be discriminatory. Other rules, such as prohibiting tape recorders in classrooms or guide dogs in campus buildings, may not be imposed if they limit participation in the program. Course examinations must be given to persons with sensory, manual, or speaking impairments in such a way that the test results are not affected by the impairment (unless the impaired skill is being tested). No student with sensory, manual or speaking impairments may be excluded or denied the benefits of a program due to a lack of auxiliary aids. Provisions of auxiliary aids may often be implemented by informing students of resources provided by the government (State Vocational Rehabilitation Services) or charitable organizations. Auxiliary aids may include taped texts, interpreters, or other effective methods of making orally delivered materials available to students with hearing impairments, classroom equipment adapted for use by the students with manual impairments, and other similar services actions. It is not required that attendants, individually prescribed devices, readers for personal use or study, or other devices of a personal nature be supplied by the college.

Physical Education, Athletics, Counseling

If the school offers physical education courses, intercollegiate clubs; or intramural athletics, it must offer comparable opportunities for participation by handicapped
Physical Education, Athletics, Counseling (continued)

students. Handicapped students may not be counseled towards more restrictive career objectives.

Accessibility Requirements

Programs must be physically accessible. This must be accomplished by eliminating physical obstacles or by other methods which will allow access to handicapped persons. It is not required that each existing facility be accessible but that each college, when viewed in its entirety, be accessible. Methods of providing for accessibility may include altering existing facilities, building new facilities, redesigning equipment, reassigning classes, or assigning aides to handicapped persons. For many handicapped persons, no physical changes are necessary, but rather prejudicial attitudes must be changed to open the doors of opportunity. Full acceptance into the regular setting, for many handicapped students, constitutes compliance with the regulations.

New Construction

A facility designed, constructed, or altered must meet American National Standards Institute (ANSI) standards for accessibility.

Responsible Employee

At least one person should be designated the responsibility for compliance with the law, and a grievance procedure to resolve any disputes that arise under the law should be adopted and published. Within the Virginia Community College System, this responsibility has been extended to the community college presidents and their
Responsible Employee (continued)

appointed representatives, the Affirmative Action coordinators.

It is noted that handicapped students, with twelve years of education behind them, are usually experts regarding their needs and can usually suggest a solution to a specific problem.
REFERENCES AND RESOURCES


"Services for the Handicapped," Virginia Community College System.

"Serving Handicapped Students," Office of Services for Handicapped, University of Iowa.
SOCIAL BARRIERS TO HANDICAPPED STUDENTS

by

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One of the major benefits of education is learning to function effectively among a wide range of people. By college age, most disabled students have learned what adjustments are necessary to perform most of the physical and intellectual functions of an educational experience. To perform socially is sometimes more difficult for several reasons.

1. General attitudes toward handicapped people: Many people harbor uncomfortable emotions about physical handicaps either from ignorance, fear or previous experience. Often people deal with these feelings by avoiding the people who elicit them. Others try to overcome these feelings by reacting with aggressive helpfulness or inappropriate sympathy; even counselors and professional helpers are not always aware of their reactions to handicaps. "The major difference between the public and the professional is that while the public may choose not to interact with the handicapped individual, as professionals we do not have the choice." (Trippe, p. 3)

2. Shyness: A physical disability which may act as a real hurdle to social communication can also become an easily available excuse to avoid social interaction. Often long periods of hospitalization have strained relationships with the students' families
and healthy peers. Students who have previously studied in special classes or schools feel as strange among "normal" people as we do among "handicapped" people. Many social skills depend on exposure to different types of people, the students' limitations, and their talents in many various situations. The isolation of many disabled persons from normal experiences can cause social immaturity or shyness.

3. **Overprotection:** Some children who have been coddled by parents or siblings will be unable to accept the more callous environment at school. They may try to seek attention by asking for sympathy, whining, or exaggerating their symptoms. While most "normal" students will respond for a short time, this strongly dependent behavior does not foster sincere or healthy friendships.

4. **Over Independence:** On the other hand disabled students who are determined to prove their independence can be so brusque that their refusal to accept assistance is misinterpreted as unfriendliness or rudeness. Offering to help is a normal friendly overture, and a disabled person who easily becomes impatient with help will lose many opportunities for meeting new people.

**OVERCOMING SOCIAL BARRIERS**

1. Educating the public about the nature of various handicaps facilitates social access. However, self-righteous or guilt-producing messages benefit only one. Use lighthearted posters and bulletin boards, pleasantly brief pamphlets or handouts, skits, special programs and pre-tested speakers, or open-ended discussions
including both disabled and non-disabled students.

2. Counselors and staff can develop frank personal relationships with disabled students offering more than sympathy. Try to encourage a relationship but discourage unnecessary dependence.

3. Through informal conversation, ascertain what the students like to do for recreation and encourage them to join groups with similar interests. Avoid assuming that handicapped persons should associate with other handicapped persons.

4. Be generous in introducing handicapped students to other students and faculty. If a student is disabled in a way that inhibits communication, calmly and clearly describe the disability and suggest ways to get around this. For example, in introducing a person with cerebral palsy, one might say, "Mary has trouble speaking at first, but she will become easier to understand as you get used to her and as she relaxes." Other students usually feel less anxious if they understand the disability and lose their fear of "saying the wrong thing" or "asking an embarrassing question." Provide the students with other things to talk about besides the handicap. Start a conversation with other relevant topics such as recreational interests, previous schooling, or class schedule.

5. Refer students with personality problems to a competent counselor for regular sessions. A group counseling situation offers practice in social skills, confrontation, and feedback from peers. Of course, tact must be used with these referrals. Follow-up support is helpful.
6. Sometimes a student organization can make a year-long project of befriending shy disabled students. The extra attention from several students betters the social confidence of the recipients and may cause permanent personality changes. Such a project and its benefits are described in *Shy?* (by Michael Girode).

7. Make available *The Source Book for the Disabled*. Written especially for disabled persons, it addresses personal topics such as depression, loneliness, asking for help, and dealing with other students. It also describes special adaptations to facilitate leisure and recreational activities, sexual experiences, and involvement in the outside world. The frank and comprehensive suggestions in this book should cover any social situation.
REFERENCES AND RESOURCES


Nathanson, Robert B. "Campus Interactions: Attitudes and Behaviors," *Disability: The College's Challenge*.


POTENTIAL PSYCHOLOGICAL BARRIERS

by

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All human beings have similar psychological needs such as love, respect, productivity, and autonomy. Individuals with physical disabilities have no greater propensity for psychological problems than their able-bodied fellow students. However, many students with physical disabilities experience inconveniences based upon an "able-bodied system" that can hamper the process of growth towards a more self-actualized life style. These inconveniences, which can deprive students of essential life experiences, are not the result of specific handicapping conditions, but rather the social attitudes and myths revolving around their handicaps. These spurious attitudinal beliefs from society at large are manifested in the form of overprotection and underestimation of handicapped individuals. Disabled students are often seen as inferior individuals who are extremely dependent physically and psychologically. This line of thinking often results from generalization. Able-bodied individuals tend to generalize a specific disability to all other physical and mental aspects of a disabled student.

Handicapped students may suffer from the psychological barriers syndrome as a result of their interactions with able-bodied individuals.
who transfer their own uneasiness to the students. This transference is, for the most part, subconscious and can be identified as a fear or anxiety. In dealing with handicapped students, one becomes aware of one's own susceptibility to physical injury. An inability on the part of the counselor/teacher to recognize and deal with these feelings often produces an avoidance response to particular students. It is important for the counselor/teacher not to overexaggerate the sense of responsibility towards handicapped students who want to be treated as normally as their disability will allow.

