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ABSTRACT
        This handbook is designed to help vocational
educators identify students with special needs and be effective in
teaching them. The first section describes disadvantaged students. A
Federal definition is given, and some practical ways are provided to
help identify disadvantaged students. Section 2 describes handicapped
students and identifies characteristics associated with various
handicapping conditions. Concepts of learning are discussed in the
next section that can be applied to teaching special needs students.
Several teaching techniques are briefly described that are useful
with special needs students. Section 4 includes some safety
guidelines. The final section is intended to help the teacher
recognize instruction problems with special needs students and
suggests preventive/corrective practices. Information is presented in
a table format with the type of special need listed at the top of the
table. In the left-hand column of the table a description of the
problem or characteristic that may be observed is presented. The
right-hand column contains a collection of helpful practices that may
be tried to prevent or correct the problem. (YLB)

TEACHING SPECIAL NEEDS STUDENTS
IN
VOCATIONAL EDUCATION

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INTRODUCTION

The primary task in vocational education is to help students prepare for successful careers. Needless to say, this is a tremendous task.

In performing this task, one of the more difficult aspects is to effectively teach students who need special help to succeed. We need to realize, though, that these students can succeed. They want to succeed, to be accepted, and to become productive members of society.

What we as vocational educators need to know is how to identify students with special needs and, after identifying them, how to effectively teach them. This handbook is designed to help you do those two things.

The first section describes disadvantaged students. A Federal definition is given, and then some practical ways are provided to help you identify disadvantaged students who may be in your classes.

The second section describes handicapped students and identifies characteristics associated with various handicapping conditions.

Section three reviews selected principles that you can follow in teaching special needs students. A brief description of several teaching techniques useful with special needs students is also included.

Safety is an important consideration with any student, but more so for those who are handicapped. Section four includes some safety guidelines which should be kept in mind as instructional activities are carried out.

Remember that special needs students may not be as alert as other students or respond as quickly to crisis situations. You should always approach class and laboratory instruction with a preventive attitude.

The last section is designed to help you in your day-to-day responsibilities. When you have problems with teaching special needs students this

section can be a quick aid to you. It is in a table form with a separate table for each major handicapping condition.

In the left hand column of each table is a descriptive list of characteristics, problems, or behaviors that you might observe. The other column contains a list of suggestions that may be helpful to you in teaching students with special needs.

THE DISADVANTAGED

Do you have students in your classes who read poorly, are not able to do simple math problems, are frequently absent from school, and who appear to have little interest in learning? They may be disadvantaged.

Before you let yourself wonder how it would be to have a class comprised totally of interested, ambitious, and extra-smart students, remember that you can probably help disadvantaged students more than any other person. Disadvantaged students can learn and you will enjoy helping them learn. They are special students who have special needs. Your job is to identify them and provide that special help.

According to Federal guidelines, disadvantaged students are those persons, other than handicapped persons, who:

> ...have academic or economic disadvantages, including persons who have limited English-speaking ability, and who require special services, assistance or programs in order to enable them to succeed in vocational education programs (Final Rules and Regulations, Vocational Education Amendments of 1976, Section 104.804, Federal Register, October 3, 1977).

Those guidelines go on to explain what is meant by academic and economic disadvantages: Academic disadvantage means that a person lacks reading and writing skills, lacks mathematical skills, and performs below grade level.

Economic disadvantage means that family income is at or below the poverty level, the student or the parent(s) or guardian of the student is

unemployed and/or receiving public assistance, or the student is institution-
alized or under State guardianship.

To help recognize disadvantaged students in your classes, look for one
or a combination of the following characteristics:

. Not succeeding in regular vocational classes

. Lacks reading, writing, or math skills

. Performs below grade level

. Family income is at or below the poverty level

. Student and/or parent(s) or guardian may be unemployed

. Student and/or parent(s) or guardian may receive public assistance

. Student is institutionalized or under State guardianship

. Experiences psychological, personality, or emotional problems

. Experiences problems relating to the home and living conditions

. Achieves at a low and/or slow rate

.. Lacks personal goals and/or a sense of purpose -

. Exhibits a lack of interest in school

. Frequently absent from school

. Lacks cultural and linguistics background

. Fails to reach potential ability

. Exhibits poor health and/or nutrituional habits

Your first impression may be that this list would include every student
in your class. But remember that in identifying disadvantaged students, those
characteristics must exist to the point that the student cannot succeed in
a regular vocational program without special help. .

The Teacher of Disadvantaged Students

You probably do have some disadvantaged students in your classes. How
do you work with them most effectively? Later in this handbook, you can

find some specific suggestions for helping disadvantaged students, but for now, let's consider you. What kind of teacher do disadvantaged students need?

Sheppard and Vaughn (1977, pp. 11-12), in working with teachers of disadvantaged students, said that the teachers should be:

. Patient--Often students seem to take twice as long to do a
    job as you think they will. The ones who finish earlier
    need to have things which they can do on their own to help
    themselves learn.

. Versatile--Some students have a short attention span as a result
    of long, difficult lessons and need four little, short things
    to do per hour. Lots of drill is needed, but it needs to
    be disguised a bit each time. Students probably won't like
    "what we did before."

. Quickly analytical--You need to be able to size up the strengths
    and weaknesses of the students in one class period or so,
    without seeming to be doing this.

. Humorous--The ability to see the funny side of even pathetic
    problems without becoming overly discouraged.

. Optimistic--You need to believe in miracles, never give up on
    students, and never think of any problem as impossible to solve.
    You need to send out rays of this feeling to the students
    since they are easily discouraged. Also, you should feel
    that with time the students will pick up what is going on.

. Understanding--You need to sense when things are too much for
    the students, and ease up on them. At the same time, expect
    more of them and push them gently on to doing more...using
    the things they have learned.

. Philosophical--You need to keep trying to get the students
    to assume responsibility for their own learning, to help
    them face their fears and get around them. The reason for
    each lesson should be explained--why it is so designed,
    what it is to teach, how to do the lesson to learn the most.

. Creative--You need to be able to think of new approaches--go
    at the same lesson a bit differently.

. Perceptive--You need to be able to see practical application,
    short-range tricks, so the students can learn something quickly
    and see their success.

. Tomorrow-looking--You should be able to instill in the students
  an awareness of the world around them--all the interesting
  things they don't know but could learn about, but recognize
  that you will not teach them all they need. Students will
  need to learn to teach themselves--learn how to do things,
  want to do them and graduate from your care into responsi-
  bility for their own learning.

. Flexible--You should feel free to have a "spur of the moment"
  inspiration and to try it. If what is planned is not quite
  right, drop it, adapt it, or forget it.