Students who experience debilitating psychological barriers often have a low self-concept of themselves. A primary goal of any counselor/teacher should be assisting the student to develop, restore, and maintain a positive self-concept. Counseling students towards a positive self-concept depends largely on the counselor's own attitudes. In terms of self-concept, the non-physical obstacles are identified below:

(a) **Lack of self-confidence.** The greater the dichotomy between ideal and actual self, the more negative the self-concept. Personal perception of abilities by students or counselors is often a major barrier limiting success at a given task. Students facing integration into a mainstream setting can find the experience devastating and any initial self-confidence can be quickly eradicated by a bad experience.

(b) **Difficulty in the definition of success.** Society holds up as models individuals who "make it on their own," thus fostering the belief that to succeed individuals must be able to do everything themselves. Such models fail to acknowledge our interdependency, which, if internalized, unnecessarily impairs the handicapped individual's sense of self-worth.

(c) **Inexperience in positive, social interactions.** Physically handicapped students are often painfully aware of their handicaps. Inexperience in supportive social interactions often reinforces a tendency toward personal isolation.
The manner in which we treat students and impose expectations upon them can have a significant effect on their lives. In order to assist handicapped students in the successful integration into our schools, the attitudes and behaviors of counselors/teachers must become a positive force. Counselors and teachers can help individuals to help themselves in the following ways:

(a) **Breaking down preconceived limitations.** Handicapped students should learn to expand their reach beyond their disabilities and be encouraged to seek out alternatives conducive to personal growth in education, social interactions, and daily living skills.

(b) **Value clarification of image.** Students may need assistance in learning to accept the reality of their physical condition and to narrow the discrepancy of real and ideal body image. Students can acquire values that are far more important than physical appearance.

(c) **Containment.** Students should be aware of their specific handicaps as a means of preventing the spread of limitation of the specific disability into areas of non-disability.

The psychological barriers confronting handicapped students are constructed more often than not within ourselves. Breaking down the barriers requires a joint and honest commitment to accept each student as a unique human being with a potential to acquire skills, attitudes, and knowledge for self-actualization.
Two categories can be used to describe visual impairment: partial and total blindness. The terms partially blind and legally blind are used to describe persons whose vision in the better eye is 20/200 or less or those who have "tunnel vision." A person who has 20/200 vision can see less, even with correction, at a distance of 20 feet than a person of "normal" vision can see at 200 feet. A person with tunnel vision sees at an extremely narrow angle (less than a 20' angle). Seventy to eighty percent of those who are considered legally blind have limited vision with some light and motion perception.

STEREOTYPES AND MYTHS

Visually impaired students are forced to rely on their other senses, especially their hearing; thus they may be more sensitive to the environment of sounds. Nevertheless, they do not have extraordinary hearing abilities. Likewise, it is not necessary to shout at blind students. Address them directly in a normal tone of voice.

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Blind students as a group are neither brilliant nor slow in learning; they have a wide range of abilities and intellectual capacities. What is effective with one blind student may not work with others. Blind students, like their sighted classmates, are individual and unique.

As with sighted students the degree of independence varies with each blind individual. It is rude to assume that blind students need help to do everything. If a blind student appears to need help, ask if you can be of assistance and how you can help.

Blind students should not be limited to a few types of employment. Visually impaired persons have a wide variety of interests and abilities upon which to build. Accounting, law, teaching, sales, secretarial services, and mechanical trades are only a few fields in which visually impaired people have been successful.

Be aware of the stereotypes surrounding blind and visually impaired individuals. Try not to stereotype and try not to be overprotective. Most visually impaired people do not want to appear "different"; they have the same scope of feelings and emotions as do sighted individuals.

GENERAL TIPS

Many people who have not had the opportunity to meet visually handicapped people often have questions on how to treat people with
disabilities. Listed below are some general tips on how to approach a blind person.

1. By all means, relate to a blind person as a person first. Just like everyone else, their thoughts, feelings and personal characteristics are unique to themselves. Remember, they are individuals who just so happen to be inconvenienced.

2. Offer your assistance if appropriate, but do not force it upon the person.

3. Mention your name when meeting a blind person. Most blind people will be able to distinguish your voice.

4. Indicate to a blind or visually impaired person that they are being addressed by using their name or touching them. Inform the person when you are leaving their presence.

5. Don't avoid using words such as "look" or "see". They are not offensive to a sightless person.

6. If a blind person is unfamiliar with a new place, give a tour. Also, warn a blind person if furniture or equipment has been rearranged in a familiar place. Keep all aisles clear.

7. When guiding a blind person, it is best to allow them to hold onto your arm between your elbow and shoulder. This allows them to follow direction and to negotiate turns, steps, curbs, etc.

8. When giving directions or the location of something, indicate "right" or "left", "up" or "down" in relation to the student's body. Another technique used to designate location is the clock method. For example, three o'clock is directly to the right, six o'clock is directly behind, etc.

9. If a student relies on a guide dog for mobility, the dog is working. Please do not distract the dog. Blind people are often offended if their dog is greeted before they are.

10. As with sighted individuals, be on time for appointments with visually impaired individuals. This courtesy suggests support and acceptance.
11. Although many non-verbal cues go unnoticed, many are distinguishable. For example, a blind person cannot see a smile, but can hear sounds of impatience such as shuffling papers.

12. Facial expressions of the blind are poor signals of emotion. Better cues are hand and body movements.

TEACHING TIPS

Blind and visually impaired people can and do learn. The most effective learning usually takes place by listening and through "hands on" activities. Comprehension of abstract concepts usually depends on whether blindness occurred at birth or adventitiously. For example, perspective, color, and three-dimensional space are concepts that cannot be achieved if the person has been blind since birth or from an early age. Space can be understood if the person can experience the concept tactilly. One useful method in helping students develop an understanding of space is to have the student feel the distance by pacing it off.

Reading can be accomplished through many different avenues. This includes the use of braille materials, tapes, records, or by relying on sighted readers. Partially sighted students sometimes use large print or a wide variety of optical aids. It is most helpful to determine which books and other written materials are to be used so arrangements can be made in advance for preparation of the necessary materials.

Reading goes much slower for the blind and partially sighted individual. An average visually impaired student can read from 65–75
words per minute, while a sighted person generally averages 250 words per minute. It may be necessary to extend reading times, and it may be helpful to supplement assignments with recordings.

Some specific guidelines include:

1. A multi-sensory approach to teaching is recommended. Allow the student to utilize his or her senses of touch, taste, and smell. In addition, encourage the student to pace off distances when appropriate.

2. Incorporate records and tapes into your teaching techniques as much as possible. Both sighted and sightless students will benefit.

3. Discuss seating arrangements with the student at the beginning of the term. Take into consideration the desk arrangements in relation to the teacher and other students.

4. Repeat what is written on the chalkboard and spell new words out loud.

5. When equipment is to be used, explain the equipment and the procedures verbally. Allow for tactile exploration.

6. Partially sighted students may have to rest their eyes on a regular basis. Plan breaks.

7. Allow ample time for assignments to be completed.

8. Individual assistance can make the difference between a successful learning experience and an unsuccessful one. Keep in mind that too much attention can be just as harmful as too little.

9. Most handicapped students will be working with tutors. Encourage meetings between the student, the tutor, and yourself to discuss what needs to be reviewed and techniques for doing so.

10. Expose the visually impaired student to blind people who have been successful in their area of study.
NOTETAKING TIPS

A blind or partially sighted person might take notes in braille. This is done with a slate or stylus or with a braillet.

Tape recording lectures is another option. If an instructor plans to copyright their lectures, it is appropriate to ask the student to sign an agreement not to release the recorded tapes.

Encourage students to take notes even if they are taping lectures. It is very time-consuming to listen to tapes when studying for exams. The student can also arrange to borrow sighted individuals' notes to be recorded on tape.