THE HANDICAPPED

In the previous section, you saw a description of special needs students
who are disadvantaged. This section describes the other category of special
needs--the handicapped.

At first thought, you may say that anyone can easily identify handicapped
students, but there are several types and some aren't so easily detected.

According to Federal guidelines, handicapped persons are those who are:

> ...mentally retarded, hard of hearing, deaf, speech impaired,
> visually handicapped, seriously emotionally disturbed, orthope-
> dically impaired, or other health impaired, or persons with spe-
> cific learning disabilities who by reason thereof require special
> education and related services, and who because of their handi-
> capping condition, cannot succeed in regular vocational education
> programs without special education assistance or who require a
> modified vocational education program (Definition, Appendix A,
> Federal Register, October 3, 1977).

A more detailed description of the different types of handicaps was provided
in the Final Rules and Regulations for Public Law 94-142, The Education of
All Handicapped Children Act (Section 121a.5, Federal Register, August 23,
1977). The categories of handicap are:

. Deaf--means a hearing impairment which is so severe that the
  child is impaired in processing linguistic information through
  hearing, with or without amplification, which adversely affects
  educational performance.

. Hard of Hearing--means a hearing impairment, whether permanent
  or fluctuating, which adversely affects a child's educational
  performance but which is not included under the definition of
  "deaf" in this section.

. Mentally retarded--means significantly subaverage general in-
    tellectual functioning existing concurrently with deficits
    in adaptive behavior and manifested during the developmental
    period, which adversely affects a child's educational per-
    formance.

. Orthopedically impaired--means a severe orthopedic impairment
    which adversely affects a child's educational performance.
    The term includes impairments caused by congenital anomaly
    (e.g., clubfoot, absence of some member, etc.), impairments
    caused by disease (e.g., poliomyelitis, bone tuberculosis,
    etc.), and impairments from other causes (e.g., cerebral
    palsy, amputations, and fractures or burns which cause con-
    tractures.

. Other health impaired--means limited strength, vitality or alert-
    ness due to chronic or acute health problems such as a heart
    condition, tuberculosis, rheumatic fever, nephritis, asthma,
    sickle cell anemia, hemophilia, epilepsy, lead poisoning,
    leukemia, or diabetes, which adversely affects a child's edu-
    cational performance.

. Seriously emotionally disturbed--means a condition exhibiting one
    or more of the following characteristics over a long period
    of time and to a marked degree, which adversely affects edu-
    cational performance:
        (a) An inability to learn which cannot be explained
            by intellectual, sensory, or health factors;
        (b) An inability to build or maintain satisfactory
            interpersonal relationships with peers and teachers;
        (c) Inappropriate types of behavior or feelings
            under normal circumstances;
        (d) A general pervasive mood of unhappiness or de-
            pression; or
        (e) A tendency to develop physical symptoms or fears
            associated with personal or school problems.

    The term includes children who are schizophrenic or autistic.
    The term does not include children who are socially malad-
    justed, unless it is determined that they are seriously
    emotionally disturbed.

. Specific learning disability--means a disorder in one or more
    of the basic psychological processes involved in understand-
    ing or in using language, spoken or written, which may mani-
    fest itself in an imperfect ability to listen, think, speak,
    read, write, spell, or to do mathematical calculations.
    The term includes such conditions as perceptual handicaps,
    brain injury, minimal brain disfunction, dyslexia, and de-
    velopmental aphasia. The term does not include children
    who have learning problems which are primarily the result
    of visual, hearing, or motor handicaps, of mental retarda-
    tion, or of environmental, cultural, or economic disadvantage.

- Speech impaired--means a communication disorder, such as stuttering, impaired articulation, a language impairment, or a voice impairment, which adversely affects a child's educational performance.

- Visually handicapped--means a visual impairment which, even with correction, adversely affects a child's educational performance. The term includes both partially seeing and blind children.

Handicapped students may exhibit one or more of the conditions described. Section five of this handbook contains a list of things you may observe in identifying handicaps. A sample of conditions you may notice includes:

- Difficulty in hearing, e.g., straining to hear, wearing a hearing aid, misinterpreting spoken language, etc.

- Physical handicap, e.g., absence of some body member, polio, cerebral palsy, limited strength, asthma, sickle cell anemia, diabetes, epilepsy, dyslexia, etc.

- Emotional problems, e.g., cannot get along with others, depression, etc.

- Rejection by other students because of handicapping condition.

- Limited physical dexterity or mobility, cannot use machinery and equipment, etc.

MAINSTREAMING

The term mainstreaming has been used frequently and in different ways during the last few years. Along with its varied meanings has come confusion regarding what the word really means. While there may not be a definition that is universally agreed on, the following may serve as a basis on which a personal understanding can be formed.

> Mainstreaming is the conscientious effort to place handicapped children into the least restrictive educational setting which is appropriate to their needs. The primary objective of this process is to provide children with the most appropriate and effective educational experiences which will enable them to become self-reliant adults. Within this objective, it is thought preferable to educate children the least distance away from the mainstream of society. Hence there is a heavy emphasis on movement into the regular classroom whenever possible. (National Advisory Council on Education Professionals Development, 1976, p. 71).

Examples of mainstreaming in our society are as follows:

. Ramps, curb cuts, reserved parking places, accessible restrooms,
   and lowered drinking fountains.

. Employers who not only refrain from discrimination against the
   handicapped, but make reasonable accommodation so that handi-
   capped people have a fair chance to compete for jobs and
   promotions.

. Recognition of the right of the handicapped to participate in
   publically supported programs, and to have access to public
   facilities.

. Access to vocational facilities and equipment.

Vocational teachers must keep in mind that mainstreaming is not:

. Wholesale return of all exceptional students in special classes
   to regular classes.

. Permitting students with special needs to remain in regular
   classrooms without the support services that they need.

. Ignoring the need of some students for a more specialized pro-
   gram that can be provided in the general education program.

. Less costly than serving students in special self-contained
   classrooms.

SOME CONCEPTS OF LEARNING

There are many concepts of learning that describe or attempt to describe

how an individual learns. The concepts of learning included in this section

were selected due to their unique application to teaching special needs stu-

dents. When integrated with specific teaching techniques included later in

this section and the suggested preventive/corrective educational practices

included in section five, these concepts should provide a sound basis upon

which specific teaching plans can be made for teaching special needs students.

Readiness

Readiness is a condition of the individual which makes it possible to

learn. There are varying degrees of readiness for learning a particular task.

If learners are not ready for a given task, they learn incompletely, are

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frustrated, or experience other problems. Readiness includes but is not limited to physical growth and maturation, intelligence, background experiences, previous learning, motivation, and perception. Students learn best when tasks are related to their abilities, experiences, and interests.

Motivation

Motivation is a state in learners which initiates activity, governs their direction, and keeps them working on a task. Students are naturally curious and engage in exploratory activities in the world in which they live. This curiosity ought to be encouraged by providing opportunities for students to explore and succeed in various tasks. Letting students know of their progress will encourage continued effort, as will praise from teachers and parents.

Effect

People tend to accept and to repeat those activities which are pleasant and satisfying and to avoid those activities which are annoying. Students enjoy activity, ownership, participation, responsibility, and success. Events which tend to discourage students from learning are failure, no responsibility, and nothing to call their own.

Individual Differences

The difference in the ability to learn between a slow learner and a fast learner increases as the learners progress through school. Since learning provides the learner with additional tools to use in learning, the fast learner increases the ability to learn at a faster rate, while the slow learner acquires the additional tools for learning but will apply these at a slower rate. The teacher who expects the slow learner to "catch up" is simply misjudging the situation. The slow learner actually has a double handicap; learning more slowly but forgetting more quickly.

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Practice

The more often an act is repeated, the more quickly a habit is established. Practice makes perfect if the practice is the right kind. Practicing the wrong thing will become a habit, too--one that's hard to break. Students should be checked to insure that they are performing an operation correctly. Also practice of specific tasks should be short but spaced close together at the beginning, then spread further and further apart.

Timing

What is learned is most apt to be remembered if it is learned just before it is to be used by the learner. That which is learned but not used in some way is soon forgotten. Classroom instruction should be applied in a laboratory as soon as possible. Students need opportunities to practice what they are being taught.

Progress

Students are more likely to continue trying to learn when they are able to see progress. An end evaluation of the quality of performance on a task provides a measure of success, but this alone is not enough. It is also important that the individual be able to see progress along the way. Some skills taught can be broken into smaller parts and students can have several "successes" instead of one. Also, they don't have to work as long before they have a success experience.

Variety

Providing a variety of activities in the learning situations helps students maintain a high level of interest. Even the brightest students may tire of studying a single topic or of performing one kind of activity if either is

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continued for too long a period of time. With special needs students, use
a variety of activities in teaching a topic--longer topics require more vari-
ety in activities.

Fear

Usually, punishment and threats are not useful teaching practices.
Punishment and threats are as likely to create an unfavorable climate for
learning as they are to create a favorable climate for learning. Punishment
and threats may actually inhibit further learning and may make it difficult
for the teacher to maintain the kind of relationship with the learner which
is needed for maximum success in teaching. Remember that special needs stu-
dents need to see success and need to be rewarded for it.

Participation

Learner participation in planning learning activities will increase the
likelihood of success in teaching. Both the young and the old like to share
in decisions regarding what they will do. Individuals who help plan a par-
ticular activity will be more interested because they helped plan it. Giving
learners as much responsiblity as possible also helps develop leadership
abilities.

Order

Some things cannot be learned until other learnings have been acquired.
Without appropriate prior learning there are some things a person cannot learn.
For example, if a task requires the use of certain tools, learning the per-
formance of that task is not possible without a knowledge of the tools to
be used.

Respect

Teaching is most effective if the learner respects and likes the teacher. Respect is more important than liking, but a teacher who has both the respect and the liking of students can expect them to work harder to learn more than would be the case without this respect and liking.

Meaningfulness

The more meaningful the task, the easier it is to learn. Tasks can be made more meaningful to students by showing how the skill can be used in a money-making job or by relating it to something in which students are already interested or have experience.

Reinforcement

Positive reinforcement will strengthen the behavior it immediately follows. This means that teachers should let special needs students know when they do things well as soon as possible after the behavior.

Review

A skill not practiced or knowledge not used will be largely lost or forgotten. A teacher should recognize the value of repetition and review for reinforcing newly gained knowledge or skills. Studies have shown that the period immediately following the learning process is the most critical. Important items should be reviewed soon after the initial instruction. It should also be pointed out that when a teacher covers a certain topic, the knowledge learned will be applied many times in the future. Thus, regularly planned reviews and student assessment activities should become a part of laboratory exercises, and not be restricted to paper-and-pencil tests.

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SOME TEACHING TECHNIQUES AND AIDS TO USE

The identification of teaching techniques to use in teaching special needs students is only limited by your creative ability. The subsequent selection and effective use of teaching techniques and instructional aids depends upon your competence and factors influencing the teaching/learning environment. A partial list of possible teaching techniques is provided below. A detailed discussion will be included only for those techniques that have unique relationships to teaching special needs students.

. Independent Study
. Programmed Learning
. Peer Teaching
. Field Trip
. Student Research
. Educational Games
. Student Projects
. Resource People

. Demonstration
. Discussion
. Questioning
. Role-Playing
. Team Teaching
. Brainstorming
. Supervised Study
. Case Studies

Regardless of the teaching techniques selected, you should use an overall problem solving approach when teaching. This requires the teacher, with the help of the students, to identify problems or questions that must be answered before the student can successfully perform the competencies desired. It helps get the students to actively thinking about the skills to be taught and how they can be applied in real-life situations. For example, if you are teaching a class in cutting rafters, some possible problems for students to solve would be:

. What tools do I need?

. What kind of wood do I select?

. What fasteners do I use?

. What pitch will I use? What does pitch mean?

. What is the correct way to use the tools?

SELECTED TEACHING TECHNIQUES

Demonstration

<u>What is a demonstration?</u> A demonstration is a visual presentation which shows how to do something. Students usually practice the skill or procedure after the demonstration. A demonstration makes principles and theories practical by allowing students to see, hear, and practice, rather than merely reading or hearing about it.

<u>How can you use a demonstration?</u>

. To teach students how to perform a new skill.

. To help students see what you are talking about.

. To convince students that they are capable of doing a certain thing.

. To create interest.

<u>What are the advantages of using the demonstration for teaching the special needs student?</u>

. Helps students who have problems with oral communication or reading, or both.

. Shows why the steps and key points are important. A completed demonstration also gives practical meaning to the activity.

. Attracts, holds attention, and is helpful in motivating students.

. Involves several senses instead of one or two. When students use as many of their five senses as possible, the amount and speed of learning increases.

. Makes procedures easier for students to understand.

. Allows the teacher to give immediate feedback when students are practicing the demonstrated skill. Errors can be quickly corrected.

. Provides hands-on experience which motivates special needs students.

. Shows students that the skill can be done.

. Provides common instruction to all students but allows individu-
   alized instruction in the student practice.

. Helps students who have problems with abstract learning.