TEST-TAKING TIPS

Tests can be given orally through a reader or by giving a tape recorded test. Work out a suitable system for test-taking with the student early in the term. If the tests are to be given orally, the following suggestions are recommended:

1. It is not recommended to give a different test to the visually impaired student. This can cause problems in ensuring that both tests are equal and fair.

2. Depending on the type of test (objective or essay), the answers can be recorded on the answer sheet by the reader or by having the student turn in their answers on tape.
3. Allow the student and the reader to work where they will not be disturbed by others and where they will not disturb others. Readers can be chosen by the instructor or by the student needing the service.

4. Allow the reader to repeat the test items as many times as necessary.

5. Repeat question stems with each possible answer on multiple choice tests.

6. Tests can also be given in braille.

7. Another option is to have the test tape recorded. The answers can be either written out by an assistant, put on tape, or the blind student can type their answers to essay tests.

8. Partially sighted students may choose to use a print magnifier to help them see the tests. Mimeographed tests are particularly difficult for a visually impaired student.

9. Still another option is for the instructor to administer the test in a one-to-one situation.
REFERENCES AND RESOURCES


Van Meter, S. *Serving Handicapped Students: A Faculty/Staff Handbook*. Iowa: University of Iowa.

SOURCES FOR BRAILLE, LARGE PRINT OR TAPE RECORDED BOOKS

American Printing House for the Blind
P. O. Box 6085
1839 Frankfort Avenue
Louisville, Kentucky 40206

Library of Congress
Division for the Blind and Physically Handicapped
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CEREBRAL PALSY

by

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Cerebral palsy is a comprehensive diagnostic term that covers a variety of neuromuscular disabilities: portions of the brain have been damaged so that controlling voluntary muscles becomes difficult or impossible. The damage is fixed and does not get worse or better. There is no cure for most of the symptoms, but students with cerebral palsy can often be trained to use the undamaged nerves and muscles to perform many life functions. As electronic technology advances, new devices are continually being invented which widen the scope of functions that a cerebral palsied student can perform. Cerebral palsy (or Little's Disease as it is also known) is one of the most common crippling conditions with almost 300,000 individuals affected in the United States.

Cerebral palsy has several types of identifying symptoms that vary in severity. Three-fourths of cerebral palsy cases are manifested by spasticity or athetosis. Other categories are characterized by tremors or rhythmic fine muscular movements, rigidity of the muscles that normally bend, ataxic or poor balance, and atonic or floppy muscle tone.

Spasticity is the inability to control voluntary muscles because of the abnormal tension and stretch reflexes. The legs often scissor, the toes point, the arms are flexed against the body, and
the fists are clenched. Basically, the limbs are rigid, and the body is arched back slightly, causing an abnormal appearance and an odd posture. Each movement takes conscious effort, and severely affected individuals have to be especially trained to even chew and swallow. Speech is often difficult as the muscles involved must be controlled quickly and carefully to produce the proper sounds. Writing is often possible but it is awkward and slow, looking like a child's first effort to print. If walking is possible, the gait is often awkward looking and unsteady and usually slower than normal pace. Generally the spasticity causes the problems of extreme clumsiness, of uncontrolled or poorly controlled movement.

Athetosis is involuntary or excess motion, usually wandering, shaky movements, which interfere with precision. This shaking is often combined with the spasticity causing further impediment to normal motion. By itself, it affects manual mechanical tasks we take for granted, like writing, knot-tying, page-turning, and many other finger-involved tasks. If the eyes are affected, the constant shifting makes reading difficult if not impossible. The speech sometimes sounds halting or stuttering. The general shakiness of movement is sometimes interpreted by others as nervousness or emotional instability.

Almost all causes of cerebral palsy are congenital, although some cases occur from infections, meningitis, lead poisoning, encephalitis, hydrocephalus, excessive jaundice (until recently) or
a severe head injury. Authorities disagree as to whether the predilection to CP is hereditary. The most frequent causes are diseases of the mother during pregnancy (rubella, toxemia, diabetes), prenatal malformation of the brain for other reasons, or brain damage before or during birth caused by insufficient blood reaching the brain.

With such a variety of causes that often leave generalized results, the muscular symptoms of cerebral palsy are often accompanied by speech, sight, and hearing defects, and mental retardation. One source, Adult and Child Care written in 1977, claimed that 75 percent of all children born with cerebral palsy show some mental retardation. However, this would be hard to measure, since the speech defects cause verbal communication blocks, the visual defects inhibit reading or eye contact, the hearing defects minimize aural stimulation and cause social problems, and the muscular problems affect tasks measuring dexterity or physical performance.

People with cerebral palsy often "look" retarded because of the lack of facial expression due to slack muscles. Although the mentality is likely to be affected, many have normal or above-normal intelligence; education and special training can allow them to function in many normal situations.

Another major problem of many cerebral palsied people is emotional instability or inadequacy caused by their frustrating physical conditions and by the unkind treatment they often receive because of their appearance and inability to communicate normally.
Physical stimulation, exploratory motions, learning activities by copying, physical outlets for energy, play, and the basic need for acceptance by family and peers is often thwarted continually by the symptoms of cerebral palsy. Perhaps these students suffer more anguish from their numerous disabilities and social reaction to appearance, especially if they are of normal intelligence and thus aware of their differences.

How can we as teachers, counselors, and learning specialists help?

1. The first interview or meeting should be conducted in as relaxed atmosphere and manner as possible. Students with spasticity or palsy need to mentally relax before they can achieve optimum muscle control for communications. Give the student time to talk and write; avoid the impulse to fill up the silences or to finish words and sentences.

2. Consider each person exhibiting symptoms of cerebral palsy as unique. "They" is a dangerous word in this instance as symptoms vary generally in type and degree. After consulting available records, directly ask the student what he or she can do. If a full response is difficult, phrase your questions so they can be answered with a Yes or No signal.

3. Think out the procedure of being a student in your particular institution and in the particular curriculum being considered. Separate the tasks into units and check each ability. For example, "Can you type? Can you type at 20 words per minute? Will these stairs present a problem? Are you able to write?" Of course, these questions should be posed so the intent to help rather than to judge is obvious.

4. Because of physical difficulties of verbal and written communications, many cerebral palsied students have not had experience in formulating thoughts and ideas into grammatical sentences. Much encouragement and individual attention is necessary to encourage written work. Tutors and faculty members who spend regular time with the student must struggle to avoid writing the paper for the student. The student must realize that poor handwriting or verbal skills cannot be used as an excuse to
avoid communication. Firm but gentle insistence on some written output whenever possible allows real achievement to take place.

(5) For visually affected students, the Visual-Tek (which magnifies words), a magnified reader, or a reading pacer will all help a student focus his/her sight. Of course, recorded texts (available from Recording For the Blind, see page 29) are most efficient and will allow the student to undertake a full load of courses.

(6) Let other students, faculty, and staff know that the cerebral palsied student is not mentally retarded or emotionally unbalanced. Encourage others to approach the handicapped student in helpful ways. Most people need to know "what to say" or, particularly in cases of facial deformity, "where to look."

(7) The palsied student with tremors or awkwardness in the hands will probably need extra time in writing papers or taking tests. Another student or tutor might need to read the questions and mark the answers for tests that are to be machine scored. Give the palsied student time to respond. Avoid indicating the preferred answer with nodding or facial expression (an automatic response in many helpers). Refer to pages 26-27 for additional ideas regarding test-taking strategies.

(8) Give the student with affected limbs more time to walk between classes if necessary.
REFERENCES AND RESOURCES


Definition and Background

Incidents of what we now refer to as epilepsy have been observed since the beginning of recorded history. In ancient times, epilepsy was thought to be the work of demons. Later it was looked upon as mental illness. The word "epilepsy" is Greek, meaning to fall upon or to seize.

In actuality, epilepsy is not a disease, but a symptom of abnormal cerebral function which alters state of consciousness and is associated with convulsive movements, or feelings of disturbance in behavior. The causes of epilepsy include: brain injury before, during, or after birth, brain defects, head wounds, chemical imbalances, poor nutrition, high fever, infectious diseases, brain tumors, and many poisons.

Types of Seizures and First Aid

1. Petit Mal (absence). Petit Mal seizures consist of a transient interruption in orderly thought processes, beginning and ending abruptly with no warning or sequel. This type of seizure usually occurs in children between four to ten years of age and may disappear in adulthood. If not treated however, petit mal seizures may develop into a more serious type of epilepsy. Although this type of seizure lasts only seconds, its rate of occurrence ranges between 1 and 200 episodes per day. During a petit mal seizure, pallor, fixed position, and staring and expressionless eyes are noted. Activity is
interrupted and usually anything being held is dropped. Eyelids, eyebrows, or head may twitch and afterwards the person may or may not be aware that a seizure has occurred.

FIRST AID: Usually no medical attention is required for petit mal seizures.

2. Psychomotor (Temporal Lobe). Psychomotor seizures, most common in teenagers and adults, last from a few minutes to several hours. These seizures are characterized by trance-like states and confused episodes, often causing a drunken appearance.

Symptoms include lip-smacking, swallowing or chewing movements, and incoherent verbalizations. Auditory and/or visual hallucinations are indicated, and the person may become violent.

Amnesia may persist for several minutes after the attack and persistent depression or ill-humor may be present. Psychomotor seizures may also occur in combination with Grand Mal seizures.

FIRST AID:
A. Do not attempt to restrain the person.
B. Remove any objects which may cause injury.
C. Stay with the person until alert.

3. Grand Mal (tonic-clonic). Grand Mal seizures are what the layman generally envisions when he or she hears the term, "epileptic seizure." The individual may experience an aura several seconds before onset of the seizure. This consists of unusual colors, smells, or tension in the stomach or esophagus. Grand Mal seizures may last from one to twenty minutes, but typically less than five minutes.

Grand Mal seizures have three stages—tonic, clonic, and post-convulsive coma. During the tonic phase, the individual experiences sudden complete loss of consciousness. He or she usually falls, with the entire musculature going into continuous contractions. The face turns pale and pupils dilate.

In the clonic phase, muscle contractions grow less frequent. Saliva mixed with air may cause the appearance of frothing at the mouth and the person may turn blue before respiration returns to normal.
During the post-convulsive coma, pupils remain rigid, tendon reflexes are absent, and chewing movements and/or cloth pulling may be observed. Confusion, headache, or sleepiness may also be present. In rare instances, the condition of Staticus Epilepticus may occur. This condition involves going from one seizure directly into another. Body temperature rises dangerously, and total exhaustion may follow. Although rare, seizures of this nature are life threatening, as they may lead to coma, cardiac arrest, or pulmonary edema. During Staticus Epilepticus, brain damage often results. Staticus Epilepticus may be precipitated by alcoholism, extreme fatigue, emotional stress, or abrupt withdrawal of medication; however, the condition may occur when none of these factors are present.

**FIRST AID:**

A. Assist the person to lie down and place a soft object under the head.
B. Remove sharp or hot objects from the area.
C. Remove glasses and loosen tight clothing
D. Do NOT attempt to restrain the person.
E. Do NOT force anything into the mouth or between clamped teeth.
F. After the seizure, turn head to the side to allow drainage of any saliva, allow the person to rest, and do NOT administer food or drink until fully recovered.
G. Rescue Squad attention is not necessary unless the person requests it, stops breathing, or goes from one seizure into another.

**Medical Management**

Today, over 50 percent of epileptic seizures are totally controlled through anticonvulsant drugs and another 30 percent are partially controlled. Administration of anticonvulsant drugs is highly individualized and requires close monitoring of blood levels. Medication must be taken exactly as prescribed to be effective. The medication often causes sleepiness and drowsiness.
Counseling Considerations

Most of the literature in counseling of epileptics deals with the young child and the family, or with employment of the individual; however, many generalizations to the college age student can be made.

Of primary importance is knowing the history of the student's epilepsy, which includes: type of seizure, age of onset, observations of behavior during seizures, and type of medication being administered.

The epileptic should be encouraged to follow medication therapy exactly as prescribed, to have frequent blood level checks, and to report any variance in frequency of seizures to his or her doctor.

Other

It is important to note that all seizures do not indicate epilepsy. Seizures symptomatically indistinguishable from Grand Mal seizures may result from low blood levels of glucose, calcium or magnesium imbalances, lack of vitamin B6 or dysfunction of the pancreas or parathyroid. Seizures may also be a result of behavioral disorders.
REFERENCES AND RESOURCES


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Hearing Impairments

by

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Hearing impairment is any degree of hearing loss by an individual; this impairment can range from a slight loss to a total loss of hearing. There are thirteen million persons in the United States with a degree of hearing impairment, ranging from minor loss to profound deafness. Of this number, 1.8 million are considered "deaf," meaning they cannot hear well enough to understand speech. Hearing loss is measured in decibels (dB). A person is considered to have normal hearing if the loss is between 0-25dB. If a person has a loss between 30-40dB, it is considered slight; 45-55dB, mild; 60-70dB, moderate; 75-90dB, severe; and over 90dB it is considered a profound loss. The term "deaf" is commonly used when hearing impairment is diagnosed as profound or severe, whereas hard-of-hearing would be diagnosed as moderate.

The Hearing Aid

The hearing aid may be worn by persons with all degrees of hearing loss. These are placed behind the ear or in a pocket with a wire going to an earmold that fits directly into the ear. These devices can add up to 25dB to a person's hearing. A hearing aid amplifies sound; however, not all hearing impaired people benefit
alike by wearing one. The hearing aid's usefulness for speech communication depends on the wearer's ability to discriminate among speech sounds and environmental sounds. However, even with a confusion of sounds, an aid may help reduce the feeling of isolation from the environment.

**Education Implications—Language Growth**

The special needs of hearing impaired students must be assessed on an individual basis. Most of the needs of the hearing impaired student are similar to those of all students. However, the hearing impaired student has a language problem and in order to understand the nature of the hearing impaired student's language background, the teacher/counselor will need a description of the hearing impairment, including the degree of hearing loss and the age of onset (prelingual or postlingual). Prelingual is severe or profound deafness that usually occurs before age 2 or 3; prelingually deaf children will not develop the English language without special assistance. They usually have limitations in receiving and transmitting thoughts in spoken or written English. They usually are in an environment where sign language is used and usually communicate well in sign language. Whereas, if the loss occurs at ages 4 or 5 or older (postlingual), language and speech will generally have been acquired, and the task becomes one of maintaining, as opposed to developing, language and speech. Consequently, those who are prelingually impaired are usually students who require learning experiences to facilitate language development.
Role of the Interpreter

Students with hearing impairments may use an interpreter. An interpreter is a professional person who facilitates communication for hearing impaired students. Interpreters are certified by the National Registry of Interpreters for the Deaf. RID interpreters must follow a code of ethics and are not permitted to give advice nor to add or leave out any information. The interpreter acts as the voice for the speaker (which includes showing emotion expressed by the sender) and the ears for the hearing impaired students. There are two types of interpreters—oral and manual. An oral interpreter is someone who orally restates the spoken word in a more understandable manner. The hard-of-hearing or deaf student who does not use manual communication is usually an oralist (someone who utilizes speech and lip reading skills to communicate). Such students may require the services of an oral interpreter.

The other form of communication used by many, but not all, hearing impaired persons is American Sign Language, which is used by manual interpreters. In sign language, thoughts are expressed through a combination of hand and arm movements, positions, and gestures. Repetition and intensity as well as facial expressions are important elements of manual communication. Finger spelling is usually used in sign language. It consists of various finger and hand positions for each of the letters of the alphabet. This alphabet is called the American Manual Alphabet.