What limitations need to be considered?

. Sufficient space, equipment, and materials must be available
   for student practice.

. Arrangements must be made so that all students can see exactly
   what is demonstrated and can practice the skill.

. Materials and supplies must be made available both for the
   teacher, demonstration and the practice to follow. ——

What are the guidelines for maximum utilization?

. Spend the necessary time to plan and to develop the needed ma-
   terials for the demonstration.

. Practice or rehearse the demonstration in its entirety, with
   an eye on time limitations.

. When it is time to put on the demonstration, make sure all ma-
   terials are at hand.

. Make sure seating or standing arrangements are such that all
   students can see and hear.

. Use questions during the demonstration to provide feedback.

. It helps many times to discuss and to demonstrate the "wrong
   way" to perform a task as well as the "right way," e.g.,
   "Look what happens when too much water is added while form-
   ing this ceramic pot on the wheel."

. At the conclusion of the demonstration, conduct a brief review
   of the steps involved or a short summary of what has happened.

. If feasible, have a student or two to repeat the demonstration.

                              Field Trip

What is a field trip? A field trip is a carefully planned educational

activity with students visiting some place or thing of interest for a first-

hand learning experience.

How can the field trip be best used? The field trip can be used best

with small groups so that all students can see and hear. Only the number

of students who can be supervised adequately should be taken on field trips. They may be used:

. With students who rely on the sense of sight. Some students need to see and hear first-hand to believe and learn.

. To teach skills that cannot be readily taught in the classroom or laboratory.

. To create interest.

. To show the results of a skill or technique in the natural environment.

. To relate things learned in the classroom or laboratory to real-life situations.

What are the advantages of using the field trip for teaching special needs students?

. Offers a first-hand experience, which often helps special needs students learn best.

. Helps relate school work to the real world.

. Students have an opportunity to meet possible employers and learn to view them as real people and jobs as real jobs.

..Makes the idea of holding a job in the community more realistic to the students.

. Provides an opportunity for students to practice social skills and appropriate conduct outside the classroom.

What limitations need to be considered in using the field trip?

. Field trips are risky. Teachers must consider the nature of the field trip and the students. Written permission should be obtained from the parents of any student going on a field trip.

. Field trips are usually more expensive than other methods of instruction. The costs should be considered in view of possible benefits for special needs students.

. Field trips disrupt the school schedule.

. The field trip may require more than one teacher to supervise all students adequately.

What are the guidelines for maximum utilization?

. Before even considering the field trip, become familiar with
the legal aspects of teacher liability involved.

. Make sure the field trip is of educational value in that it
relates directly to what is being taught in the classroom.

. Plan the field trip by visiting the site and talking with the
people.

. Obtain permission from school authorities.

. Make all transportation arrangements.

. Notify parents to obtain consent. Parents often like to go
along, giving added supervision as well as driving help.

. Prepare the class by relating the trip to what is being studied
and what they might observe.

. Establish dress and behavior standards.

. At the site, provide for adequate supervision.

. Be sure all students are where they are supposed to be.

. Handle small incidents as they occur. Do not let unsafe behavior
continue.

. Upon return to the classroom review and summarize what was learned
on the field trip.

. Have the class send a "thank you" message to the host(s) of the
field trip.

.. Develop a means of evaluation for pupils as well as the place
visited in order to assist in planning future trips.

Individualized Instruction

What is individualized instruction? As used in this handbook, this

method refers to a one-to-one situation that accommodates the learning styles

and interest of special needs students, and facilitates sincere and honest

expectations that these students will succeed. This method has obvious

variations, i.e., individualized instructional packages, work stations,

programmed instruction, and others.

Individualized learning packages, programmed instruction, work stations and many other methods all allow students to work at their own pace. To be most effective, some feedback is provided students as they progress. Methods of individualized instruction usually provide some successes for the student to encourage further participation. Many of the most effective ways of teaching special needs students require some form of individualized instruction.

When should individualized instruction be used? This technique is appropriate for use when the students exhibit some of the following characteristics:

. Cannot keep up with the group.

. Have difficulty in speaking.

. Are disinterested and lacking in motivation.

. Are not easily motivated by traditional classroom and laboratory instruction.

. Have high fear of failure.

What are the advantages of using individualized instruction?

. Permits instruction to start where the student is.

. Helps get students motivated.

. Provides awareness of hidden abilities.

. Allows students to work at their own pace, thereby assisting in bringing out their creativity.

. Provides flexibility in meeting students' different learning styles.

What limitations need to be considered?

. Could require a great deal of preparation depending on the type of individualized instruction, i.e., independent study, programmed learning, work station.

. Requires limited class size.

. Requires awareness of students' needs, interests, and capabilities.

What are the guidelines for maximum utilization?

. Be prepared to direct students away from the traditional to
the individualized concept gradually. This will entail a
great deal of structure at first until students become self-
motivated and responsible.

. Parents and pertinent administrators should be consulted for
approval and kept informed prior to and during the program.

. Careful records of individual accomplishments need to be kept
on each student's daily progress.

. Pre-assessment is an integral part of individualized learning.
Different methods are plentiful, depending on the types of
information required, such as:-
      (a) If physical health information is needed, con-
          sider the school nurse, cumulative records,
          parents, dialogue with the student, and your
          observations.
      (b) If assessment of special learning disability is
          needed, rely on diagnostic tests, medical records,
          and conferences with the doctor, school psycho-
          logist, and parents.
      (c) To discover student interest and needs, use in-
          terest inventories, straightforward communica-
          tion with the students, parent conferences and
          observation. Contact the guidance counselor
          for help.

. Objectives should be clearly stated on paper and understood
by the student.

. Objectives and the time, material, and procedures necessary to
achieve them should vary with each student's interest and
capabilities.

. Students should have some voice in selecting their objectives,
materials, procedures, and time span for completion. Ideally,
they may eventually develop their own objectives and proce-
dures.

Peer Teaching

What is peer teaching? In peer teaching, students who have learned

a particular skill or knowledge will help to teach other students the skill

or knowledge.

When should peer teaching be used? Peer teaching works especially well

with students who learn slowly. It often helps the peer teacher and the

peer learner.

What are the advantages of using peer teaching for teaching special
needs students?

- It helps special needs students fit in regular vocational classes
  without being neglected. A peer may be able to help the
  student by providing extra help in reinforcing what is taught.

- It improves self-concept of the student. Without special atten-
  tion and opportunity to learn, special needs students experience
  failure repeatedly.

- It improves knowledge of the subject of both peer and tutor.

- It helps the tutor gain self-confidence by sharing what he/she
  knows about the topic.

- It increases self-assurance and motivation in special needs
  students.