The role of the interpreter is to facilitate communication between the student and the teacher. In a classroom situation, the
interpreter usually stands a few feet behind the instructor or
sits in front of the classroom. The hearing impaired student sits
where he/she has access to the line of view of the teacher, the,
interpreter, and the blackboard.

Role of Notetaker/Tutors

Deaf students and hard-of-hearing students may receive services
from a notetaker. A notetaker is usually a classmate in the hearing
impaired student's class who takes good notes. This person will
usually make a carbon or other copy of the notes and will give them
to the hearing impaired student. Notetakers are a valuable asset in
the classroom because as the deaf student looks down to take notes,
he/she misses the interpretation of the class by the interpreter.
Also, the hard-of-hearing student has varying degrees of hearing and
is not always able to get down everything said in class. Thus, the
notetaker is a valuable part of the classroom for both such students.
Hard-of-hearing students may choose to rely on only lip reading,
hearing aid, and the notetaker. It is important to take notes on
all classroom activities including films, student presentations, etc.

Tutoring is also valuable for all hearing impaired students.
The tutor can help in learning related vocabulary, reviewing notes,
and understanding assignments. Both the tutor and the notetaker
should undergo a training program which gives them simulated practice
sessions such as role playing for tutoring, and audio tapes of lec-
tures for notetaking practices. During this training program, the
notetaker/tutor should be educated on the special problems/needs of
the hearing impaired.
Information for Instructors with Deaf Students in Their Classes

Each teacher or counselor has made a commitment to the individuals they encounter in the classroom. It is their aim to communicate clearly and to encourage mutual growth through professor-student interaction. Since the deaf student is isolated from the world of sound and must depend primarily on visual clues, effective communication becomes more difficult. This list is designed to familiarize the teacher or counselor with some of the special problems of the deaf student and to offer ways in which these problems might be handled. Each instructor is encouraged to become familiar with the entire list and to incorporate as many teaching techniques and suggestions as is appropriate.

One-To-One Communication

1. It is important to have the student's attention before speaking. The deaf student cannot hear the usual call to attention. Try tapping their shoulder, waving, or other signals such as blinking the lights to catch their attention.

2. Speak slowly and clearly, enunciating each word, but without exaggerating or overpronouncing. Although it is necessary to speak slowly and clearly, exaggeration and overemphasis distorts lip movements, making lip reading more difficult. Try to enunciate each word, but without force or tension. Short sentences are easier to understand than long sentences.
3. Look directly at the student while speaking. Even a slight turn of the head can obscure the student's vision, making lip reading more difficult. Avoid holding hands and books where they will hide your face.

4. Try to maintain eye contact with the student. Deaf students, like most students, prefer the feeling of direct communications. Eye contact establishes this feeling. Even in the presence of an interpreter, try to communicate to the student. The student can watch the interpreter behind the person communicating.

5. Try to rephrase a thought rather than repeating the same words. Sometimes particular combinations of lip movements are very difficult for a student to lip read. If you are not being understood, try to rephrase the sentence.

Classroom Situations

1. The student should be seated to his/her best advantage. It is very helpful, however, if the instructor will assist the student in selecting an appropriate seat if the student fails to do so. Hard-of-hearing students usually benefit from sitting in the front of the class with their good ear toward the instructor.

2. Try to avoid standing with your back to a window or other light source. Looking at someone standing in front of a light source practically blinds the deaf student. Lip reading is difficult, if not impossible, since the speaker's face is in a shadow.
3. Notify the interpreter in advance when you plan to use materials that require special lighting. Since it is impossible to lip read in the dark, the interpreter must have advance notice so necessary lighting can be provided (example: films or slides).

4. A brief outline would aid the interpreter and the student in following the lecture. It is very helpful to a deaf student to know in advance what will be studied next. S/he will then have a chance to read ahead and study vocabulary. After the lecture, notes can be better organized.

5. Try to present new vocabulary in advance. If this is impossible, try to write new vocabulary on the chalkboard or overhead projector since it is difficult, if not impossible, to lip read or finger spell the unfamiliar.

6. Visual aids are a tremendous help to deaf students. Since vision is a deaf person's primary channel to receive information, a teaching aid that can be seen may aid the assimilation of information. Make full use of chalkboards, overhead projectors, films, diagrams, charts, etc.

7. Try to avoid unnecessary pacing and speaking while writing on the chalkboard. It is difficult to lip read a person in motion and impossible to read from behind. It is preferable to write or draw on the chalkboard, then face the class and explain the work. The overhead projector adapts readily to this type of situation (because the instructor does not turn away).
8. **Slowing the pace of communication often helps to facilitate comprehension.** Speakers tend to quicken their pace when familiar with the material. In addition, there is an unavoidable slight time lag in the presentation when an interpreter is involved. Try to allow a little extra time for the student to ask or answer questions since s/he has less time to assimilate the material to respond.

9. **When vital information is presented, try to make sure the deaf student isn't left out.** Write on the chalkboard any changes in class time, examination dates, special assignments, additional instructions, etc. In lab or studio situations, allow extra time when pointing out the location of materials, referring to manuals or texts, etc., since the deaf student must look, then return their attention for further instruction.

10. **In the absence of an interpreter, questions or statements from the back of the room should be repeated.** Deaf students are cut off from whatever happens that is not in their visual area. Since it is often necessary to know the question in order to fully understand the answer, questions or statements from the back of the room should be repeated.

11. **Obtain feedback from your students at every opportunity with every mode of communication.** Listening to or seeing the student's modes of expression can indicate the student's level of understanding. If the student appears confused, ask if s/he understands with a tactful, well-timed question.
12. **The interpreter will interpret all communication that occurs.** Don't ask the interpreter to delete any information or communication. The interpreter is obligated by the code of ethics to interpret everything, including all discussion by classmates. The deaf student can sense through lip reading and facial expressions when information is being left out during interpretation.

13. **For group discussions, sit in a circle so that the deaf student can see the person who is speaking.** It is very difficult, if not impossible, to interpret many people talking at the same time. Try to limit discussions to one participant speaking at one time. The interpreter will speak the student's ideas as s/he signs them.

14. **Be careful on true/false tests.** Many times the student will have the knowledge but will be confused by the language, for example, double negatives and time sequences. In sign language, most actions are presented in the order they happen (English: "Before you feed the cat, take out the garbage;" sign language: "Take out the garbage, then feed the cat.") English is like a second language to most deaf people. Their English skills may not correlate to their intelligence.

15. **The deaf student can succeed at athletics and dancing.**

16. **Do not depend solely on lip reading with the profoundly deaf.** Even if one is a very skilled lip reader, only about one-third of the information presented can be lip read. If a student smiles a lot and nods his head yes, s/he probably doesn't understand. Be sure to check on comprehension through behavioral outcome.
The information in the preceding section was obtained from the Communication Center of the National Technical Institute for the Deaf, Rochester Institute of Technology, Rochester, New York.
REFERENCES AND RESOURCES


Communication Center of the National Technical Institute for the Deaf, Rochester Institute of Technology, Rochester, New York.


Learning disabilities may be described as perceptual difficulties stemming from abnormal functioning of the senses. Since the senses do not function in a normal fashion, the learning disabled student has difficulty in accurately processing the information received through the senses (to the brain). Because the brain receives inaccurate information, it has trouble sorting it for storage and therefore, its memory ability may be impaired. The student's capacity for learning, however, is intact. It is the processing of information that is different.\footnote{1} The Education for All Handicapped Children Act of 1975, Public Law 94-142, further clarifies this description by stating that:

...'children with specific learning disabilities' means those children who have a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in imperfect ability to listen, think, speak, read, write, spell or do mathematical calculations. Such disorders include such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia and developmental aphasia. Such term does not include children who have learning problems which are primarily the result of visual, hearing or motor handicaps, of mental retardation, of emotional disturbance, or environmental, cultural or economic disadvantage.\footnote{2}
Behavioral Characteristics

Behavioral characteristics which learning disabled students may exhibit include inability to organize and budget time, difficulty in starting, following through and completing tasks, large discrepancy between oral and written work, poor attention span, over-or-under activity, distractibility, forgetting, confusing, substituting or misarticulating words, difficulty describing and defining simple terms, poor memory, inability to follow oral directions and motor coordination problems.