- It makes learning more friendly and less formal.

- It stimulates intermingling of students from different back-
  grounds.

What limitations need to be considered?

- A limited number of students may volunteer to be tutors.

- Tutors may make special needs students feel stupid or inferior
  if they are not patient.

- Scheduling problems may hinder peer teaching.

- Adequate coordination and supervision are needed by the teacher.

What are the guidelines for maximum utilization?

- All students should be given the opportunity to function as
  peer teachers. Remember, all students can learn by teaching
  others.

- Use a variety of techniques when instructing the tutors.

- Aim at the higher cognitive levels in teaching the tutors.
  It is essential that the tutors have both breadth and depth
  in the subject.

- The student tutorial approach is excellent to use whenever a
  large number of students have been absent from the class,
  e.g., flu epidemic. This is usually a dead time, but a
  teacher can teach those present and use them as tutors when
  the absent students return to class.

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. In using the tutorial approach, all students should understand clearly the objectives of the lesson. The tutors can tell whether or not they are achieving the objectives, thus being able to keep the teacher informed.

. Quick measures of tutor achievement should be periodically used to provide feedback which will indicate the degree of success of the approach.

. Without being too obvious, observe each of the tutorial situations.

Role-Playing

What is role-playing? Role-playing is acting out a situation, condition, or circumstance by students.

When should role-playing be used? Role-playing is used effectively to:

. Teach attitudes rather than knowledge.

. Bring role-players and observers closer to actual feelings and reactions involved in a situation than by reading or hearing it.

. Help students understand others' viewpoints and feelings.

. Discover how people react under certain conditions and situations.

. Help resolve interpersonal conflicts.

. Help students get along with each other.

. Teach social behavior.

What are the advantages of using role-playing for teaching special needs students?

. Teaches students to better express themselves verbally.

. Develops creativity.

. Teaches attitudes.

. Helps students become more interested in learning.

. Helps students gain in self-understanding as they see themselves in the roles portrayed.

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. Helps students understand the feelings of others.

. Helps students become actively involved in the learning situation.

What limitations need to be considered?

. Role-playing is only useful in simple clear-cut problems and
  . situations.

. Students may be fearful and anxious about playing a role.

. Students may think role-playing is a game and fail to recognize
  , the significance of the content brought out in the situation.

. Role-players may become so involved in their roles that they
  display deep personal emotions.

What are the guidelines for maximum utilization?

. Design the situation and roles in sufficient detail in advance;
  A written situation with written roles is best.

. Define roles in terms of the situation.

, The actors should be given a short time to get their thoughts
  together.

. The class members who are to observe should take notes and be
  instructed in what to look for.

. Upon completion of the activity, evaluate students' performances.

. Certain portions of the activity may be improved with reenact-
  ment.

. In a "hot" display in which emotions get out of hand, a simple
  . reversal of roles can accomplish much.

. An atmosphere of freedom and security must exist in the class-
  room.

Games

What are educational games? An educational game provides instruction

or reviews concepts through a structured play situation with a specific set

of rules or procedures to be followed. Games show that learning can be an

enjoyable activity.

When should games be used? Games are often effective with students who:

. Have short attention spans.

. Are not interested in school.

. Have difficulty learning in the structured classroom.

. Lack motivation and don't participate in class activities.

. Are restless when required to sit still and quiet for long
    periods of time.

. Need immediate recognition.

What are the advantages of using games for teaching special needs students?

. Games make learning fun and add variety to the daily routine.

. Games may help students learn to work together cooperatively.

. Games may help teach students to make decisions and work for
    their own success.

. Games usually involve participation of the whole class rather
    than only a select few.

. Games can portray real life situations for students.

What limitations need to be considered?

. Games may cause special needs students to be seen as failures.
    Some games avoid this problem by developing opportunities
    for each student to be in competition with him/herself rather
    than other members. Games which have a element of chance
    or luck often insure that all students have an equal chance
    of winning. Games which provide for group winning also reduce
    the chances for students to become discouraged.

. The time taken and the disruption of the classroom can outweigh
    the learning taking place.

. If not carefully supervised, students may play for entertain-
    ment only.

. If used too often, games may lose their novelty.

. Some students may become frustrated if they lose.

What are the guidelines for maximum utilization?

. Select a game appropriate for the content to be covered.

. A game is an excellent technique to summarize or review a topic.

. Avoid selecting games that eliminate students from the partici-
   pation.

. Explain the rules of the game to the students.

. Point out to the students the goals and reasons for playing
      the game.

. Explain how points will be awarded if appropriate.

. . Supervise the game closely.

. Add encouragement and praise when appropriate.

. End the game when interest falls.

. Follow up the game with a discussion and summary.

Summary

As pointed out earlier, variety is very important to special needs stu-

dents. You have seen, now, a variety of teaching techniques, but remember

that variety alone is not enough and may even hinder learning. In selecting

teaching techniques, consider the objectives you are trying to achieve.

The teaching technique must contribute to achievement of the objectives. If

it doesn't, don't use it. Regardless of the techniques being used, proper

planning is essential for success. Good teaching techniques will not over-

come poor planning.

SAFETY

Safety is a critical area of concern to vocational teachers and it be-

comes even more of a concern to teachers who are working with special needs

students. Many of the suggestions included in this section are not new,

but serve as a reminder to the teacher who has the responsibility of work-

ing with special needs students.

- Rèquire and wear safety glasses.

- Mark exits properly.

- Have adequate lighting.

- Have machines and tools properly guarded.

- Floors should be kept free of debris.

- Provide for easy access to machine switches.

- Properly install guards and shields.

- Provide containers that can be attached to equipment to prevent spills.

- Provide faucets with dials to set temperatures and faucets with foot or elbow controls.

- Use the "buddy" system to help students.

- Expose only the minimum amount of blade required to do the job.

- Provide ways for fastening material down when using portable power tools.

- Have a master switch at several locations to kill all power in the laboratory.

- Only one person should operate a machine at a time unless assistance is needed.

- Make machine adjustments with machine turned off unless otherwise specified.

- Get help or supervision if you need it.

- Install handrails.

- Arrange for accessibility of wheelchairs (distance between objects should be at least 34").

- Make bench heights adjustable.

- Mount small machines on portable tables.

- Use portable platforms and ramps.

- Use extension on handles and levers.

- Use flashing lights and sirens as warning devices.

There are some specific laws pertaining to safety in school laboratories, such as the Mississippi law which mandates eye protection in laboratories. However, you must be concerned about more than this law.

Practically speaking, you are held liable for any student injury which you could have reasonably prevented. Let's assume, for instance, that a student gets a severe cut on a radial arm saw. Do you have evidence that you could present to a jury which would convince them that you did all you could to protect the student?

Can you prove that you taught radial arm saw safety? Are rules or signs posted which warn against unsupervised use of the saw? Was the saw properly guarded?

Other questions could be asked, but to summarize, treat each student as your son or daughter. Provide to every student the kind of instruction and protection you would want your own child to receive.

SOLVING PROBLEMS ENCOUNTERED

As you've probably heard a thousand times, "to fail to plan is to plan to fail," and that's an indisputable truth. But sometimes the best teaching plans go awry. No plan is perfect for every student in your class, so you will probably encounter problems in your classroom and/or laboratory instruction.

This section is devoted to helping you recognize instructional problems with special needs students. It also provides suggestions that may prevent or correct those problems. The information is presented in a table format, with the type of special need listed at the top of the table. In the left-hand column of the table, a description of the problem or characteristic that you may observe is presented. The right-hand column contains a collection of helpful practices that you may try in preventing or correcting the problem.

In some cases, you may relate certain suggested practices to one specific characteristic or problem which you observe. However, you should generally consider that entire list of suggestions for each type of problem or characteristic observed.

For this section to be most helpful, you must be very observant. The term "signals" is used in the tables to remind you that most problems will be accompanied by signals to you. They alert you to the fact that there is always a reason why students do poorly. It is important to realize, though, that observing one symptom does <u>not</u> necessarily diagnose a student. For example, if you observe a student complaining of earaches (p. 30) this alone does not mean that the student has a hearing problem, but does mean that you should determine if there is a hearing problem.

Finally, you must also remember that very few experiences or causes for these experiences occur in a vacuum. Many factors that influence the teaching/learning environment are interrelated. When one element in a teaching/learning situation changes, for whatever reason, other elements may also be affected.

The tables follow and are in the order shown.

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AIDS TO IDENTIFYING AND ASSISTING DISADVANTAGED STUDENTS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Educational Signals Learns at a slower rate than other class members; failed one or more grades in school; lacks basic mathematics, writing, and reading skills; IQ of 70 to 90; low grades in courses; frequently absent from school; potential dropout from school or may have dropped out. **Social Signals** Family members may be unemployed; family income may be low; may come from a large family; family members may have low educational levels; may belong to an ethnic or minority group; may be culturally disadvantaged. **Behavioral Signals** Frequently appears to be sleepy; may be easily frustrated; difficult to motivate; lacks respect for rules; lacks self-confidence; apathetic; lacks desire to achieve.	**Helpful Instructional Practices** . Limit use of written material . Use audio-visual aids . Use a simple vocabulary . Select materials at appropriate reading level . Show relevance of reading to vocational success . Use concrete, rather than abstract, examples . Use a variety of teaching techniques and aids . Relate instruction to real-life experiences . Help students achieve success and provide rewards/reinforcement for this achievement . Explain objectives of each lesson to students . Provide immediate feedback . Increase interest with field trips, guest speakers, etc. **Helpful Management Practices** . Use labels on materials, tools, machines, and equipment . Develop a positive atmosphere and encourage students to do the same

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AIDS TO IDENTIFYING AND ASSISTING DISADVANTAGED STUDENTS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Involve parents in the students' activities
	. Use a variety of teaching techniques and aids
	. Use community resources
	. Sequence instructional material in a logical order
	. Provide clear instructions for activities; repeat as necessary
	. Use peers to assist in teaching
	. Allow students to proceed at their own rate; try to give individualized assignments
	. Discuss expected behavior with students
	. Pair or group students
	. Be flexible

AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH HEARING PROBLEMS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Posture Signals Holds head in a set position; strains to hear; frowns; shows tenseness when trying to hear; easily fatigued because of need for visual concentration; distracted from work or startled by a shadow or sudden movement. **Hearing Signals** Fails to respond to questions or asks that they be repeated; seems inattentive during auditory activities; fails to follow oral instructions; fails to realize misunderstandings; often cannot identify who is speaking or the direction of sound or speech. **Speech Signals** Substitutes, omits, or mispronounces sounds; grammatical errors are common; omission of functional words such as "a" and "the"; spoken sentences are seldom more than six or seven words long; poor voice inflection; reading level is low. **Health Signals** May complain of earaches, colds, or discharge or swelling of ears.	**Improving Your Speech** . Be aware of student's better side, i.e., the side from which student hears better . Use normal speaking tones . Use manual communication, if known . Stand where lip reading can be used by the student . Face the class or student when speaking . Aid your speech through body language, i.e., gestures, illustrations, etc . Speak clearly and slowly, but avoid exaggerated lip movement . Use simple sentences . Be consistent in presentation of concepts, e.g., consistent use of car instead of automobile or vehicle . Provide a vocabulary list of new words with definitions and examples of usage **Improving Instruction** . Use transparencies, slides, pictures, realia, and charts to help students understand ideas and concepts . Use repetition and allow time for visual and/or tactile understanding of concepts

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AIDS TO·IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH HEARING PROBLEMS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Use flashing lights as signals, e.g., on, off
	. Use written tests when appropriate
	. Present one source of visual information at a time
	. Provide written outlines and assignments
	. Use chalkboard and newsprint; write legibly
	. Use handouts .
	Improving The Environment
	. Reduce general noise level
	. Avoid vibration and lighting difficulties
	. Limit amount of external noise
	. Allow student(s) to work in quieter areas or use headphones, if necessary
	. Allow for a minimum of distractions
	. Provide visual cues for directions, e.g., on, off, left
	. Provide tape recorders with proper amplification
	. Remind students to adjust volume of hearing aids in noisy areas

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH HEARING PROBLEMS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	Miscellaneous
	. Pair the student with a normal hearing student
	. Place the student near the teacher
	. Seat student so visual/projected materials can be seen
	. Encourage expression of language in some form
	. Identify the speaker; point to the sources of sound
	. Sensitize others to the communications needs of students

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE MENTALLY RETARDED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Communications Signals Exhibits poor language development; does not complete sentences; reads and writes poorly.	**Using Teaching Materials** . Use programmed materials . Modify commercial instructional materials . Use materials designed specifically for slow learners
Motor Skill Signals Exhibits poor motor abilities and aptitudes; often clumsy; impulsive and immature.	. Material should be in small, distinct steps . Use real-life materials, tools, etc
Recorded Signals Discrepancies between chronological age and behavior; IQ of 50-75; poor scores in reading, writing, and mathematics.	**Maintaining a Learning Atmosphere** . Systematize activities and provide repetition . Give reinforcement and reassurances often
General Learning Signals Short attention span; easily distracted; cannot comprehend abstractions; slow in conceptual and perceptual ability; has difficulty with incidental learning.	. Maintain a climate of support . Encourage honest effort . Allow additional time for student to complete work
General Behavior Signals Exhibits loyalty, courage, integrity, and compassion; is independent; behavior may be inconsistent.	. Chart student performance to show progress . Provide immediate feedback to student . Task analyze all skills