In an academic environment such as the community college, learning disabilities such as dyslexia (inability to read because of perceptual problems, not physical or mentally handicapping conditions), dysgraphia (inability to communicate in writing because of perceptual problems, not physically or mentally handicapping conditions), dyscalculia (inability to do arithmetic because of perceptual problems, not physically or mentally handicapping conditions), and dysphasia (inability to verbally express ideas or receive verbal information because of perceptual problems, not physically or mentally handicapping conditions) most often seriously impede the success of learning disabled students.

Misconceptions

Three basic misconceptions exist regarding learning disabled people. The first misconception is that learning disabled people are mentally retarded. This determination is inaccurate and quite
misleading. Although many types of learning disabilities are attributed to minimal brain damage or dysfunction, the level of dysfunction is, as stated, minimal, and does not affect the intellectual capacity of the person. The effect is in perception rather than mental ability.

The second basic misconception is that learning disabled people are spoiled, lazy, and/or willful. The person who has a learning disability has no internal or external control over the nature or extent of his/her disability because it is most often an organic dysfunction rather than a learned behavioral response.

A third misconception is that learning disabled people can learn to compensate for their disabilities at the same rate using the same technique. As in most areas of life, the amount and rate of progress in compensating for a learning disability varies from individual to individual. A technique or strategy that works for one person may not be effective with another.

1. The College Student with a Disability, President's Committee on Employment of the Handicapped, Washington, D.C.


4. The College Student with a Disability, President's Committee on Employment of the Handicapped, Washington, D.C.
LEARNING PROBLEMS OF THE SECONDARY AND JUNIOR COLLEGE LEARNING DISABLED STUDENT: SUGGESTED REMEDIES

by

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At the secondary and junior college level of education, the teacher's responsibility is to teach content, and not cure learning problems. Teaching methods should be adjusted to coincide with the student's actual learning style. Such adjustment circumvents the student's learning problems and caters to strengths (Zigmond 1976, Kaluger and Kolson 1969, Hayes 1974, Bruechnern 1947). For example, for the student with a visual problem, the teaching approach should emphasize hearing and speaking. Conversely, auditory problems can be circumvented by teaching to the student's visual modality.

Most learning disabled students try their best, but their efforts often fall short of standards. Such students need additional clarification, support, enlightenment, organization, and structure. A helpful and understanding teacher is needed—not a punitive one.

The purpose of this article is: (1) to create an observational awareness of visual, auditory, and general symptoms of the learning disabled adolescent; (2) to suggest classroom methods for circumventing these learning problems.
A. Behavioral characteristics

1. Learning difficulty not attributable to impaired vision, hearing, intelligence, emotional or environmental well-being, plus underachievement in certain, but not all, academic subjects.

2. Weak study habits
   a. inability to organize and budget time
   b. slow to start tasks
   c. difficulty completing tasks
   d. poor notetaking and outlining skills
   e. struggles using reference materials

3. Discrepancy in quality of oral and written work

4. Poor attention span
   a. overactivity—constantly on the move
   b. underactivity
   c. distractibility

5. Language problems
   a. substituting easier words for complex words
   b. trouble verbalizing answers and speaking in whole sentences
   c. refraining from discussions or questions
   d. forgetting, confusing, or misarticulating words
   e. difficulty describing objects and defining simple vocabulary

6. Poor short and long-term memory for information presented in class

7. Floundering when trying to follow oral or written directions

8. Disorganized thoughts

9. Lack of gestures when talking

10. Confusing left and right sides

11. Motor coordination problems
    a. unorganized
    b. sloppy
    c. clumsy walking, running, holding pens and pencils
    d. failure to swing arms when walking or running
B. Suggestions to compensate

1. Set learning priorities and teach accordingly (these students cannot master everything)

2. For all class sessions, review previous material, preview material to be presented, and help students summarize the material just presented

3. Eliminate such classroom distractions as excess noise, physical motion, flickering lights, shiny jewelry, and loud clock ticking

4. Whenever possible make alternative assignments
   a. for incomplete or incorrect work, give an alternative assignment—not a redo of the original assignment

5. Notice and respond to nonverbal signs of anxiety or frustration

6. Have a student helper assist students with lectures and assignments. The helper could take lecture notes or correct the students' lecture notes

7. Make sure the student understands what you have said, done, or demonstrated; then move on to more complex material

8. Provide and teach memory tricks (mnemonics)

9. Teach the student to proofread assignments and tests
   a. the teacher or student helper could read the student's work back to him until the student is capable of proofreading himself

10. Teach and encourage the student to use all teaching modalities (visual, auditory and motor-notetaking from lectures). To help students take lecture notes:
    a. provide introductory activities for the lecture by reviewing previous day's lectures
    b. supply students with sufficient time to review notes
    c. discuss new and previously introduced vocabulary words and concepts
    d. teach a shorthand and/or abbreviation system using such notations as

       1) w/ = with
       2) i.e. = that is
during the lecture the teacher should
1) talk distinctly and at a rate that the student can follow
2) give an organized lecture
3) stop periodically and encourage questions
4) give unmistakable clues to identify and emphasize important information (for example, "This is important." "The main points are," "This could be a test question.")
5) repeat major information
6) refer students to important textbook pages; use such visual devices as blackboards, overhead projectors and dittos to stress information

after the lecture the teacher should
1) help the students summarize the lecture
2) recognize students' notetaking skills and when needed provide additional information
3) give students time to edit notes and ask questions

Encourage the students to reflect on a task before starting it

Capture student attention before beginning class

Emphasize meaningful associations, be organized and relate to student experiences

Give individual conferences to guide students and monitor understanding of assignments and course content

Frequently review material and check comprehension

Take the time to give good directions
a. have students' attention before starting
b. tell students purpose of activity
c. give direct and uncomplicated directions
1) use correct grammar and vocabulary students understand
2) be seen and heard clearly
3) be concise and give sequential steps for students to follow
4) be relaxed and positive
5) minimize distractions
6) make sure written directions are legible

d. tell class what materials to use and where to find them

e. vary ways to give directions
   1) oral, direct from the teacher or recorded on tape (so student can replay directions)
   2) written on ditto paper, blackboard, or overhead projector
   3) demonstrate what is to be done

f. clarify directions before starting the activity
   1) work on example together
   2) display a completed project
   3) encourage questions
   4) have students start the activity, then walk around the room checking on student progress

g. encourage students to write down, copy, or tape record directions

h. with long-term assignments, ask for periodic status reports

17) Encourage students to keep only materials necessary for class on their desks

18) Set time limits for classroom activities
   a. during examinations keep a clock visible and post time remaining

19) Help the students be organized by:
   a. posting a weekly schedule of class and study times
   b. listing materials needed for class
   c. posting when assignments are due

20) Teach students to use textbook sections: glossary, index, table of contents, introductions, summaries, and graphics

21) Instead of solely large group activity, provide for small group or independent projects

22) Keep extra supplies of paper, pens, and books

23) Have the students work in a study carrel
24) Give several short classroom activities instead of one long activity

25) Make furniture arrangements easy to maneuver around

**VISUAL**

A. Behavioral characteristics to note

1. Problems with visual tasks
   a. loses place easily
   b. becomes bored, restless, frustrated
   c. seems uncertain in recalling visually presented material
   d. shows signs of eye problems (rubbing, headaches)

2. Mechanical problems taking examinations
   a. places answers in the wrong spots
   b. cannot draw lines on a matching test
   c. poorer performance when using a separate answer sheet

3. Preference for auditory activities
   a. when shown a sound film, pays more attention to source of the sound than to the movie screen
   b. listens to lecture without making eye contact

4. Preference to avoid pictures and graphics
   a. difficulty in interpreting
   b. slow rate of perception
   c. poor recall of information
   d. inattentiveness

5. Problems with oral and silent reading
   a. word-by-word or syllable-by-syllable reading
   b. excessive lip movement or vocalizing in silent reading
   c. body motion while reading
   d. numerous oral reading errors: mispronunciation (both gross and minor), omissions, substitutions (meaningful and nonsense), hesitations, short eye-voice span, regressions
   e. poor comprehension
   f. slow reading pace
   g. substandard reading level
   h. mistaking words that look similar
   i. using finger to keep place
   j. failure to recognize a word when it reappears
   k. easy eye fatigue
   l. participation better with materials presented in class (as opposed to read for class)
6. Oral spelling better than written spelling, or often words written phonetically

7. Visual-motor problems when printing, writing, copying, and drawing.
   a. reverses letters, words, phrases
   b. seems sloppy and careless
   c. constantly refers to the visual model
   d. spaces poorly
   e. unorganized

8. Notice visual stimuli usually unnoticed by other students (marks on blackboard, etc.)

9. Seems more confused if visual material is crammed together (difficulty using a map, dictionary)

10. Responds better to oral directions

11. Difficulty focusing and following print when going from far-to-near or near-to-far vision (looking from the blackboard to the textbook)

B. Suggestions to compensate

1. Allow student to verbalize whenever possible
   a. before writing, let student topic preference
   b. when studying, read material, lecture notes, and directions aloud
   c. with visual information, have the student summarize what is seen

2. Suggest that the student tape record lectures and directions for assignments

3. Provide more auditory presentation of information

4. Write legibly, use large type, do not clutter blackboard

5. In visual presentations, preview and review the material to help students summarize it

6. Have a consistent format for papers and assignments

7. To compensate for verbal expressional dysfunctions
   a. allow student to write answers before responding
   b. ask questions he can answer
   c. answer in written form evaluative and appreciative questions (Barret's Taxonomy)
8. To compensate for reading problems
   a. explain purpose of readings: critical analysis, overview, pleasure and appreciation, application, skim for main ideas, scan for specific information
   b. ask sound comprehension questions: start with the literal, move to the inferential, then evaluative, and end with appreciative level questions
   c. find materials paralleling the textbook but written at a lower reading level
   d. tell the student to use a ruler or blank white index card to hold reading place
   e. have the student read silently, then orally
   f. while listening to a tape recording of a good reader, have the student read silently and follow along

9. Visual-motor problems
   a. encourage use of tape recorder for examinations and lecture notes
   b. lower standards of acceptable writing
   c. encourage the student to use the typewriter when writing a paper or taking a test
   d. tape lecture material and assignments for student use
   e. for notes or test, encourage the student to use graph paper and write cursive (one letter per block) and to use pens and pencils that produce dark black lines
   f. if student is expected to write in class allot sufficient time

10. Minimize visual stimuli: portable study carrels provide an effective environment

11. Have the student keep a file of his most commonly misspelled words

12. Challenge far vision (blackboard) and new vision (ditto papers) simultaneously

13. Reinforce all visual directions with verbal clues

AUDITORY

A. Behavioral characteristics

1. Seems to hear but not to listen
   a. makes inappropriate responses
   b. hesitates before responding to oral questions
   c. ignores, confuses and/or forgets verbal directions
2. Has problems of articulation, enunciation, grammar, limited vocabulary, speech pace

3. Has trouble blending syllables or pronounces words as they physically appear

4. Has difficulty understanding and paying attention (daydreaming, hyperactive, blank expression on face) to oral activities and presentations

5. Seems perplexed when trying to understand people who speak quickly or quietly, as well as those who move while talking

6. Has problems with academic subjects taught orally

7. Spells poorly

8. Easily distracted by noises inside and outside classroom (noises unnoticed by other students)

9. Frequently asks what has just been said (What!, Huh?)

10. Substitutes gestures for words

11. Watches the speaker's lips

12. Often looks at others before following directions

B. Suggestions to compensate

1. Use short one-concept statements

2. Encourage the student to tape lecture

3. Talk at a slower rate

4. Face the student whenever possible

5. Do not penalize for incorrect spelling but correct the spelling

6. Encourage the student to select a seat that is clear of written graffiti, near a blackboard or overhead screen, and far removed from auditory disturbances

7. Tape classroom lectures

8. Encourage the student to visualize material that has been orally presented (revisualize material before answering questions
9. Whenever possible, keep visual clues
   a. brief written outline of the material to be covered
ten that class session
   b. examples on the chalkboard or overhead projector

10. Encourage the student to rewrite his lecture notes and
write out sample test question answers while studying

11. Make written copies of your lecture

12. Instruct the student to repeat your questions before
answering

13. Reinforce oral directions with written ones or other
visual clues
REFERENCES AND RESOURCES


THE MOBILITY IMPAIRED STUDENT

BY

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I. Definition

People who suffer partial or total loss of motor function in a body part fit into the broad category of the mobility impaired. The extent to which a mobility impairment imposes a handicap depends upon the degree to which such impairment limits one's ability to function.

Mobility impairments may manifest themselves as muscle weakness, lack of muscle control, poor stamina, loss of limb or paralysis. A mobility impaired person may have difficulty moving from place to place or with managing personal needs. Such impairments may cause the impaired person to use wheelchairs, crutches, braces, walkers, canes, or prostheses (an artificial replacement for a limb). The need for this equipment varies among individuals.

II. Common Mobility Disabilities

1. Orthopedic - as a result of surgery or amputation

2. Neuromuscular -
   a. Multiple Sclerosis (MS) - a diffuse, chronic, slowly progressive, neurologic disorder which
has its onset early in adult life and is characterized by irregular, fluctuating periods of stabilizations and remissions. MS causes a variety of symptoms; there is no classical type. These people must be treated on an individual basis as each case of MS is a case unto itself.

b. **Paraplegic** - Paralysis of the legs and lower part of the body usually due to a spinal cord injury which affects both motion and sensation.

c. **Quadriplegia** - Paralysis of the arms and legs sometimes causing dysfunctional motor ability, sensation, sex, and bowel and bladder functions.

Both paraplegia and quadriplegia are severe disabilities due to the multiple nature of the disability. Many people take two or three years to develop coping skills.

d. **Progressive Muscular Dystrophy** - This is a disease of unknown cause with several types. The type of most concern to the teacher is the pseudohypertrophic type (Duchenne) which occurs in early youth and is characterized by bulky calf and forearm muscles. It is most common in males.

3. **Collagen Diseases** - A group of diseases which causes deterioration of the connective tissues.

Typical of these diseases is arthritis and its various forms:

- **Rheumatoid arthritis** is a systemic disease of unknown cause. It is typified by hot swollen joints. It occurs in young adults, sometimes resulting in severe crippling.

b. **Still disease** - Rheumatoid arthritis in very young children; it can result in severe crippling and is frequently seen by teachers/counselors in high school. The client is usually very disabled when seen by the teacher/counselor.

c. **Marie Strumpel** - Arthritis of the spine which can result in severe crippling, and may interfere with ability to articulate.
III. Guidelines for Serving the Mobility Impaired Student

1. The student is the most significant source of information regarding his or her impairment and resulting needs. Each student is unique with individual needs, abilities and potentials.

2. Physical facilities, including classrooms, labs, restrooms, offices, library, etc., and any equipment needed for coursework must be accessible.