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE MENTALLY RETARDED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices

	Delivering Instruction
	. Use audio-visual aids
	
	. Use concrete examples
	
	. Show what is expected of students
	
	. Explain things as they happen, step-by-step
	
	. Use small group instruction
	
	. Vary teaching techniques
	
	. Use tutors and aides if possible
	
	. Use imitation techniques to teach psychomotor skills
	
	. Simplify instructions
	
	. Eliminate student's fear of tools and equipment
	
	. Activities should have few rules, require little memori-
	    zation, and stress concrete rather than abstract
	    approaches

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE ORTHOPEDICALLY IMPAIRED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Physical Signals May have missing hand(s), arm(s), leg(s), etc; exhibits deformity; limps; movements that appear slow and painful; lacks good motor control; relies on other parts of the body to compensate for weaker body parts; needs support in standing; poor physical fitness; demonstrates unusual pincher grasp. **Performance Signals** May exhibit problems in drawing or writing; may have illegible handwriting; writes heavily, very small, or very large.	**Improving The Environment** . Make environmental changes to improve student accessibility, e.g., eliminate or compensate for doors and stairs, etc . Place materials and workbenches at heights that are good for the students . Modify equipment to accommodate student needs . Bring situations and group activities to the students if they are unable to come to the situation . Work with other vocational education service areas in modifying equipment . Be aware of necessary safety considerations and abide by them . Move off-on switches and adjustment levers for easier access . Provide extra handles or modified handles for students who need them . Install handrails where needed .. Arrange classroom and laboratories for accessibility of wheelchairs, usually 34" wide . Mount small machines on portable tables

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE ORTHOPEDICALLY IMPAIRED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Construct portable platforms and ramps
	. Mount mirrors in strategic positions for easier viewing
	. Use specially adapted jigs and fixtures for students
	Helpful Management Practices
	. Pair the student with a non-exceptional student to provide support, help in note-taking, working, and securing supplies and materials
	. Provide an adequate time period for students to get to and from class and for other activities
	. Where possible, use small materials; avoid bulky ones
	Helpful Guidance Practices
	. Get as much information as possible on the physical disability
	. Help students set realistic goals
	. Help peers become sensitized to exceptional students
	. Remove the pressure of demands on students that they aren't able to meet

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE ORTHOPEDICALLY IMPAIRED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	Helpful Instructional Practices
	. Use audio-visual aids to help compensate for disability
	. Move from simple skills to more complex ones
	. Reward class participation
	. Limit written materials, if necessary
	. Encourage exceptional students to verbalize their needs and to help care for themselves
	. Don't do work for students; create a sense of independence and ability to accomplish

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH OTHER HEALTH IMPAIRMENTS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Physical Appearance Signals Shows effects of disease; is usually under-weight or overweight; has limited strength in comparison with other students. **Behavioral Signals** Constantly acts tired; demonstrates poor appetite; misses school frequently; frequently complains of pain; acts inattentive; does not like to participate in strenuous activity; does not like to compete in sports.	**Helpful Management Practices** . Pair the student with a non-exceptional student to provide support, help in note-taking, working, and securing supplies and materials . Adapt the environment as much as possible to accommodate exceptional students . Provide extra time for students who need it, thus promoting independence **Helpful Guidance Practices** . Get as much information as possible on the impairment . Help students set realistic goals . Remove the pressure of demands on students that they aren't able to meet **Helpful Instructional Practices** . Adapt media and materials as needed . Use students' ideas to help increase participation . Use audio-visual aids to help compensate for disability . Move from simple skills to more complex ones . Reward class participation

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Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Limit written materials, if necessary
	. Encourage exceptional students to verbalize their needs and to help care for themselves
	. Don't do work for students; create a sense of independence and ability to accomplish

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE SERIOUSLY EMOTIONALLY DISTURBED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Group Behavioral Signals - Rejects being "part of the group;" is suspicious of acceptance; fights and argues with peers; is often not invited or does not wish to participate in group activities; is not accepted by peers; behaves in a manner which is socially unacceptable or inappropriate. Personal Behavioral Signals Unusually nervous and tense; frequently appears unhappy and depressed; is disruptive, easily frustrated; is overly sensitive; has a poor or negative self-concept; seeks attention and behaves immaturely; is often self-critical; may not like to be touched, imagines persecution; inability to learn; tends to develop physical symptoms or fears associated with personal or school problems; unable to evaluate personal behavior in terms of consequences it has for self or others.	Helpful Environmental Practices . . Remove distractions or unnecessary materials . Limit amount of external noise; allow student(s) to work in quiet areas or use headphones if necessary, and limit the amount of visual distraction . Use a structured environment that is highly predictable and routine-oriented Helpful Management Practices . Provide a "buddy" for the shy student . Provide systematic schedules rather than changes that promote confusion . Be consistent in your management of the student's behavior . . Observe the behavior during periods of stress and note the preceding and provoking behavior . Progressively increase the group size for aggressive students as they develop the ability to handle the skill or social area . Have activities ready when students enter and begin work as soon as possible . Explain the standard of conduct that will be accepted

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE SERIOUSLY EMOTIONALLY DISTURBED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Prepare for instruction in segments which are short, frequent, and specific
	. If using manual communication techniques, pair the gestures with simple concrete words
	Helpful Guidance Practices
	. Provide for the student to have medical counseling services needed
	. Be prepared for a display of emotional disturbance
	. Empathize with student
	. Be calm in approaching and responding to problems
	. Give the student behaviorally stated feedback that will assist him/her to correlate behavior with its consequences
	. Use predetermined (by counselors, administrators, psychologists, teachers) behavior modification-management techniques
	Helpful Instructional Practices
	. Provide many opportunities for success and minimize failure through reinforcement
	. Minimize frustration by having periods of learning based on attention span and skill level .

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO ARE SERIOUSLY EMOTIONALLY DISTURBED

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Use programmed materials
	. Task-analyze skills
	. Maintain a climate of support and positively reinforce attempts at successful completion of tasks
	. Use instructional projects with short-term attainable goals
	. Set one goal at a time and approach step by step
	. Reward good work by quiet activities

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH LEARNING DISABILITIES

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Intellectual Signals May have disorders of memory and conceptual thinking; may have specific learning defects, especially in language; may have problems paying attention; perceptual-motor defects; I.Q. could be below average, average, or above average; may be hyperactive and impulsive.	**General Instructional Practices** . Determine student's level and have him/her work on level equal to abilities . Provide structured "success oriented" activities . Provide clear instructions with a plan or procedure list for project construction . Review previous explanations
Academic Signals Any one of the characteristics above may be visible in any academic subject; discrepancy may show up in one or more areas, such as reading, writing, listening, talking, spelling, math, or thinking.	. Progress slowly from known to unknown . Provide experiences in familiar situations . Maintain an objective attitude toward the student's behavior . . Maintain a calm approach and response to problems
Social Signals May have poor self-concept; poor social relations because of behavioral characteristics; problems of motivation because of repeated frustrations.	. Be alert to signs of frustration and tension . Build acceptance by rest of the class . Use praise for success·
Speech Signals Minimum contribution to oral discussion; word-finding difficulties; speech not very fluent; poor articulation; avoidance of reading aloud; grammatical confusions.	. Use high-interest materials . Allow the child time to point to the objects or things that can be shown if he/she is unable to verbalize intent

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH LEARNING DISABILITIES

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Visual Signals Looks up often when copying from a distance; avoids close desk work; bends closely over paper when writing; cannot follow written directions, but can follow verbal instructions; exhibits limited attention span for visual tasks; frequently forgets things seen; unable to evaluate; easily distracted; contorts facts; blinks and squints excessively; moves eyes excessively and inappropriately; has difficulty following moving object smoothly with eyes; repeats or omits words when reading, confuses words that look alike. **Hearing Signals** Gives inappropriate or wrong answers to simple questions; understands better at a one-to-one level than at classroom distances; fails to follow oral instructions; easily distracted by noise, may respond to every noise; cannot distinguish between background noises and teaching sounds; cannot locate the source of sound; confuses words that sound similar; cannot remember class discussions; strains to hear.	. Use yes and no questions to extract language . Begin with one step directions and lengthen the requirements . Strengthen memory by saying lists of numbers or alphabets, and having them repeated . Role-play situations for older students which help them become functional (i.e., interviewer, employer, etc.) . Use "show and tell" activities . Practice activities which involve sequences, e.g., steps in replacing a head gasket, mixing mortar, etc. . Remember that each student with a learning disability must be treated individually. Even with specific disabilities, students may be very capable of learning in some educational areas. Consult a specialist for help with students with learning disabilities. . For specific learning disabilities, review other sections of this publication. For example, check the chart on hearing impairments if you have a student with an auditory learning disability.

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH LEARNING DISABILITIES

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Motor Skill Signals Has problems in drawing and writing; dislikes physical activity; has unusual pencil grasp; has illegible handwriting; has difficulty organizing paper; writes unevenly; trips or bumps into things; uses one hand then the other, showing no definite hand preference. **General Behavior** Oral or physical outburst; distractability; withdrawal; inconsistent performance; Probably a male (8 of 10 are male); poor orientation of time and space, may be confused about right/left, up/down, top/bottom, yesterday/tomorrow; written work may be all in one corner of a page; difficulty with sequencing; reverses letters and words (b for d, saw for was, quite for quiet); difficulty with orderly recall (alphabet, multiplication tables, days of the week, football plays, etc.); has trouble remembering birthday, address, etc.; difficult to follow directions; difficult to understand abstract ideas; appears clumsy; may be awkward; could be ambidextrous; somewhat immature physically and/or socially; may appear to be rebellious, "tests" the teacher; may feel inadequate, dependent...	

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WITH SPEECH IMPAIRMENTS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Speech Signals Cannot communicate effectively; stutters; has articulation problems; shows delay in speech; speaks very slowly or rapidly; repeats syllables or words; substitutes, omits, adds or distorts speech sounds; speaks very softly or very loudly; does not like to read aloud or speak in front of a group.	**Helpful Instructional Practices** . Use charts whenever possible . Label tools . Substitute diagrams and pictures for written material . Provide materials on appropriate reading level . Make written instructional materials, instructions, manuals, etc. as simple as possible . Be a good model for students to listen to and imitate . Don't say words for students when they have difficulty . Pay careful attention when person is speaking **Helpful Management Practices** . Provide success-oriented opportunities in non-speech activities . Provide atmosphere that is relaxed . Reduce or eliminate student criticism . Refer student to a specialist and follow recommendations . Provide manuals for free reading . Use a one-to-one setting as much as possible . Provide experiences that don't always require verbal interaction

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO HAVE VISUAL IMPAIRMENTS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
Posture Signals Tilts head to see more clearly; squints excessively; rubs eyes; appears careless, clumsy, or awkward. **Sight Signals** Does not notice visual stimuli; shows sensitivity to brightness, e.g., sunshine, bright lights; exhibits difficulty doing close eye work; poor eye tracking, loses place when reading or other work; brings objects very close to eyes; cannot read writing on chalkboard or overhead projector; vision fluctuates. **General Behavior Signals** Shows limited ease in mobility; poor eye-hand coordination; prefers auditory or tactile activities; takes longer to read or write; becomes frustrated or discouraged; acts insecure and tries to hide the handicap; encounters problems in social acceptance.	**Improving The Environment** . Arrange the environment to encourage movement and familiarity . Help the student become accustomed to the environment . Identify rooms and machines with appropriate labels, e.g., large letters or raised letters . Doors to dangerous areas should be labeled and/or locked . Provide for tape recorder hook-ups so lessons can be taped . Provide adequate lighting . Make provisions for use of canes and seeing-eye dogs . Provide special tools such as Braille rulers and micrometers **Improving Instruction** . Use tactile methods when possible . Use Braille or large print materials . Use overhead projector to enlarge type, diagrams, etc . Read aloud to the student . Provide a "buddy" to aid in reading

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AIDS TO IDENTIFYING AND ASSISTING SPECIAL NEEDS STUDENTS WHO HAVE VISUAL IMPAIRMENTS

Characteristics/Problems/Observations	Preventive/Corrective Educational Practices
	. Use magnifiers
	. Use audio materials, instructions, etc
	Improving Management Practices
	. Teach class members to aid student by identifying themselves and objects
	. Allow students to do things for themselves whenever possible
	. If in doubt as to whether a person needs help, ask; don't take over unless requested
	. In walking from one area to another, don't steer a person; let them take hold of your arm and follow
	. Sight, look, and see are not "dirty" words to the blind; use them when needed
	. Indicate you are talking to a person by touching their arm or calling their name
	. Mention your name when there is doubt as to whether a person will recognize you
	. Help to create a sense of independence and accomplishment

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