3. Allow adequate time for moving between classes.

4. Be alert to architectural barriers when scheduling field trips and other activities.

5. When adaptive equipment and financial assistance are needed, local agencies such as the Social Services Agency, Rehabilitative Services, Mental Health Centers, the Veterans Administration and others can often provide suggestions and assistance.

6. When writing is impaired, classwork may require modification. Tape recorders, notetakers, and the opportunity for oral presentations should be considered.

7. When meeting a wheelchair user
   a. Talk directly to the person using the wheelchair, not to a third person. Consider sitting down in order to share eye level.

   b. Offer assistance if appropriate but do not insist. If a person needs help she or he will accept your offer and can tell you how to help.

   c. Do not automatically hold on to a person's wheelchair. Leaning on the chair is comparable to leaning on any person sitting in a chair.

   d. Don't be afraid to use words such as "walking" or "running."

Source:

REFERENCES AND RESOURCES

ACCENT on Living, Ray Cheever, Publisher and Editor, P. O. Box 700, Gillum Road and High Drive, Bloomington, Illinois 61701, (309) 378-2961

Association on Handicapped Student Services Programs in Postsecondary Education (AHSSPPE). President: Janet Huss ('81), Rich Harris ('82), P. O. Box 886, Ames, Iowa 50010.

Auxiliary Aids: A Resource Guide for Postsecondary Schools, Rehabilitation Agencies, and Handicapped Individuals. This Resource Guide has been prepared by the U. S. Department of Education to assist postsecondary schools, rehabilitation agencies, and handicapped individuals in their efforts to obtain auxiliary aids, including both institution-based programs and individual-based programs. The second section contains a list of other organizations that provide services that may be of benefit to handicapped students. Available from the HEATH/Closer Look Resource Center.

Career Counseling and Job Placement of Disabled Students at Two-Year Colleges. A Guide has been published by the Center for Advanced Study in Education of the Graduate School and University Center of the City University of New York. Although written for two-year colleges, the information has applicability to all types of schools. This manual includes a chapter on academic, vocational, and personal counseling for disabled students, as well as chapters on job placement, types of work-place accommodations, development of job placement skills, de-stereotyping, and improvement of interviewing skills for employers. Several case studies, Section 504 of the Rehabilitation Act of 1973, and an annotated bibliography conclude the book. For ordering information, contact David Katz, CASE, Institute for Research and Development in Occupational Education, Graduate School and University Center, CUNY, 33 West 42nd Street, New York, New York 10036.

Fund for the Improvement of Postsecondary Education, Office of Assisting Secretary for Educational Research and Improvement, Room 3123, FOB-6, 400 Maryland Avenue, S. W., Washington, DC 20202, (202) 245-8091.


REFERENCES AND RESOURCES

National Center for Law and the Handicapped, Post Office Box 477, University of Notre Dame, Notre Dame, Indiana 46556, (219) 283-4536.

National Rehabilitation Information Center (NARIC), 8th and Varnum Streets, N.E., Catholic University, Washington, DC 20064, (202) 635-5826 (Voice), 635-5884 (TTY).

Office for Civil Rights, Office for Special Concerns, 330 C Street, S.W., Room 5116, Washington, DC 20202, (202) 245-0015 (Voice/TTY), U. S. Department of Education.


President's Committee on Employment of the Handicapped, 1111 20th Street, N.W., Room 600, Washington, DC 20036, (202) 653-5010 (Voice), 653-5337 (TTY).

Regional Rehabilitation Research Institute on Attitudinal, Legal and Leisure Barriers, 1828 L Street, N.W., Suite 704, George Washington University, Washington, DC 20036, (202) 676-6377 (Voice), 676-4810 (TTY).

Source:

RESOURCES

by

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Resources for the handicapped are available in all communities, obviously more in larger communities. The trick is not in finding the public services agencies, but in working with these agencies. Here are some ideas that may help you achieve better results.

All of the public resources available to handicappers have one thing in common: they are non-profit organizations. Also all public resources people are human. Sometimes the people are heavily over-worked. Sometimes some of the people may not be as highly concerned with meeting your needs as they might be in a private business. For these reasons, you may find that your request could get lost, delayed, misfiled, or wrongly answered. To protect yourself, here are some suggestions:

1. **Start with a positive attitude.** This means that when you call, your question is not, "Will you help me?" but rather, "When will you help me?" It also means that you are cheerful and courteous, not demanding or pushy. As a matter of fact it means that you out-do the other person in politeness, always remembering to say "please", "thank you", etc.
2. **Learn the rules.** Public service agency rules for eligibility or for income determination frequently differ. Ask for a copy of the rules that fit your case. If you have trouble, you can usually request these under the Freedom of Information Act.

3. **Always document any contact with a public service resource.** Write down the agency, the phone number, the name of the person you talked to, the time and the date. Also write down what was discussed and who is to call whom. The purpose of these important details will be outlined in the next step.

4. **Check back frequently.** If the person has to get more information or if a case worker needs to visit the home, find out when. Then follow-up with a "nice" phone call, or letter, using your "documentation" information.

5. **Politely do not take "no" for an answer.** Some people are born saying "no". These are the rare birds, because most public service people will bend over backward to help. To deal with rare birds, though, you need to have the document outlined in step 2. That way, when a rare bird doesn't respond, you can call again to remind. Also with that kind of document, if a rare bird tells you "no", you can ask to talk to the person at the next level (the boss). With the documentation, your conversation with the boss will be more meaningful.

6. In step 1 the values of a positive outlook were pointed out. You also need to remember that your taxes help to pay the salaries of public officials. This means they work for you. Some rare birds have
trouble remembering it. If you run into one of these, the documentation helps all the more.

7. Do not be intimidated. Some rare birds resent having to do anything, and sometimes this type of public official will try to put you down. You should "out-humble" this person. Pour on the "thank you's" and the "please's", but do not be intimidated. In the next section there are listed several public service agencies. Most of them can be located in your phone book. Some times they are listed under the name of county or state, or U. S. Government; and some times they are listed independently. If you cannot find a phone number, librarians, newspapers and the information operation are good sources.

8. As a last resort, become familiar with Appeals Processes. The Processes are most important where the resources are financial. Each agency should have a written Appeals Procedure available for you.

For a booklet like this, space does not permit great detail on each agency. But here are a few general thoughts on each...

A. Social Security - Depending on your handicap you should explore assistance under S.S.I. and Medicaid. If one of your parents is deceased or under Social Security and you are under age 22, you may also be eligible for assistance.

B. Social Services - The chief assistance available to handicappers is through companion care, but be sure to explore such things as child care and fuel assistance.

C. Food Stamps - This service provides extra cash based on income, living arrangements, and some additional factors.
D. **Rehabilitative Services** - Designed to help a person become work-ready, this agency has wide latitude to cover evaluation and training-related start-up expenses such as tuition, transportation, housing, etc. Counseling services, particularly for career choices, are also available.

E. **Low-Rent Housing** - Each facility maintains priority lists, and handicappeds may also qualify under such lists as "present housing condemned," "born out," etc.

F. **Health Department** - Both supplies and home care services are available, depending on eligibility. Counseling and information are likewise available.

G. **Extension Service** - These are good resources for people for a variety of needs such as food preparation, remodeling, suggestions and general living activities. They have a host of pamphlets, also.

H. **Community Action Programs** - They are general resource people who coordinate a variety of services. Check them out!

Not related to these agencies, but of possible interest is a publication (subscription is $3 per year) called *Achievement*, 925 N.E. 122nd Street, North Miami, Florida 33161. C. J. Lampros is the editor, a noble advocate for the handicapped.

Another resource is an organization called HUVA (Handicaps Unlimited of Virginia, Inc.), 855 West Brambleton Avenue, Norfolk, Virginia 23510.

This chapter is written for adaptation and distribution to consumers.